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Read more about SDS4HEI on the project website: https://sds4hei.eu/



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01. / Introduction

In the rapidly evolving landscape of higher education, the role of universities and colleges extends far beyond imparting knowledge and conducting research. These institutions are increasingly recognised as pivotal in addressing global challenges, particularly those encapsulated in the United Nations' Sustainable Development Goals (SDGs). Adopting a 'whole institution' approach to integrating SDGs within higher education institutions (HEIs) is beneficial and essential.

This holistic approach ensures that sustainable development principles are embedded across all facets of the institution, from governance and operations to teaching, research, and community engagement. By doing so, higher education institutions can cultivate a generation of graduates who are aware of these global challenges and equipped with the skills and mindset to address them effectively. This comprehensive integration fosters a culture of sustainability, enhances institutional resilience, and aligns academic pursuits with the pressing needs of society and the planet, ultimately contributing to a more sustainable and equitable future for all.

There are several barriers to integrating sustainability into daily operations at HEIs. Key among these is a lack of awareness and understanding of sustainability issues among management, staff, and students. Additionally, institutional inertia and resistance to change can impede progress. The lack of a culture of sustainability, as a transversal dimension that influences perceptions, values, beliefs, and motivation to take action, remains a prevailing need of many HEIs across Europe and the globe.

Financial constraints and limited resources often prioritise immediate needs over long-term sustainability investments. There is also a fragmentation of efforts, with sustainability initiatives sometimes operating in silos without a cohesive strategy or leadership support. Furthermore, insufficient training & professional development opportunities hinder management, staff, and students from acquiring the necessary skills to implement sustainable practices effectively.

With all those barriers combined, the level of individual enthusiasm, and the lack of a framework to transform motivation into concrete, strategic actions with long-term effects are among the major difficulties. Accordingly, a holistic approach is required to address sustainability at HEIs, where sustainable development encompasses and addresses the following: (1) systemic change through new forms of governance, working, teaching, & learning methods, (2) transformative readiness to reach long-term transformative goals, (3) harmony as a goal while focusing on present, future, and regional needs, and all sustainability's dimensions (herein, economic, social, & ecological), (4) culture of sustainability as transversal dimension, and (5) putting humans at the centre to create sustainable future.

This Recommendation Document for Sustainable Development Strategies for HEIs aims to address those existing barriers while providing recommendations focusing on HEIs' contribution to increased entrepreneurial activity, local communities, civic society, and progressive policy implementation. SDS4HEI project findings show that entrepreneurial and civic engagement are pivotal for successful sustainable development at HEIs.

Entrepreneurial efforts are most viable for encouraging the design of sustainability into the fabric of educational fields, where entrepreneurial activities can (1) serve as mechanisms for redistribution with new models of co-creation, (2) be used as a tool for finding solutions for challenges that experimented real-life are on collaboratively, tested, and adapted within the contextual frame, (3) enhance knowledge transfer, outreach & partnering outputs, (4) enhance support and infrastructure for entrepreneurship, (5) assist transdisciplinary and interdisciplinary approaches for sustainable development, (6) impact values, beliefs and orientations that guide future entrepreneurial actions, (7) assist the transformation of the economy and development of socially responsible entrepreneurs, (8) bring a new perspective on green business practices and new professions to address sustainability challenges, (9) influence regional development, (10) advance regional ecosystem, and (11) impact individual ability to access the labour market and find employment.

Civic engagement with local stakeholders (e.g., policymakers, companies, government and non-government officials) is a good measure to promote sustainable development in education, where transdisciplinary collaboration can lead to multiple benefits: (1) help regional development, (2) contribute to universities third mission through knowledge sharing and collaboration, (3) facilitate the exchange of knowledge, including new perspectives and

practices, (4) create synergies and new opportunities, (5) foster entrepreneurial skills, (6) enhance and promote social innovation, (7) advance social welfare, and (8) cultivate human capital.

Hence, this Recommendation Document provides several recommendations that HEIs can utilise to address barriers towards sustainable development and facilitate organisational efforts, including increased entrepreneurial activities, local and civic engagement and progressive policy implementation to address sustainability.

The Recommendations are based on quality information acquired through the pilot testing of the SDS4HEI Self-Assessment, designed to provide HEIs' staff with the understanding, analysis, and knowledge they need to integrate the SDGs into their courses and campus roles. The Self-Assessment has been peer-reviewed by members of HEIs, including educators, academics and non-education staff at HEIs. The Self-Assessment results have been combined with the peer-review feedback from 28 HEI stakeholders and integrated into the recommendations.

HEI stakeholders assessed the Self-Assessment's usability and informativeness, but also provided feedback on:

- Knowledge & skills relating to SDGs, and sustainability in general;
- Level of improvement in knowledge/self-awareness of the SDGs following use of the Self-Assessment;
- Level of understanding of how the SDGs can be implemented in the organisation, and extended to local society and the regional ecosystem following use of the Self-Assessment;
- Current knowledge and limitations of staff at the organisation with regard to sustainability teaching and campus management operations;
- Recommendations on how HEIs can motivate their staff to engage in sustainable development;
- Recommendations on how HEIs can motivate their staff to integrate SDGs into their roles in campus upkeep, graduate development, student engagement and partnership building.

The recommendations are also informed by multiple sources of literature. Best practice documents, UNESCO Education for Sustainable Development and GreenComp: The European Sustainability Competence Framework, have influenced the development of the SDS4HEI Framework and other project resources.

D2./ Recommendations for Practice

Raising Awareness

SDS4HEI showed that:

Many members of management, staff and students remain uninformed about the importance and relevance of the SDGs, limiting their engagement and commitment to incorporating these goals into academic and operational practices. This lack of awareness hampers progress toward integrating sustainability.

We therefore propose:

Raising awareness on integrating sustainability internally through comprehensive sustainability education programs, courses, training, workshops, learning and awarenessraising activities (e.g., community garden, experiments) and extracurricular learning activities. HEIs can increase awareness beyond their institutional boundaries through community engagement, outreach and partnering. This can be enhanced by engaging in communication campaigns, collaborative projects, and involving stakeholders in sustainability planning. Showcasing successful case studies and creating sustainability-focused student organisations, events, and opportunities can further promote active participation and commitment across HEIs.

SDS4HEI showed that:

The lack of robust frameworks to ensure sustainability integration, measurement and reporting, leads to fragmented efforts and inconsistent implementation. Without clear guidelines and accountability, sustainability initiatives often lack coherence and impact, hindering the institution's ability to address challenges and promote a campus-wide culture of sustainability effectively.

We therefore propose:

Implementing a robust framework to ensure sustainability is integrated into all aspects of operations at higher education institutions. A framework provides clear guidelines, measurable goals, and accountability mechanisms, fostering consistent and comprehensive implementation. This



Implementing a Robust Framework structured approach ensures sustainability becomes integral to the institution's culture, decision-making, and daily practices. The framework should encompass a wholeinstitution approach, cover all dimensions of sustainability (herein, economic, social and environmental), and acknowledge culture as a transversal dimension. It should provide an insight into staff motivation and barriers to engagement, put humans at the centre, shed light on good practices and initiatives championing sustainable link regional needs/challenges development. and institutional visions to concrete activities and provide context-specific goals, measures and indicators focusing on civic engagement and entrepreneurial learning.

SDS4HEI showed that:

A lack of leadership and senior management support significantly impedes the integration of SDGs in higher education operations. Without committed leaders prioritising sustainability, initiatives struggle for resources, visibility, and institutional backing. This results in fragmented efforts, low engagement from management, staff and students, and missed opportunities to embed sustainability into the institutional culture.

We therefore propose:

Facilitating strong leadership and nurturing sustainability champions will enhance an institution's ability to integrate SDGs into all aspects of campus life, and catalyse change processes. These leaders provide vision, guidance, and advocacy, fostering a culture of sustainability. By sustainability initiatives, they championing inspire engagement, secure resources, and drive meaningful change toward achieving the SDGs across the institution. Governance structures require modernisation focusing on future-orientated. innovative. and interdisciplinary transformation. In this process, HEIs must rethink structures and power relationships while acknowledging the role of management, staff, and students in delivering sustainability actions and providing them with adequate support and active involvement from leadership. Leadership should enable participation in governance, including HEI and regional stakeholders' involvement in decision-making, establish sustainability-related governance infrastructure, implement incentive systems, policies & regulations, and raise awareness while offering internal & external opportunities.

#3

Facilitating Strong Leadership & Management Support

#4

Demanding Sustainability by Design

SDS4HEI showed that:

There is often a lack of integration of sustainability within daily work practices at higher education institutions. This gap results from insufficient training, limited awareness, and inadequate institutional support. Consequently, sustainable practices are not routinely embedded in administrative, academic, and operational activities, impeding progress toward comprehensive sustainability goals and undermining long-term institutional responsibility.

We therefore propose:

Sustainability should be integrated into daily work practices in higher education institutions through a "sustainability by design" approach. This means embedding sustainable principles in every aspect of campus operations, from administration to academics, ensuring that all activities and decisions promote sustainable responsibility and contribute to long-term sustainable development goals. This could include embedding sustainability requirements in Periodic Programmatic Evaluations (PPE) or other similar institutional regulatory processes, adapting sustainable campus design and culture through restoration or creation of green buildings, food/book donation and recycling stations, water conservation, sustainable transportation, zero-waste initiatives, biodiversity reserves and spaces, urban farming, green commuting, embedding sustainability across disciplines and curricula design, offering learning and awareness activities, and similar.

SDS4HEI showed that:

There is a significant lack of basic training on integrating activities supporting SDGs into all campus life aspects. This deficiency prevents management, staff, and students from effectively understanding and implementing sustainable practices, hindering the institution's ability to fully embrace and achieve the Sustainable Development Goals in its operations and culture. Many staff from all domains within HEIs have expressed a desire to be formally trained in integrating SDGs within their domain.

We therefore propose:

All staff should receive mandatory training on integrating activities that support the SDGs into their daily operations. This ensures everyone is equipped with the knowledge and skills needed to incorporate sustainability into daily practices, fostering a unified commitment to achieving the SDGs across the institution. Extending such

#5

Requiring Mandatory Training for all Staff training offerings to the broader community has the potential to expedite sustainable development within society; in particular, it can enhance entrepreneurial activities and facilitate interdisciplinary, cross-institutional, local and civic engagement towards progressive policy implementation to address sustainability.

SDS4HEI showed that:

Incentive schemes are an attractive method of embedding sustainability in HEIs. These schemes encourage culture change by rewarding sustainable behaviours and achievements. These incentives motivate management, staff, and students to adopt and prioritise sustainability practices, fostering widespread engagement. Over time, this recognition and reinforcement of sustainable actions nurture a culture deeply committed to responsibility for SDGs and sustainable development.

We therefore propose:

Implementation of incentive schemes for staff to integrate sustainability into their daily operations. Such incentives, including recognition, awards, collaboration opportunities, and financial benefits, can motivate staff to adopt sustainable practices, enhance engagement, and promote a culture of responsibility for the SDGs. This will ultimately advance the institution's sustainability goals more effectively and help it become a change-maker in sustainable development culture. By implementing incentives for stakeholders, HEIs can expand the reach of their sustainable development initiatives, raise awareness, stimulate innovation, promote quality transformation and inspire others to become actively involved in addressing sustainability.

SDS4HEI showed that:

Many higher education staff recognise the need to monitor and regularly review sustainable practices and activities. This continuous evaluation ensures accountability, identifies areas for improvement, and tracks progress towards sustainability goals, fostering an adaptive and effective approach to integrating sustainability into institutional operations and culture.

We therefore propose:

An integrated methodology that supports regular monitoring and review of sustainable practices and activities in higher education institutions. This will ensure accountability and **#6** Implementing Incentive Schemes

#7 Monitoring Sustainability Practices & Activities continuous improvement. By systematically tracking progress and identifying gaps, the methodology facilitates effective integration of sustainability into all aspects of institutional operations, promoting a culture of responsibility and advancing sustainable development activities and goals. We recommend using input-output models, which are most often used to outline the impact. HEIs should focus on using appropriate means to assess and measure progress, and set objectives for outcomes rather than activity outputs. Key performance indicators (KPIs) should resemble the cultural dimension with a design that captures stakeholders' perspectives and aims towards long-term behavioural changes.

SDS4HEI showed that:

Many higher education students seek to learn about sustainability as an integral part of their courses, with a long-term goal of embedding sustainable actions into their professional careers. They desire knowledge and skills to address sustainability challenges, ensuring their future work contributes to sustainable development and fosters a culture of responsibility and innovation in their respective fields.

We therefore propose:

Embedding sustainability education into all higher education courses and degrees is crucial in preparing graduates to address complex global challenges. By integrating sustainability principles across disciplines, institutions cultivate a generation of professionals equipped with the knowledge and skills to create a more sustainable and equitable future. Inclusion of students and regional stakeholders in curricula co-design and transdisciplinary collaboration to explore synergies between curricula, industry and societal/environmental challenges is desired. This can work to enhance the quality of education, course design and students' employability. Combining entrepreneurial and sustainable skills, project-based and on-campus learning, and implying new teaching and learning methods (e.g., digital, problem-based, interdisciplinary community-based learning) and innovative methods in course delivery will increase skills and knowledge on sustainability. Besides courses, educational offerings should extend to other educational opportunities (e.g., trainings, MOOCs, workshops, boot camps).

#8

Integrating into all HEI Courses at all Levels

SDS4HEI showed that:

Many higher education staff are eager to engage stakeholders at regional and national levels for guidance on how sustainability education can be integrated to have a lasting impact at the regional/national level. Collaboration with government bodies, NGOs, and industry experts will provide valuable insights and resources. Additionally, many academics feel that graduate groups can play a pivotal role in supporting and advancing sustainability initiatives, providing a link between education and industry.

We therefore propose:

Facilitate an effective method for engaging stakeholders at regional and national levels, such as through collaborative forums, networks, associations, sitting chairs in executive bodies, workshops, training, and projects. These forms of engagement facilitate dialogue, knowledge sharing and good practices. They catalyse resource mobilisation, enable diffusion of skills into regional ecosystems, contribute to better mapping and understanding of regional challenges, contribute to regional development towards more sustainability. From an entrepreneurial perspective, they contribute to initiating and orchestrating regional business, innovation and entrepreneurial ecosystems, increase and uphold level of motivation among stakeholders, and help HEIs increase their impact in regional ecosystems. Additionally, leveraging graduate networks as advocates and mentors can amplify the impact, fostering a collective commitment to integrating sustainability across HEIs and beyond.

SDS4HEI showed that:

Many higher education management, staff, and students desire to experience a visible, living culture of sustainability that fosters ongoing support for the SDGs. Through engaging events like sustainability fairs, eco-friendly competitions, and campus clean-up initiatives, students and staff will be inspired to actively contribute, ensuring sustained momentum towards achieving the SDGs.

We therefore propose:

HEIs can host regular sustainability-themed events, such as workshops, seminars, and volunteer opportunities. Implementing eco-friendly initiatives like waste reduction programs and sustainable transportation options further reinforces the institution's commitment to supporting the SDGs and inspires continued community engagement. Engaging events, such as competitions and teamwork initiatives, will encourage management, staff, and students **#9**

Fostering Regional & National Engagement

#10

Creating a Visible Living Culture of Sustainability to consider sustainability in their practices and keep the SDGs at the forefront of their minds. Besides embedding culture through campus design, management, operations and practices, sustainability culture can be created through establishing dialogue among diverse stakeholders, telling transformative stories, and providing opportunities and safe spaces for experimentation and value co-creation. Herein, culture should be embedded as a transversal dimension, influencing perceptions, values, beliefs, and motivation to take action for sustainable development. Creating and embracing sustainability culture will help HEIs implement sustainable development and expand the reach of sustainability initiatives, enable long-term behavioural change, make an overreaching impact, and help them rise into changemakers and transformative agents in regions.

03./ Additional Resources

If you would like to continue learning about sustainable development through multiple sources of literature that have shaped the SDS4HEI Framework, Self-Assessment, Massive Open Online Course (MOOC), and other SDS4HEI resources, please visit the SDS4HEI Knowledge Base at https://sds4hei.eu/knowledge-base/. This library provides access to literature that addresses sustainable development at multiple levels within HEIs, including Institutional Level, Regional Level, National Level, European Level, and also, relevant Ranking Systems.