SUMMARY REPORT ON THE STATE OF THE ART ON SUSTAINABLE DEVELOPMENT IN HIGHER EDUCATION INSTITUTIONS

INTELLECTUAL OUTPUT 1



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FOREWORD

FOREWORD

Our times call us upon reflecting and imagining how deeply our living conditions will change from an environmental, social and economic point of view in the near future. These changes – climate change, biodiversity loss, severe social inequalities, deterioration of general living conditions, intensive use of resources – are already underway¹ and, according to many, are a consequence of human activities². Unfortunately, these processes are much faster than predicted³, threatening the collapse of key social and economic systems (United Nations, 2019), so we do not have much time to take the right steps, as a matter of facts, changing the current economic systems would require a **paradigm shift**: an extremely complex task.

Even though numerous studies, practical environmental procedures, and interdisciplinary solutions are already available and encouraged; it is important to adapt them to different subsystems, apply these measures widely in the most efficient way as possible and to promote further developments and innovations in the light of experience.

Unprecedented efforts to transform societies, economies, infrastructures and governance institutions call for interdisciplinary solutions capable of promoting change and innovation into the institutional Sustainable Development Goals (SDGs) strategies. Within this context, the term "Education for Sustainable Development" (ESD) describes the educational efforts aimed at empowering people to change the way they think and work so as to create a sustainable future society (Hoffman, 2018; UNESCO, 2017).

For this reason, universities and other higher education institutions (HEIs) play an essential and irreplaceable role in this domain.

Firstly, higher education provides future thinkers, decision-makers and teachers with broad and well-grounded knowledge and leadership skills motivating people to get a deeper understanding of the world. Secondly, higher education is an important basis for sustainability research; cutting-edge procedures may facilitate the transition to a more sustainable future. Thirdly, HEIs operations mediate, set examples or transform certain behavioural patterns into a norm, thus fulfilling the wider social role of these institutions. Being the place where future leaders and citizens develop their professional and civic skills to support social and economic development, HEIs should pave the way towards the effective communication, promotion, and implementation of sustainable solutions to environmental issues (Leal Filho, 2000).

The UNI-ECO project comes as a response to these pressing issues, its innovativeness resides in a bottom-up approach involving all university layers and all the social groups within partner institutions. Being an Erasmus+ Strategic Partnership project, innovation and promotion of cooperation are its core values. The project envisages to establish a common effort among partner universities in order to deal with the challenges they will identify within their campuses. The aim of the project is not only to promote the adoption of green practices and make sustainability more visible and actionable but

¹ Intergovernmental Panel on Climate change (IPCC) (2019). Special Report: Global Warming of 1.5 °C. Available at: https://www.ipcc.ch/reports/

² National Aeronautics and Space Administration (NASA) (2020). Scientific Consensus: Earth's Climate Is Warming. Available at: https://climate.nasa.gov/scientific-consensus/

³ Copernicus Climate Change Service (2020). Copernicus: 2020 warmest year on record for Europe; globally, 2020 ties with 2016 for warmest year recorded. Press release, Reading, 8 January 2021. Available at: https://climate.copernicus.eu/2020-warmest-year-record-europe-globally-2020-ties-2016-warmest-year-recorded

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also to develop an innovative methodology that will empower the HEI community to actively support the strategic plan of each institution. UNI-ECO recognizes the necessity of establishing an action plan which should be as close as possible to the HEI's needs as well as to its population's capacities. The aim is to create a tailor-made UNI-ECO action plan based on the state of the art of each participating institution, so that it may reflect their vision.

We think that the UNI-ECO – practical & collaborative tools for sustainability innovation in the university (UNI-ECO) project will make a major contribution to all of these goals by allowing for an extensive screening of the current sustainability practices in five European universities (UU, UB, UM, Trinity, ELTE). Moreover, its methodology could be used as an institutional method aimed at strengthening environmentally-conscious initiatives in the future.tcd

INTRODUCTION TO SUSTAINABLE DEVELOPMENT

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A. Sustainable Development: an International Perspective

Today, the theoretical and practical background of sustainable development has become a complex, usable and policy-making framework that individuals, for-profit and non-profit organisations, and institutions can easily turn to if they want to expand their knowledge on the topic or reduce their environmental impact by setting up relevant action.

The area- and natural resource-specific approaches of the Nineteenth and Twentieth centuries was slowly replaced by an in-depth, research-based approach to subsystems that sought to interact at the macro level while being able to change individual behaviour at the same time. These steps are pointed out by specific milestone, such as the publishing of relevant books and reports, e.g. Silent Spring (1962) The Limits to Growth (1972) Our Common Future (1987) Rio-Agenda21 (1992); Johannesburg Education Decade- UN-UNESCO (2002); Vilnius, UNESCO IIS (2005); Rio+20 (SD21) (2012) or UN-SDGs (2015).

Currently, the main global challenges to sustainability are outlined in the 17 SDGs and their sub-targets set by the United Nations General Assembly. Complementing these with the conceptual framework of planetary boundaries and global risk factors (developed in 2010), we get a complex system of relations where all important factors in the field of sustainable development are included and lead to informed decisions.

By the 2020s, researchers, NGOs, politicians, and individuals have realized how complex and pressing the problem is and understood that the actual results of the efforts made thus far have shown a lack of direction and it seems uncertain whether humanity may meet this global challenge.

There is a broad consent on the key role that sustainability education may play at all levels of education, from kindergarten to university. However, such a remark is even more valid for universities as multistakeholders which are responsible of contributing to the SDGs.

In order to emphasise the importance of learning, the United Nation declared the period 2005-2014 the Decade of Education for Sustainability. The aim was to integrate the principles, values and practices of sustainable development into all aspects of education and learning, thus enabling a more sustainable and fairer society for all. The concept of education for sustainability is the idea of investing in the future. It is supported by several recommendations and conferences by the UN and UNESCO, promotes the integration of the **environmental**, **social**, **economic** and **cultural** aspects of such challenge. Global Action Programme on Education for Sustainable Development (GAP)() furthers the ideals which informed the Decade on ESD and it is closely related to the UN SDGs.

The United Nations "Education for Sustainable Development" (ESD) programme continues to be pivotal as it aims at enabling people to change their mindset and strive for a sustainable future.

At the international level, the transformation of education for sustainability is supported by a number of recommendations and programs.

University and higher education institutions have been formulating declarations and strategic plans for decades so as to promote institutional and educational changes. Those statements and documents are various and include curriculum developments, recommendations, research supports

or networking, such as those listed below:

- 1972 Stockholm Declaration on the Human Environment (UNESCO, 1972)
- 1977 Tbilisi Declaration (UNESCO-UNEP, 1977)
- 1988 Magna Charter of European Universities (1988)
- 1990 Talloires Declaration (UNESCO, 1990)
- 1991 Halifax Declaration
- 1991 Urgent Call from European Universities to the Preparatory Committee of the UN Conference on Environment and Development (1991)
- 1992 Challenges for the 21st Century Chapter 36 (UNESCO, 1992)
- 1993 Kyoto Declaration (IAU, 1993)
- 1993 Swansea Declaration (UNESCO, 1993)
- 1994 CRE Copernicus Charta (CRE-Copernicus, 1994)
- 1997 Thessaloniki Declaration (UNESCO, 1997)
- 2001 Lüneburgi Declaration (CRE-Copernicus, 2001)
- 2002 Education for Sustainable Development, Johannesburg (UNESCO, 2002)
- 2005 Graz Declaration
- 2005 UNECE
- 2009 Torino Declaration, Abuja Declaration
- 2015 Nagoya Declaration (UN, 2015)

The process of making universities more sustainable is open and exploratory, with professional international organizations, emerging consortia, and in-country networks helping institutions operate in a more environmental-friendly manner, transform and engage in scientific dialogue.

The International Sustainable Campus Network (ISCN) is a global forum that supports leading colleges, universities, and corporate campuses in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching.

University Leaders for a Sustainable Future (ULSF) () includes Talloires signatories and promotes sustainability as a critical focus of teaching, research, operations and outreach in higher education through publications, research, and assessment.

Moreover, students' action is also on the rise with organisations like Students Organizing for Sustainability International. SOS International helps members deliver sustainability programmes and campaigns specifically designed for educational institutions.

B. Sustainable Development in the European Union

The EU implements strategies and plans to achieve environmental and sustainable development targets. These include the European Green Deal, one of the European Commission's six political priorities along with Environment action programme to 2030⁴, the United Nations Sustainable Development Goals⁵, Biodiversity strategy for 2030 – concrete actions⁶, Circular economy plan⁷, Zero Pollution action plan⁸ and the Chemicals Strategy for sustainability towards a toxic-free environment⁹.

Key actions for the implementation of the 2030 Agenda include the integration of SDGs into EU policies and initiatives across the board, with sustainable development as an essential guiding principle for all European Commission decisions. These measures provide regular reporting of the EU's progress; take the implementation of the 2030 Agenda forward with EU governments, the European Parliament, other European institutions, international organisations, civil society organisations, citizens and other stakeholders; launch a high-level multi-stakeholder platform, support the exchange of best practices on implementation across sectors at national and EU level; launch a longer-term vision with a post-2020 perspective.

In order to promote sustainable development around the world, the EU continues working with external partners, using all the available tools under its external policies and support in particular the efforts in developing countries.

⁴ European Commission (2020). Proposal for a decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2030 (2020/0300). Available at: https://ec.europa.eu/environment/pdf/8EAP/2020/10/8EAP-draft.pdf

⁵ United Nations General Assembly (2015). A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development. Available at: https://sdgs.un.org/2030agenda

⁶ European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions EU Biodiversity Strategy for 2030 Bringing nature back into our lives (COM/2020/380). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380

⁷ European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions A new Circular Economy Action Plan For a cleaner and more competitive Europe (COM/2020/98). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN

⁸ European Commission (2020). Towards zero pollution in air, water and soil – EU action plan. Available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12588-EU-Action-Plan-Towards-a-Zero-Pollution-Ambition-for-air-water-and-soil

⁹ European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (COM/2020/667). Available at: https://ec.europa.eu/environment/pdf/chemicals/2020/10/Strategy.pdf

C. Common Definition on Sustainable Development in Higher Education Institutions

Starting from mid-twentieth century, several interrelated schools of **thought** contributed to conceptualising the idea of "sustainability". According to some scholars¹⁰, one can distinguish six foundations or roots: resources/environment, biosphere, ecological/carrying capacity, critique of technology, "no growth"/"slow growth", eco-development.

Years of scientific dialogue, recent research, and interdisciplinary work have given way to a widely accepted definition stated in the 1987 Brundtland Report. The definition in the Brundtland Report of the World Commission on Environment and Development¹¹ is as follows: "... development that meets the needs of the present without compromising the ability of future generations to meet their own needs". "... In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations".

According to another definition, sustainable development is nothing more than ensuring prosperity within the Earth's capacity to sustain itself. That is, a long, happy, meaningful life with a minimal ecological footprint¹².

Experts in sustainable development agree that the three pillars (originating from John Elkington) of sustainable development or sustainability are: environment and nature, economy, and society. This concept was completed with a fourth dimension: culture, namely: "... sustainability is a relationship between dynamic human economic systems and dynamic, but slower, ecological systems"¹³.

In the case of universities, we believe we should start from 1987 definition, taking into account the special role and operation of HEIs, along with the need to embed sustainability in all aspects of the university governance, operations, learning, research, and community.

As detailed and summarized by the International Sustainable Campus Network a sustainable university is committed to:

Institutional Leadership to:

- Embed sustainability
- Create an environment that cultivates resilient, empowered, caring and engaged students, staff, and faculty who will contribute to the health of people and places.
- Engage with external partners, industry, government, and civil society to disseminate knowledge, research and best practices to benefit the communities in which we serve.

¹⁰ Kidd, C.V. (1992). The evolution of sustainability. J Agric Environ Ethics 5, 1–26. Available at: https://doi.org/10.1007/BF01965413

¹¹ World Commission on Environment and Developmen (WCED) (1987). Our Common Future. Available at: https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

¹² IUCN/UNEP/WWF (1991). Caring for the Erath: A Strategy for Sustainable Living. Available at: https://portals.iucn.org/library/efiles/documents/cfe-003.pdf

¹³ Costanza, R. & Daly, H.E. (1992). Natural Capital and Sustainable Development. Conservation Biology, Vol. 6, No. 1 (Mar., 1992), pp. 37-46. Available at: https://www.life.illinois.edu/ib/451/Costanza%20(1992).pdf

Network Collaboration:

- Deepen and broaden the collaboration that happens between members of the network to accelerate collective action.
- Ensure that the network is significantly inspiring international dialogue and debate to contribute to the SDGs.

ABOUT THE UNI-ECO PROJECT

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A. Purpose, Participants and Duration of the Project

This project aims at responding to the need of building social and environmental sustainability into the core ethos of modern university. Sustainability is a crucial issue. Now more than ever, it has become a vital need to transform our lifestyle in order align it with the many initiatives aimed at reaching the UN Sustainable Development Goals (SDGs) by 2030. The term "Education for Sustainable Development" (ESD) describes education that empowers people to design the future actively in a globalized world, autonomously and responsibly. The UNI-ECO project sets to design a sustainable campus, even though it is up to students and HEI staff to bring it to life by getting involved and taking action.

The concerned target group is university population including students and staff covering the whole HEI hierarchy axis. UNI-ECO has selected a bottom-up approach in order to start this transformation from the roots focusing firstly on the campus needs and secondly on its perspectives by activating all the key actors.

The project aims not only at increasing the adoption of green practices and making sustainability more visible and actionable but also at developing an innovative methodology that will empower the HEI community to actively support the strategic plan of each institution.

In order to work together towards more sustainable campuses, UNI-ECO will develop an innovative methodology based on 3 key dimensions:

1. Raise awareness

Sensitizing the HEI population remains one of UNI-ECO core objectives, as we believe that by taking all necessary actions towards involving staff and students, we can make sure that they will keep on working on sustainability even after the project implementation.

2. Collaborate

The project aims at promoting collaboration not only among the participating universities but also across different layers within each institution. Moreover, it furthers the exchange of good practices by bringing to the surface innovative ideas coming from the staff and students.

3. Contribute

The heart of the project will be the implementation of Living Labs based on a systematic user cocreation approach integrating pedagogical tools and innovation processes. As students/staff are the key users of facilities on campus, their knowledge, skills, and habits are essential to the successful attainment of sustainable campuses.

By understanding core issues and involving key actors (e.g. the institution and its community) we aim at changing the perceptions and behaviour of university population so as to allow them to transform such problems into solutions.

UNI-ECO project is supposed to deliver the following outputs: Summary report on the State of the Art on Sustainable Development in HEI, E-Learning Training Units for HEI staff, Living Lab for Sustainable HEIs, Road Map for a Staff Empowerment on Sustainable Development Matters. Moreover, the team will develop an innovative methodology and toolkit empowering the HEI community to act on

Sustainable Development related matters.

Our cooperation is targeted not only at increasing the adoption of green practices and at making sustainability more visible and actionable but also at developing an innovative methodology that will empower the whole HEI community to support the strategic plan of each institution.

The following universities are part of the UNI-ECO consortium along with two non-profit institutions, CESIE and Unione delle Università del Mediterraneo (UNIMED):

- Universitat de Barcelona (UB)
- Utrecht University (UU)
- The University of Dublin, Trinity
- Université de Montpellier (UM)
- Eötvös Loránd University, Eötvös Loránd Tudományegyetem (ELTE)

University of Barcelona

Since its foundation in the year 1450, the University of Barcelona has been a leading centre of education, science, and critical thought. With 63,000 students, it is one of the biggest universities in Spain. The University of Barcelona comprises 100 departments grouped in 16 faculties and two university schools, nine affiliated centre.

In the academic year 2017-2018, students were distributed across 73 bachelor's degrees, 153 master's degrees, 48 doctoral programmes, over 700 postgraduate courses, and about 597 on-site and distance lifelong learning courses - to cover the complete selection of courses.

It has 106 departments and more than 5,000 full-time researchers, technicians, and research assistants, most of whom work in the 243 research groups as recognized and supported by the Government of Catalonia.

Utrecht University

It is located in Utrecht, the Netherlands. Established in 26 March 1636, it is one of the oldest universities in the Netherlands. The enrolled students are 29,425 and more than 5,568 people work at University. In 2011, 485 PhD degrees were awarded and 7,773 scientific articles were published. Utrecht University's mission is to contribute to a better world, by focusing its research on solving major global challenges, by equipping graduates with the knowledge and skills necessary to make a substantial contribution to society.

Trinity

Founded in 1592, Trinity is Ireland's oldest and top ranked University. Situated in the heart of Dublin City, the central campus occupies 47 acres and has approximately 18,000 students and 3,400 staff members. It is a comprehensive University where students benefit from a unique education across diverse disciplines in three faculties – Arts, Humanities and Social Sciences; Engineering, Mathematics and Science; and Health Sciences - with research and teaching programmes committed to the UN-SDGs in all three.

University of Montpellier

The University of Montpellier is a research-intensive university where education and research cover

most of the Scientific and Technological fields. UM gathers around 43,000 students and 4,618 staff with an overall budget of 400 million euros. Studies are organized into three fields: Fundamental and Applied Sciences, Human and Social Sciences (Law, Economy) and Health studies. Research is structured into 76 laboratories most of which are in partnership with well-recognized French research organizations such as CNRS, IRD, INRA, or CIRAD. On the innovation front, UM is linked to 8 Competitiveness Clusters in the Languedoc Roussillon Region. UM is the project coordinator of UNI-ECO project.

Eötvös Loránd University

As one of the oldest and most prestigious university of Hungary, Eötvös Loránd University (ELTE) aims to preserve its rich traditions while taking a leading role in educating the best future professionals in Humanities, Natural and Social Sciences. It has 8 faculties (covering the fields of Law, Humanities, Education, Psychology, Teacher Training, Special Needs Education, Informatics, Natural Sciences, Mechanical Engineering, and Economics). Students may choose from 70 different languages to study at ELTE. 2000-2250 researchers and professors work at ELTE along with 1000 managers and administrative staff.

UNIMED

Founded in October 1991, Mediterranean Universities Union (UNIMED) is an association of 118 Universities from 23 countries across Mediterranean Sea, which aims to strengthen Euro-Mediterranean scientific, cultural, social, and economic cooperation by promoting University international projects.

CESIE

Established in 2001, CESIE is a non-profit, apolitical, and non-governmental organisation based in Palermo (Italy). CESIE is committed to promote the cultural, social, educational, and economic development at local, national, European, and international levels. CESIE contributes to growth and development through the active participation of people, civil society, and institutions, always valuing diversity.

The duration of the project is 3 years (2019-2022).

B. Methodology

This study aims at establishing the state of the art of sustainability measures in each university, so as to fix UNI-ECO starting points.

When defining the methodology, partners agreed that existing measurement systems should be taken into account in order to evaluate their sustainability status. However, different measurement systems used in the five universities are difficult to compare in a data-driven way. Therefore, we sought to determine to what extent a sustainability area is addressed on a 0-100% scale. For example, when examining composting, we did not measure the collected mass; rather we reported the extent to which composting is taken into account at each university.

Existing university reference materials were used as a literature base. The UN Sustainable Development Goals, International Sustainable Campus Network professional materials, University of Indonesia Greenmetrics, and Times Higher Education rankings were taken into account to set Key Performance Indicators by which to assess present university sustainability systems.

In order to collect the necessary data among the general population of the university and staff members working specifically on SD-related topics, we conducted 2 studies:

- An institutional survey completed by institutional professionals. This consisted of 215 questions covering 10 topics related to incorporating sustainable development into universities structure and operations (general questions, energy, waste, water, procurement, biodiversity, food and catering, education, communication and SD-system, mobility). A questionnaire was used to gather information: its template is provided in **Annex 1**;
- Asurvey targeted at "campus users", i.e. students, academic and non-academic staff, consisting of 34 questions that examined individual attitudes and habits. It also addressed environmental awareness and community views on university environmental activities and their effectiveness. A questionnaire was used to gather information: its template is provided in Annex 2.

Both questionnaires served as a common basis for the study, and were adapted to their particular context by partner universities. They include yes/no questions, open-ended questions, Likert scale questions, and data provision requests. The institutional questionnaire also includes SWOT¹⁴ analyses at the end of each topic.

The wide range of question types provided an opportunity to address and grasp diverse perspective concerning HEI approach to sustainability.

The data were summarised and analysed with graphs, summary tables, textual and SWOT analyses.

Based on the incoming data, each partner university prepared an institutional report for internal purposes, presenting an overview of operational sustainability and the response of their community. The present document was drafted on the basis of those reports to provide a broad analysis of the partnership as a whole.

¹⁴ SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, and so a SWOT Analysis is a technique for assessing these four aspects of an organisation.

ANALYSIS OF HEIs' NATIONAL REPORTS

ANALYSIS OF HEIS' NATIONAL REPORTS

A. Sustainable Development Issues

General information

General findings

In the sustainability report, the above-mentioned Universities were examined in ten areas, the first of which is **general data and Sustainable Development (SD) policies**.

All the five universities were founded several hundred years ago.



figure 1 - Establishment of the UNI-ECO universities

These historic high-ranked institutions have extensive buildings, and - in addition to educational campuses - libraries, sports facilities, botanical gardens, and archives enrich their operational system. Individual universities include kindergartens, high schools, and resorts (ELTE). Dormitories are not outsourced at Trinity and ELTE, while this is the case for UM and UU. Therefore, data collection is cumbersome.

It can be stated that institutional units are scattered over a number of locations, sometimes very far apart and this is a recurring aspect of the survey that hinders a cohesive approach to sustainable development.

Student and staff information

The personal data of the five universities are extremely significant. On the one hand, the personal ecological footprint of nearly a quarter of a million people is highly considerable, but the environmental burden of education is also important in itself and might become worrying disadvantage. On the other hand, it can be a benefit and remarkable results can be achieved, if easy-to-implement measures for all citizens are taken by each university (*figure 2 and 3*).

Number and rate of university citizens of all 5 HEIS

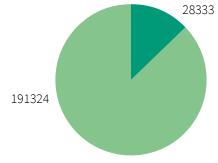
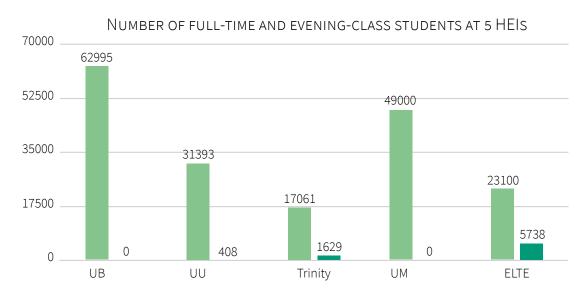


figure 2 - University population of the UNI-ECO partners



part-time student full time student

figure 3 - Studies and students at the UNI-ECO universities

Policies, programmes

The five HEIs have several policies and programmes in place (or under renewal) whose realisation might be crucial in the near future.

HEI	Greenhouse gas policy	Water conservation programme	Waste management programme	Biodiversity conservation programme	Transportation policy
UB	OP2	OP2	OP3	PP	OP2
UU	OP3	PP	OP3	OP3	OP3
Trinity	OP2	OP3	OP3	OP3	OP2
UM	OP2	NONE	OP3	OP2	OP1
ELTE	OP2	OP2	OP3	OP2	PP

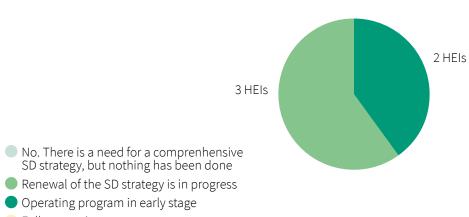
None: There is a need for a programme, but nothing has been done yet PP: Programme in preparation (feasibility study and promotion)

OP1: Operating programme with one measure OP2: Operating programme with two measures

OP3: Operating programme with at least three measures

table 1 - State of SD-policies at UNI-ECO HEIs

COMPREHENSIVE SUSTAINABLE DEVELOPMENT STRATEGY



Fully operating program

figure 4 - State of SD-strategies at HEIs

For instance greenhouse gas policy include the following measures: measurement of and goal setting concerning emissions, purchased electricity, waste, travel and commuting.

A comprehensive sustainable development strategy is in place at two universities (in UU and Trinity), while it is under renewal in the other institutions (UB, UM, ELTE).

SWOT

The information gathered in the National reports helped identify clear similarities between partner universities according to the SWOT analysis in relation to sustainable development in general:

- Strengths: commitment to create SD policy
- Weaknesses: large, scattered campuses, buildings, budgetary problems, lack of Key Performance Indicators
- Opportunities: raising awareness, networking and dissemination of information
- Threats: current health crisis, high cost of structural changes, competition among universities, urban environment

Education and Research

General findings

A closer look at education and research can provide valuable data concerning sustainability to enable universities play their role as indicators of change in the coming decades.

The emergence of sustainability was taken into consideration for the basic education portfolio and research. We also examined in detail how environmental aspects appear in the organization of education.

All the universities involved in the research are well-established institutions with a long tradition. Their education and training portfolios are very diverse, with some common fields of education in Economic studies, Legal studies and Natural Sciences. Overall, the integration of sustainability in educational programs was very difficult to analyse in a precise way, since a subject can be more or less related to the topic, and currently there are no central institutional databases available to examine this specific aspect.

Nevertheless, we may affirm that sustainability is a high priority in the five HEIs in terms of both education and research. Students who want to deepen their knowledge in this field may find undergraduate and master's degrees, as well as PhDs (EIT Climate-KIC). SD research is playing a major role everywhere and universities are sharing knowledge through networking initiatives (e.g. MUSE, CHARM-EU).

Students

A significant number of students (191,324 registered students in 2020) attend the five universities. They are mostly involved in full-time training however, three universities (UU, Trinity and ELTE) also offer evening classes and part-time education.

In 2020 COVID-19 pandemic had a fundamental impact on the lives of universities which had to switch to online classes for large numbers of students over a very short timeframe and at a crucial time (just before exams). These experiences are still being analysed and they suggest that in the long term

educational institutions may decide to promote a more thorough use of online resources. This is of the utmost importance since, **thanks to distance education and teleworking, university consumption figures have fallen significantly**, resulting in greenhouse gas emissions reduction.

Sustainability research

The proportion of sustainability research compared to all research applications is 1-15% for four universities and reaches 16-25% in one case (*figure 5*).



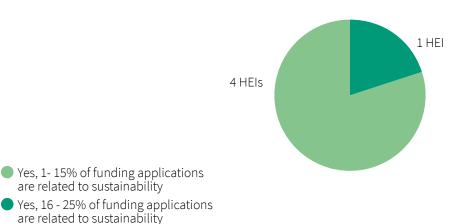


figure 5 - Sources of SD-researches

The research repertoire is wide as climatological, social, and economic studies are being undertaken. Institutions carry out research projects on how to reduce emissions; as well as on biodiversity, transport, waste management, water protection and behavioural change. One of the most important topics is how sustainability initiatives can be transferred at the societal level over a short period of time.

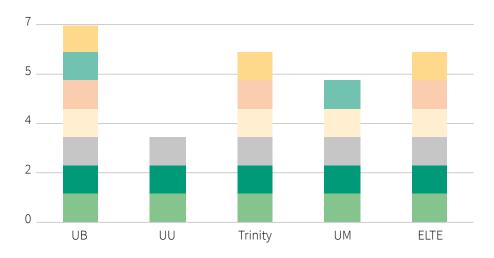
In addition to professional/scientific journals, university professionals regularly write articles for a wider audience.

Educational processes from an environmental point of view

Making educational processes more sustainable, on the one hand, reinforces the message of a better future, and on the other hand, it can also contribute to reducing the university's ecological footprint. In three areas, **all five universities have introduced procedures aimed at reducing paper usage**: digital essays and theses are accepted, and libraries have electronic book rental systems.

Electronic certificates for students are available in four universities (UB, Trinity, UM, ELTE), degree parchments are still hard copy. The use of carbon-neutral search engines is also organised - formally or informally - at UB, Trinity, and ELTE. Teachers are encouraged to reduce paper use (UB, Trinity, and ELTE) and to integrate SD in their studies (UB and UM) (*figure 6*).

EDUCATIONAL PROCESSES AND SD-MEASURES



- Encouraging teachers to reduce paper use during teachning.
- Encouraging teachers to integrate SD in their studies.
- Encouraging carbon neutral search engine
- Eletronic certificate for the students
- Electronic book rental
- Thesis accepted eletronically
- Essays submitted eletronically

figure 6 - Methods applied for SD during education

SWOT

Once again, the information gathered in the National reports helped identify clear similarities between partner universities in the SWOT analysis regarding SD in education and research:

- Strengths: lots of courses include SD, strong research systems
- Weaknesses: large universities, impact of the education and the rate of SD courses are less measured
- **Opportunities:** assign all programs to certain SDGs, cooperation through the CHARM-EU's alliance, more video conferences
- **Threats:** limited funding sources driven by economic growth, personal barriers, COVID-19

Energy

General findings

One of the largest contributors to greenhouse gas emissions is the burning of fossil fuels for energy needs. Furthermore, energy consumption is constantly increasing since the beginning of the Industrial Revolution. The most important greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.

As *figure* 7 shows, industrial processes, production of electricity and heating count for around 50% of global greenhouse gases. Even though greenhouse gas emissions from increased energy use are one of the biggest threats, their reduction by means of effective measures may represent a great opportunity as well.

Energy consumption at universities includes the following: heating, air conditioning, hot water use, gas heating, lighting, electric or gas heating (cooking), electrical appliances, specialist laboratory

equipment, and information technology (i.e. computers, printers, etc.).

As energy consumption is one of the main factors in overall operational costs at universities, it is also in their financial interest to improve efficiency and to keep this consumption to a minimum in the long run.

Annual greenhouse gas emissions by sector

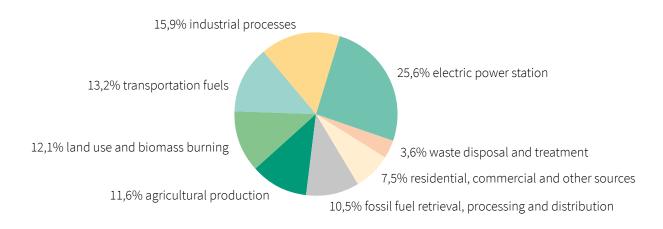


figure 7 - Fractions of man-made greenhouse gases on a global scale, EDGAR, 4.2, 2010¹⁵

Overview of the energy production in the UNI-ECO partner countries

In order to have a better understanding of energy consumption at universities and identify possible developments, it is worth examining the main sources used in the countries (*table 2*)¹⁶.

Ktoe (kilogram of oil equivalent)	Total	Coal	Natural gas	Nuclear	Hydro	Wind, solar etc.	Biofuels and waste	Oil
Spain	125 017	11 254	27 082	14 530	2 952	7 308	8 009	52 926
Netherlands	72 934	8 213	30 729	916	6	1 351	3 9 1 2	26 989
Ireland	13 713	1 394	4 488	0	60	758	752	6 265
France	246 355	9 034	36 726	107 596	5 613	4 036	17 748	70 998
Hungary	26 739	2 252	8 274	4 114	19	333	2 701	7 812

table 2 - Energy production in the UNI-ECO partner countries (2018)

Fossil fuels remain dominant energy sources in the five partner countries. Spain and Ireland are ahead in the use of renewable energy (5-15%), with no nuclear power generation at all in Ireland and 1% in the Netherlands. Nuclear power is a key part of energy supplies in France (43%), but it is also significant in Hungary (16%) and not negligible in Spain (11%).

In Hungary, the use of biofuels produced with waste is quite widespread (11%), while in other countries it represents between 5-7% of energy sources.

¹⁵ Data extracted from Emission Database for Global Atmospheric Research (EDGAR) version 4.2, fast track 2010 project. Available at: https://data.jrc.ec.europa.eu/dataset/jrc-edgar-jrc-edgarv42_ft2010_ghg_gridmaps

¹⁶ Data extracted from the International Energy Agency database. Available at: https://www.iea.org/regions/europe

Energy use at HEIs

It is not easy to determine the energy sources used in HEIs since much of the energy is purchased from the national grid. While locally produced energy may not be fossil fuel-based, it is difficult to identify the exact source and amount of power purchased. Hence, universities are highly dependent on national energy strategies and may not be as strong so as to have a great influence on them.

However, universities do have, to some extent, leverage as regards to their energy consumption, on the one side as regards to the power they buy through procurement operations, and on the other concerning the reduction of energy use on campus.

Regarding procurement, two universities of the consortium have successfully inserted sustainability clauses in their contracts with energy providers. At UB and UM, 100% and 50% of the purchased energy is generated from renewable sources respectively. Another strategy includes local production of energy, for example through the installation of solar panels directly on university ground (either for electricity or heat production). This strategy is pursued by UU and Trinity, where renewable energy production on campus accounts for 4% and 0.5% respectively. This strategy can be further developed by other institutions which have a rather strong potential for renewable energy production on campus (due for example to the climate at UM and UB).

Regarding the reduction of energy consumption within each institution, several strategies are implemented. In particular, they are dedicated to renovating ageing university buildings so as to meet energy efficiency targets. Further in that regard, Smart Building Implementation (SBI), aiming at setting up connected devices which enable efficient measurement of the energy use in a building to enhance its performances, is already well-developed (or under development) in some university buildings in 3 HEIs (UU, Trinity, UM) (Table 3). SBI has been extensively implemented at Trinity, with a broad ethernet-based Building management system (BMS) in place and the systematic installation in newer buildings of Smart Building Technology and services to allow them to operate as living laboratories. There is so far no SBI at UB and ELTE.

University	Smart building implementation
UB	None
UU	PES
Trinity	PES
UM	PP
ELTE	None

None: There is a need for a programme, but nothing has been done yet PP1: Programme in preparation (feasibility study and promotion)
PP2: Programme in preparation (budget provided, project under construction)
PES: Operating programme at early stage

FOP: Fully Operating programme

table 3 - The state of SBIs (Smart Building Implementations) at HEIs

Tables 3 show that universities still have a long way to go to increase the rate of renewable energy in use. Gas use is still above 30% in 3 institutions (UU, Trinity, ELTE) while it is in the range 16-30% at UB. The highest rate of renewable energy is linked with wind power and it falls in the range 10-15% at UU and Trinity. Solar (UU, ELTE, UM), geothermal (UU) and combined heat and power (UU, Trinity) reaches only 1-3%.

It is worth mentioning that thermal insulation was also carried out partly in the case of the ELTE buildings in connection with solar energy installations.

University	Electricity use per Kwh	Total number of students and staff	Electricity per capita (kWh)
UB	38.048.971	71.387	532,90
UU	53.600.000	38.992	1374,64
Trinity	37.721.264	22.164	1701,9
UM	~30.000.000	53.883	556,76
ELTE	20.629.914	33.281	619,87

table 4 - Electricity per capita at HEIs

Table 4 shows the yearly data on electricity consumption along with the number of university students and staff. Clearly, HEIs have many opportunities to reduce electricity consumption and such analysis is a good starting point for future campaigns.

SWOT

With regard to energy use, the SWOT analysis undertaken based on the information gathered in the National reports highlighted the following commonalities between partner universities:

- Strengths: improvements already made in the field of renewables;
- Weaknesses: large universities, renewable is still present in small proportions;
- Opportunities: awareness-raising campaigns, increasing renewable energy;
- Threats: budgetary restraints, legal procedures, climate change

Waste

General findings

Waste management refers to a wide range of activities and actions required to handle and treat waste from its inception to its final disposal. Within the overarching sustainability agenda of Higher Education Institutes (HEIs), sustainable waste management plays a key role since it raises awareness of the campus community as well as it positively influences people's attitude and behaviours.

In general, waste reduction and recycling programs are well managed and systematically implemented at all five universities, where greater attention is paid to this matter compared to other areas of sustainability. This is mainly due to the measurability and good physical separability of waste, as well as the relatively long history of effective waste processing in the countries where the universities under investigation are located.

The topic receives primary planning attention at all institutions, although efforts and resources are also channelled towards other equally important operations.

While three of the five stages of the waste hierarchy (landfill, incineration, recycling) are considered at every campus, there remains scope for improvement in the prevention and reuse phases where more structured approaches and increasingly ambitious targets should be adopted.

When it comes to the recycling stage, it must be noted that much depends on the local conditions and the national system capacity. For example, although selective waste collection and recycling can potentially be above 76% for almost all types of materials, there are universities where plastic wastes are only partially recycled due to a lack of awareness among the population and the intrinsic characteristics of the national waste processing system.

Waste fractions Residual paper waste

Regarding selective waste collection, there are two different waste streams universities tend to concentrate their efforts on residual office paper and plastic products. Office paper is easy to collect, highly recyclable and also significant in terms of savings. Once recycled and processed for re-use, it reduces the need to cut down trees. Those are the main reasons why the recycling rate rises above 76% at three universities (UB, UU, ELTE), and paper-waste programs have also been developed at the two other ones with at least 26-50% (Trinity) and 1-25% (UM) of paper being collected for recycling.

With the spread of university digitization, many expected that there would be less paper waste and thus universities could be operated in a more environmentally-conscious way. However, experience has shown that, on the one hand, paper waste has not decreased to the extent that would have been expected, and on the other hand, the proportion of IT waste has increased significantly, which is more difficult to manage (see electronic waste below).



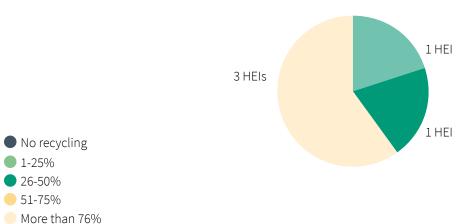


figure 8 - Residual paper waste at HEIs

Confidential paper waste

Administrative rules on campus concerning confidential paper waste are strict and periodically reviewed, therefore its collection and safe disposal is precise and widely dispersed. This conclusion is confirmed by the high recycling rate of confidential paper waste (between 51% and 100% - UB, UU, Trinity, ELTE) at 4 universities, but there is also an operating program meat an early stage at the 5th university (UM).

Plastic waste

Plastic waste collection is also a priority in each of the five universities, where this type of waste is systematically and selectively collected for recycling throughout the academic year, with collection rates ranging from 1-25% (Trinity, UM), to 26-50% (UB), and 51-75% (UU, ELTE). Since there are many

varieties of plastics which are not equally recyclable, the collection rate depends mainly on the structure of the national systems involved, which might explain the different percentages registered. Additionally, many people fail to distinguish between recyclable plastic (i.e. hard plastics in general) and non-recyclable plastics (e.g. Styrofoam, plastic wrapping) which further reduces the recycling rates for plastics. Further analysis and exchange of experiences are recommended.

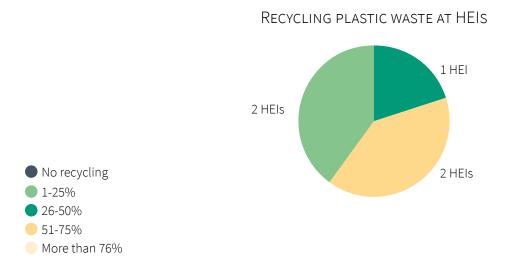


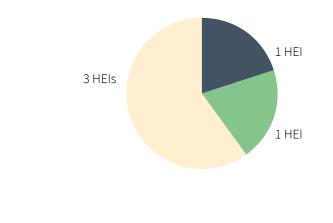
figure 9 - Recycling plastic waste at HEIs

Wood waste (furniture)

The issue of "furniture wood waste" (tables, beds, cabinets) is very complex. The donation of old furniture that can be reused but has become redundant at HEIs is hindered by the fact that these pieces of furniture belong to the State or the HEI and thus, their management is subject to strict rules. Combustion of the above materials (e.g. disposal by incineration which is prevalent in most countries) usually produces many irritating, corrosive and carcinogenic organic substances contributing to air pollution. Moreover, the raw material is also lost.

Landfilling wood waste is the worst solution that universities can count on, as not only is the raw material lost, but controlled decomposition takes a long time and toxic substances must also be taken into account in the long term. As a result, it is a very encouraging fact that more than 76% (UU, Trinity, ELTE) of the wood waste is recycled (sent to be demetallized, ground up and/or re-made into furniture) by 3 universities, approximately 1-25% is recycled at one university and only one university has yet to meet the challenge of correct disposal go this type of waste.





No recycling1-25%26-50%

51-75%

More than 76%

figure 10 - Recycling wood waste at HEIs

Electronic waste

Although the volume of electronic products available at universities (such as TVs, monitors, computers and peripherals, cameras, and related supplies) is increasing and a high concentration of toxic materials is used to produce them, the management and treatment of this waste fraction is successful and exceeded expectations in 4 institutions, which are able to recycle more than 76% of electronic waste every year (UB, UU, Trinity, ELTE) and one university 1-25% (UM).

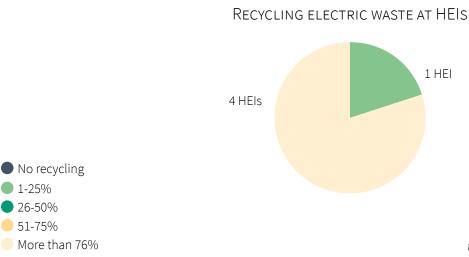


figure 11 - Recycling electronic waste at HEIs

Garden 'green crops'

Separate collection of landscaping waste such as tree branches, grass, and leaves is at more than 76% in three universities (UU, Trinity, ELTE), and at less than 50% at two universities (UB, UM). The importance of a proper garden waste collection is twofold: on the one hand, composting plays a role in forming attitudes towards recycling/reuse and contributes to biodiversity conservation by reducing the amount of Greenhouse Gas (GHG) emissions to the atmosphere and by providing habitat for soil-dwelling animals; on the other hand, mulching and using this waste on-site reduces flooding by absorbing excess rainwater, slowing runoff and preventing pavements from being slippery in the autumn-winter months.

Composting basically takes place in two forms: through composting companies (taking away the green goods from the university campus) or composting on-site (in campus gardens, putting in special bins, without moving it from the campus). The two methods can be combined as a large amount of green



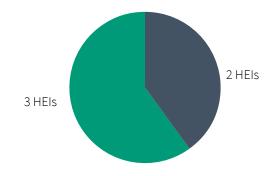


figure 12 - The rate of composting garden green crops is quite high at HEIs

Less than 50%More than 76%

waste is produced. In terms of value for money, the local way is much more beneficial, but this is often limited due to the lack of space.

Food waste

Collecting and donating / recycling food waste seems to be a bottleneck in the university's waste management processes, although several options are available¹⁷. Among the five universities under investigation, only one institution manages to handle this waste fraction correctly and in large quantities (UU).

Four main sources of food waste have been identified:

- leftovers from university restaurants and buffets;
- waste from meetings and events;
- uneaten food and cooking leftovers from dormitory residents;
- surplus brought to campus by students and staff.

While universities may require food composting as mandatory in a contract with restaurants (perhaps due to legal obligation), food leftovers are a major concern. Proper disposal requires special selective collectors (indoor), human resources (very limited at several universities), which sometimes is lacking, eventually leading to ineffective waste separation.

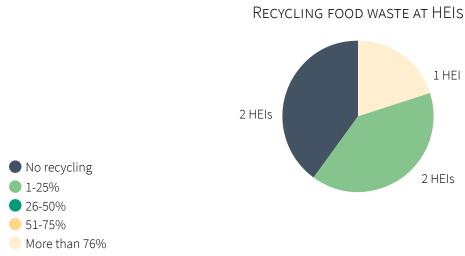


figure 13 - Recycling food waste is a challenge

Kitchen green crops

The main source of kitchen green waste generated during cooking is the university dormitory or, in some cases, restaurants. Nowadays, university and non-university restaurants already work with prepared materials, so far less fruit and vegetable peels are produced locally. Meanwhile, college students who prepare their own meals produce significant amounts of compostable kitchen waste.

Kitchen waste management of the five universities shows a colourful picture, the five institutions are divided into four categories. This suggests the possibility of examining, in-depth, the causes of poor composting rates and opportunities for improvement. (No composting UM; 1-25% Trinity, ELTE; 51-75% UB. more than 76% UU).

¹⁷ Food waste can be donated directly to local food banks or brought to collection points (very limited for hygiene reasons and strict legal regulations); disposed in landfills; handed over to livestock farmers for feed purposes; or recycled through composting.

Cooking oil

Used cooking oil is either not collected at all (UU, UM) or the collection rate is above 76% (UB, Trinity, ELTE). This seems to indicate that university citizens are very conscious when they have the right infrastructure, and in the case of university canteens it is legally required. Used oil collection also contributes to protecting water bodies, as according to some calculations, 1 litre of oil entering a sewer can contaminate 1,000,000 litres of water.

Glass waste

Glass waste can be easily separated and is 100% recyclable. The collection system of universities also shows good recycling rates: 3 universities perform above 76% (UU, Trinity, ELTE), one university at 51-75% (UB) and one at 1-25% (UM). This result suggests that if there is a system in place, instructors and workers are willing to use it and not to mix the glass with other types of waste fractions. It also reflects a clear understanding among the university populations that glass is recyclable.

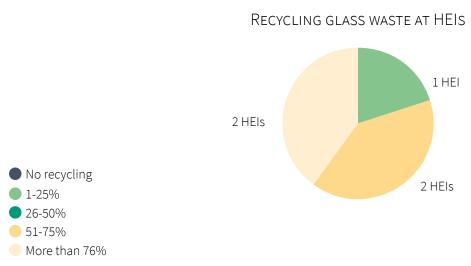


figure 14 - Recycling glass has high measures

Metal

Metal waste comes from several sources at universities and is easy and inexpensive (or cost-positive) to recycle. One common type of metal waste is food and drink cans made of steel and/or aluminium. Another main group includes electrical and electronic devices (which can contain aluminium, copper, gold, silicon, silver, iron), and a third significant source is pieces of furniture and educational devices (which can contain iron, steel, aluminium, copper).

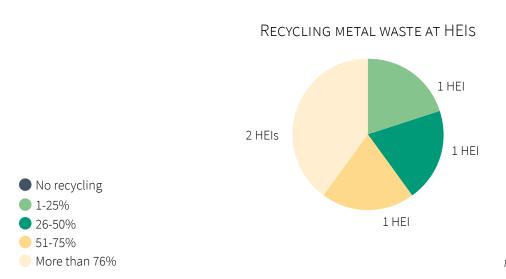


figure 15 - Every university recycles metal

Although metals can be 100% recyclable, interestingly, the segregation rates are lower than for glass. As such, while 2 universities perform above 76% (UU, ELTE), the other 3 institutions manage to recycle 51-75% (Trinity), 26-50% (UB) and 1-25% (UM) of the metal waste produced.

Other

In addition to the above, institutions produce other types of waste materials, e.g. hazardous waste, which are collected and disposed of accordingly in a legally binding manner (toner cartridges, light bulbs, laboratory materials, batteries, cartridges, paints, cleaning agents).

SWOT

In terms of waste management, the following common features have been underlined by the SWOT analysis based on the information gathered in the National reports:

- Strengths: existing basic infrastructure and practices.
- Weaknesses: lack of measurement, dispersed campuses, new population every year.
- **Opportunities:** increasing awareness, research and education, cooperation with partners.
- Threats: apathy by stakeholders, rising costs, increase of IT waste, diversified university.

Water

General findings

The universities participating in the research can be divided into three main groups according to their geographical-climatic location: Mediterranean (UB, UM); Marine west coast/Oceanic climate (UU, Trinity); Humid continental (ELTE). All universities have an urban, city-centre environment, and one university (ELTE) also has provincial institutional units.

Rising global temperatures are altering climatic zones around the planet, increasing the hazard while at the same time decreasing the resilience of communities, which are significantly impacted by the negative effects of climate change. An overview of the different climatic zones and associated environmental risks is provided in *table 5*.

HEI	Climate in the region	Surroundings in the region	The risk of climate change in the country	Threats to the university
UB & UM	Mediterranean	Urban (UB) Suburban, urban, city centre (UM)	Heat extremes, droughts, decrease in precipitation, biodiversity loss, negative processes in agriculture	Health effects of heatwaves
UU & Trinity	Marine west coast/ Oceanic climate	Urban (UU) City Centre (Trinity)	Sea-level rise, flooding risks, droughts, heavy precipitation events, increasing risk of river and coastal flooding, increasing damage risk from winter storms	Costs of rising water
ELTE	Humid continental	Suburban, city centre, urban	Mediterraneanizing, droughts, desertification, flash floods, increase in heat extremes	The cost of maintaining buildings flooded by flash floods could rise

table 5 - Climate in the region of the 5 UNI-ECO universities

Water consumption on campus is mainly associated with potable water use, washing, bathing, toilet use, laboratory water use, heating circulation, irrigation, garden maintenance, sewage disposal, and often interrelated with other environmental, economic and social issues. This complexity is reflected in the high operational costs and sustainability implications of integrated water resource management at the universities.

As a result of the recent progress made towards incorporating environmental sustainability into research and campus operations, water conservation is already in progress in each of the five institutions where a wide range of water-saving tools and practices have been identified (water-saving devices, water cleaning methods, strategic communication on sustainable water management, among others). Nonetheless, their effectiveness and usability vary greatly depending on the local conditions.

Water-saving devices

According to data collected, all universities have adequate strategies and plans in place to confront several types of future water crisis (UU: BREEAM-NL Water credits; UM and ELTE: climate-adapted plants), with some of them already implementing integrated approaches for more effective water management (UB: an extended system of water-saving toilets and showerheads, Trinity: an extended programme of fixing leaks). (table 6).

University	Rainwater collection	Aerators in the taps	Water-saving toilets	Water-saving showerheads	Irrigation equipment
UB	None	PES	FOP	FOP	NDI
UU	PP	PES	PES	PES	NDI
Trinity	PES	PES	PES	PES	No sprinkling
UM	None	PES	PES	No information	No sprinkling
ELTE	PES	PES	PES	PES	No sprinkling

None: There is a need for a programme, but nothing has been done yet PP: Programme in preparation (feasibility study and promotion)
PES: Operating programme at early stage (1-30% water saved)

FOP: Fully Operating programme (more than 51% water saved) NDI: Non-drip irrigation system

table 6 - Water-saving devices at HEIs

Water-cleaning methods

Due to existing regulations and already established water management plans, the feasibility of systematic recycling and re-use of greywater as a valuable alternative water source for non-potable uses is only possible up to a certain extent on some campuses and needs to be further developed (UB, UU, Trinity).

The safe treatment of sewage water is not practicable at three universities (UB, UM, ELTE) as it requires the use of complex physical, biological and sometimes chemical processes to remove harmful pollutants and a lot of space. Nevertheless, Utrecht University and Trinity are working on programmes for recycling sewage water.

Fortunately, this is amply compensated for by the considerable improvement of national sewage collection and cleaning systems in all five countries over the past 30-40 years. In 2017 69 % of the European population were connected to tertiary level treatment and 13% to secondary level treatment of sewage water¹⁸.

SWOT

As for water management, the following commonalities between our 5 institutions have been identified by the SWOT analysis based on the information gathered in the National reports:

- Strengths: strong research capacity, water system maintenance is good.
- Weaknesses: lack of a comprehensive water policy, difficulties in measuring water use objectively, institutional fragmentation.
- **Opportunities:** involvement of university citizens in the processes, campaigns, development opportunities.
- Threats: infrastructure transformation difficulties, rapid climate change.

Procurement

General findings

Public procurement aims to rationalize public expenditure, make the use of public funds transparent, and ensure fair competition in the procurement system.

The traditional principles of public procurement are fairness and publicity of competition, equal opportunities and equal treatment in-line with national norms. Tenderers established in the European Union must be granted national treatment.

Moreover, it provides also for a proper exercise of rights, i.e. the twisting of legislation is not permitted and the purpose of the law must be complied with throughout the procurement process. This is followed by the principles of good faith and fairness.

The European Union's minimum requirement presupposes that public procurement is centrally regulated.

Sustainable public procurement¹⁹ practices are an essential component of a "responsible consumption and production" (UN SDG12). Under this main goal, procurement is highlighted separately in Target 12.7: "Promote public procurement practices that are sustainable, in accordance with national policies and priorities"²⁰.

Green Public Procurement (GPP) is defined in the European Commission's documents as follows: "Public procurement for a better environment" as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured".

¹⁸ European Environment Agency (2017). Urban Waste Water Treatment in Europe. Available at: https://www.eea.europa.eu/data-and-maps/indicators/urban-waste-water-treatment/urban-waste-water-treatment-assessment-5

¹⁹ European Commission (2017). Buying Green! - A Handbook on green public procurement. Available at: https://ec.europa.eu/environment/gpp/buying_handbook_en.htm

²⁰ United Nations (2017). Resolution adopted by the General Assembly on 6 July 2017, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313). Available at: http://ggim.un.org/documents/a_res_71_313.pdf

GPP is a voluntary instrument, which means that public authorities can determine the extent to which they implement it.

Public authorities are major consumers in Europe: they spend approximately 1.8 trillion Euros per year, accounting for 14 % of the EU's gross domestic product. By using their purchasing power to choose goods and services with lower impacts on the environment, they can make an important contribution to sustainable consumption and production.

Green purchasing is also about influencing the market. By promoting and using GPP, public authorities can provide the industry with real incentives for developing green technologies and products. In some sectors, public purchasers command a significant share of the market (e.g. public transport and construction, health services and education), thus, their decisions have considerable impact.

At Higher Education Institutions, the following main areas of public procurement can be identified:

- Stationary
- Educational equipment and services (laboratory devices, materials)
- Electronic devices (IT, refrigerators, lamps etc.)
- Furniture (beds, chairs, shelves, cabinets) and furnishing accessories (curtains, beddings, etc.)
- Purchased cleaning products and services
- Building renovation and/or maintenance services
- Reception, guarding protection services
- Events management (organising events and/or catering services)

Public procurement system, eco-labels and training/education

Based on the survey, it can be pointed out that **all five universities try to take environmentally conscious materials and services into account**, but this requirement cannot be applied in all cases at the moment.

Another conclusion is that **the public procurement system itself is based on full transparency, under strict legal conditions** (UB, Trinity, UM, ELTE), and in one case, the evaluation system is under development (UU).

Although there is no Green Public Procurement System at most of the universities (UB, UU, UM, ELTE), at Trinity there is a dedicated GPP programme in preparation, meaning a feasibility study and promotion has already been done there.

Regarding the issue of eco-labels and training/education, various responses have been recorded, as well.

European eco-labels are not taken into consideration at two of the five HEIs (UU, Trinity), at UM it is under preparation and at two universities it is either in an early stage (ELTE) or ongoing (UB).

As shown in the table below, in the case of one university (Trinity), there is no existing benchmark for national eco-labels, so applying one is not feasible at all. However, universities are on the way to apply eco-label system already used at a national level (UM) or there are some measurable results (in 1-30% of all cases it is considered (ELTE); 31-51% (UM)). UU has an extensive program, with eco-labels taken

into account in more than 51% of all cases.

Last, but not least, regarding training/education in GPP: two participants are challenging it (UU, UM), two are in the organizational phase (Trinity, ELTE), and one has already conducted training on that, however it remains yet to be developed (table 7).

University	EU eco-labels taken into consideration	National eco-labels taken into consideration	Training/education in GPP
UB	PEV	PEV	PEV
UU	None	FOP	None
Trinity	None	Not feasible	PES
UM	PP	PP	None
ELTE	PES	PES	PES

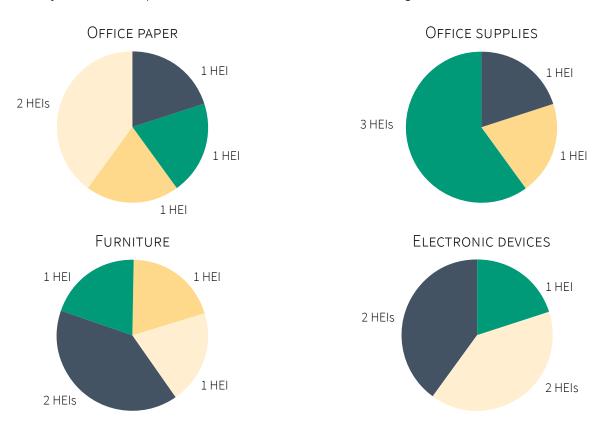
None: There is a need for a programme, but nothing has been done yet PP: Programme in preparation (feasibility study and promotion)

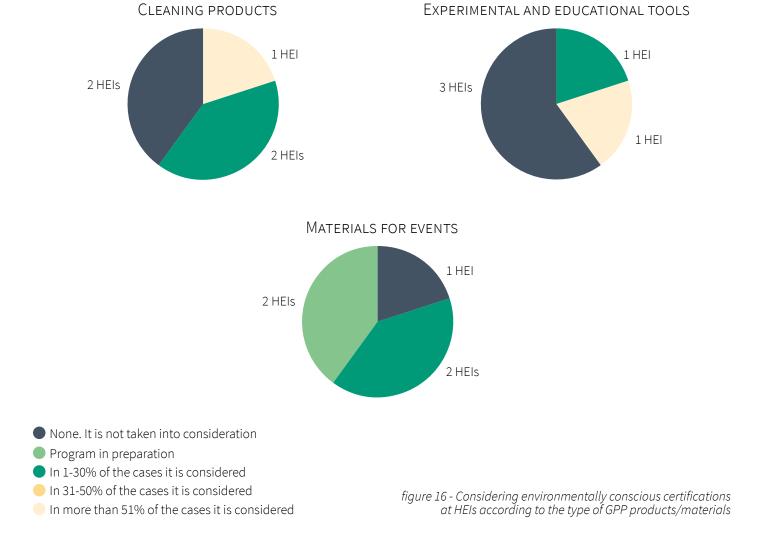
PES: Operating programme at early stage PEV: Operating programme in evolution FOP: Fully Operating programme

table 7 - Eco-labels taken into consideration and procurement education at HEIs

State of Green Public Procurement for products

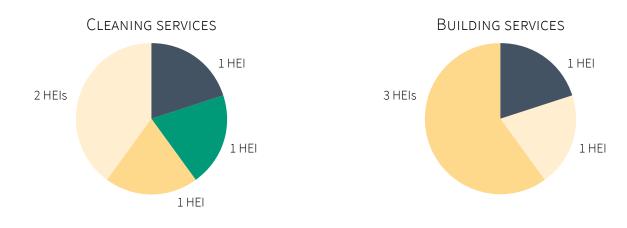
When we asked the institutional staff about the state of environmentally conscious procurement of products, we got a varied picture; environmental considerations are already being taken into account in the procurement of several products, such as office paper and office supplies. In the case of furniture, electronic devices, cleaning products, educational tools, and event materials, this aspect is proportionally less valid at present. Detailed data are shown in figure 16.

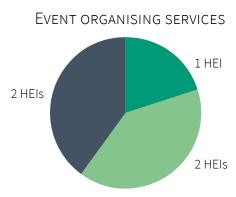




State of Green Public Procurement for services

When ordering cleaning services, a large proportion of environmental aspects are enforced (in approximately 80% of all cases). In the case of construction services, we find even better rates: in 75% of all cases, a rate of 31-100% can be expected. In the case of event organization - in 80% of all cases - this aspect cannot be enforced at all or the programme is only in the preparation stage. (*figure 17*).





- None. It is not taken into consideration.
- Program in preparation
- In 1-30% of the cases it is considered
- In 31-51% of the cases it is considered
- In more than 51% of the cases it is considered

figure 17 - Taking environmentally conscious certifications into consideration at HEI according to the type of GPP services

Key barriers to Green Public Procurement

One of the most interesting outcomes of the GPP chapter is about the presumed key barriers to green purchasing at HEIs.

Following this consideration²¹, the least hindering factor to green procurement seems to be the lack of cooperation among partners (50%). At the same time, the lack of necessary legal knowledge (55%) seems to be a relevant issue, along with the lack of education, difficulties in integrating into the management system, and the lack of political support (65% respectively). The prejudice against higher prices for environmentally-friendly products is still holding on as an obstacle (70%) however, the biggest challenge is the lack of practical tools and information (80%, *figure 18*).

KEY BARRIERS TO SUSTAINABLE UNIVERSITY PROCUREMENT ACCORDING TO THE HEIS ON A SCALE OF 5

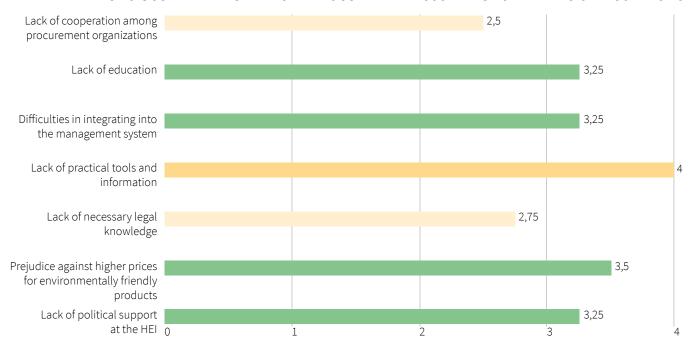


figure 18 - Average scale of key barriers of Green Public Procurement

²¹ Based on data from four universities.

SWOT

The information gathered in the National reports helped identify clear similarities between the partner universities according to the SWOT analysis concerning procurement:

- Strengths: existing green contracts and subcontracts
- Weaknesses: No official GPP policies at the HEIs
- Opportunities: awareness-raising campaigns in this field
- Threats: state regulations for public procurement, higher price

Food and catering

General findings

The ability to feed the world while alleviating pressure on natural resources is a key element of sustainable development. In agriculture, forestry, and fisheries, sustainability is a complex idea with many facets, including economic (a sustainable farm should be a profitable business that contributes to a robust economy), social (it should deal with its workers fairly and have a mutually beneficial relationship with the surrounding community), and environmental aspects.

Taking all the underlying targets of UN SDG2 (Zero Hunger) into account, multiple interactions can be identified with the other SDGs, emphasizing its relevance in the framework of the 2030 Agenda. Within this context, universities play a crucial role and need to demonstrate how they are contributing to ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture. The survey takes the following main areas related to food and catering into consideration, within the Higher Education Institutions under investigation: university canteens and buffets, and the food and catering of university events. However, it does not address the publications each university has on the topic of ending hunger, as such aspect could be part of deeper research.

One of the main findings of the survey is that this area is relatively hard to measure and in some cases, official data are not available due to contractual circumstances and the lack of solid monitoring systems.

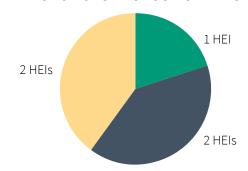
Another common finding is that several universities have a strong interest in promoting quality food and catering but - as it is mostly an outsourced service and much is determined by the price - it is more difficult to influence those involved in this process, except in some cases, where there are locally managed services, meaning not only outsourced canteens (Trinity).

Raw materials and services of canteens

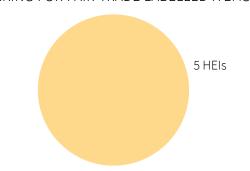
Organic and healthy menus are important at universities but not feasible all the time, because of purchasing reasons, price, lack of knowledge and multi-level supplier lists. The number of canteens is given in *table 8*.

	UB	UU	Trinity	UM	ELTE
University-run canteens	0	0	7	0	0
Outsourced canteens	12	15	5	No data	18

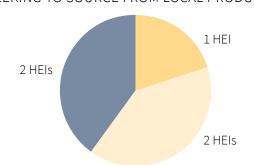
SEEKING FOR ORGANIC FOOD CERTIFICATION



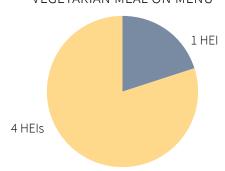
SEEKING FOR FAIR TRADE LABELLED ITEMS



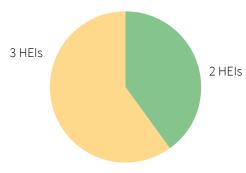
SEEKING TO SOURCE FROM LOCAL PRODUCERS



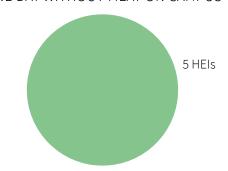
VEGETARIAN MEAL ON MENU



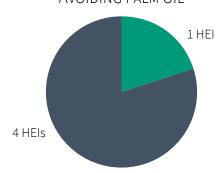
VEGAN MENU



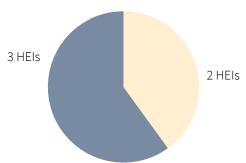
ONE DAY WITHOUT MEAT ON CAMPUS



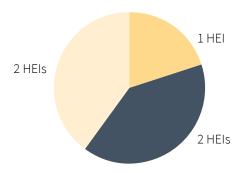
AVOIDING PALM OIL



AVOIDING DISPOSABLE TABLEWARE









- No, it is not done
- Program in preparation
- In 1-30% of the cases it is considered
- In 31-50% of the cases it is considered
- In more than 51% of the cases it is considered

PERSONALIZED PROPORTIONS

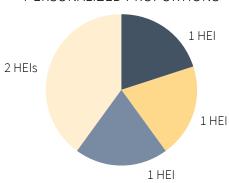


figure 17 - Sustainable methods in university canteens

While it has proved necessary to examine a wide range of aspects related to college meals, it is worth noting that most of the answer state that a particular aspect is "not feasible".

While in some cases this has legal reasons, in others this is the consequence of the food supply chain: e.g. palm oil can be found in almost every product and it is impossible to avoid it.

Two ameliorative actions could be implemented: vegan meals on the menu (UM, ELTE) and meat-free-days on campus (UB, UU, Trinity, UM, ELTE). There are two programs in preparation: seeking organic food certification (UU) and avoiding palm oil (UM).

In most cases, the responses fall in the 1-30% category, indicating that despite the success, such ratios could certainly be improved.

It is a positive result that some measures are implemented in a higher proportion (31-50% or even more than 51%) in one university or another: seeking to source from local producers, avoiding disposable tableware, using personalized proportions (*figure 17*).

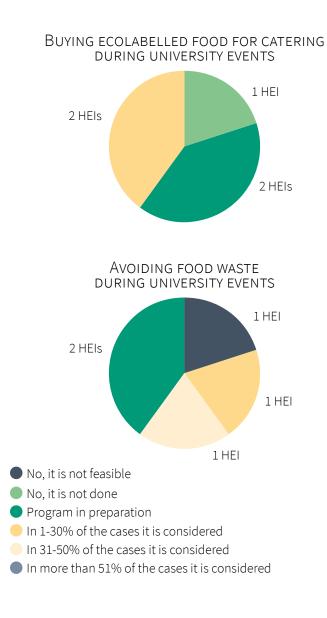
University events

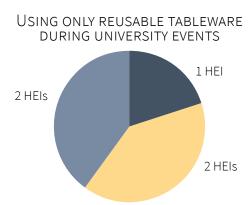
University events were analysed according to the following criteria:

- 1. buying eco-labelled food for catering during university events;
- 2. using only reusable tableware;
- 3. avoiding food waste.

Here, we also encounter "unfeasible" or "unrealized" items, but universities strive to step forward in these three fields.

In most cases, the responses fall in the 1-30% range, leading to the same conclusion as for the canteens: even if targets are achieved, the ratios could certainly be improved (*figure 18*).





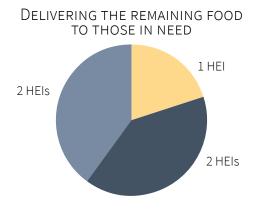


figure 18 - Sustainable methods at university events

SWOT

The information gathered in the National reports highlighted the following aspects in all partner universities according to the SWOT analysis concerning the food and catering:

- Strengths: promotion of vegetarian meals, proactive management of canteens;
- Weaknesses: lack of measurement, lack of mandate to change;
- Opportunities: promoting healthy food and SD aspects, open-minded students and staff;
- Threats: difficult to change habits, pandemic, higher prices, long supply chains.

Biodiversity

General findings

Biodiversity features prominently in many UN Sustainable Development Goals since it is featured in goals 13, 14, 15 and associated with 27 targets. It can also be related to other goals in a broader sense²². This topic seems to be important for all five universities, but unfortunately, it does not always prevail in day-to-day operations yet.

²² SDGs n° 1, 2, 3, 5, 6, 8, 9, 11, 12, 16, 17.

The topic is connected to several levels of university operations. These include biodiversity research, education, publications, collaboration with local or national communities, facility management, maintenance of dormitory and campus gardens, especially botanical gardens. Biodiversity policies recognise that diversification has an essential role to play in gardening, from the maintenance of soil health and fertility to the provision of natural pest control and pollination. However, these measures are made at a different level within UNI-FCO universities.

Protecting biodiversity also includes environmentally-friendly energy, waste and water treatment (such aspects have been covered in other chapters of the report).

In general, universities are performing very well in terms of education, publications, research and community collaboration concerning biodiversity.

In this section, we analyse other measures such as garden procedures, fauna and flora protection policies and actions, and the endowments of botanical gardens. In general, data collecting was not easy since biodiversity is less measured, but the indications provided show a realistic overview of the subject.

Flora and fauna protection by creating habitat

In all universities, measures concerning the protection of flora and fauna are quite encouraging. Of course, the level of development is not the same for each topic, and there are opportunities which have not been explored yet. Nevertheless, it is interesting to note that biodiversity protecting processes have been started, creating appropriate habitats even in urban circumstances (table 9).

HEI	Creating community gardens	Green roof on buildings	Bird protection program	Pollinator protection program	Botanical garden
UB	PES	1 - 5%	PP	None	Yes
UU	None	1 - 5%	None	PP	Yes
Trinity	PEV	1 - 5%	PEV	FOP	Yes
UM	FOP	None	PES	PEV	Yes
ELTE	PEV	1 - 5%	PEV	PP	Yes

None: There is a need for a programme, but nothing has been done yet PP: Programme in preparation (feasibility study and promotion)

PES: Operating programme at early stage (tools, organisation has been done) PEV: Operating programme in evolution (1-2 years of working) FOP: Fully Operating programme (more than 2 years of working)

table 9 - Summary of the methods used to create habitat for plants and animals

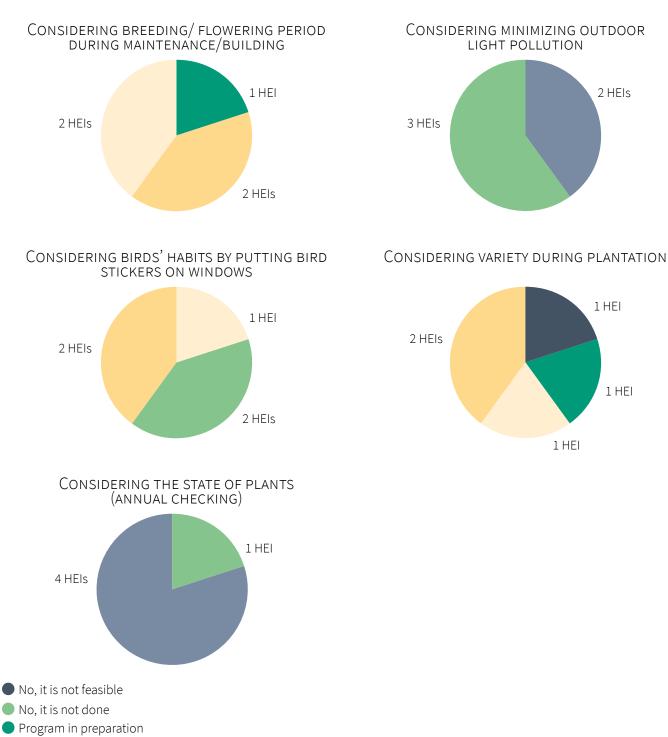
The botanical gardens of universities are of paramount importance for biodiversity. **The five UNI-ECO** institutions are all in a good position, having prestigious gardens with a rich diversity of species.

Botanical gardens play multiple roles. They are used for scientific research, educational programmes both for university students and the general public are carried out, they serve as a genetic bank (both for native and non-native plants) and they have a historical value. Last but not least, they are all open to visitors.

Flora and fauna protection by considering habits

To ensure the diversity of species, it is essential to take their condition, habits and way of life into account while carrying out university operations.

The evaluation of tree health and structural conditions is carried out annually (UB, Trinity, UM, ELTE). This is mainly done to prevent accidents however, thanks to these annual inspections, diseases can also be recognized and cured in time.



In 1-30% of the cases it is considered In 31-50% of the cases it is considered

In more than 51% of the cases it is considered

CONSIDERING MINIMIZING OUTDOOR LIGHT POLLUTION 2 HEIs

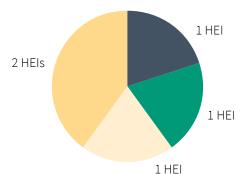


figure 19 - Summary of the methods used by considering habits in HEIs

Questionnaires show that there is proper light pollution prevention in two universities (Trinity, ELTE), while for the three others it still represents a challenge (UB, UU, UM).

All universities should make some improvements as for the variety, the breeding and the relocation habits of birds since these aspects are taken into consideration in less than 50% of the cases (*figure 19*).

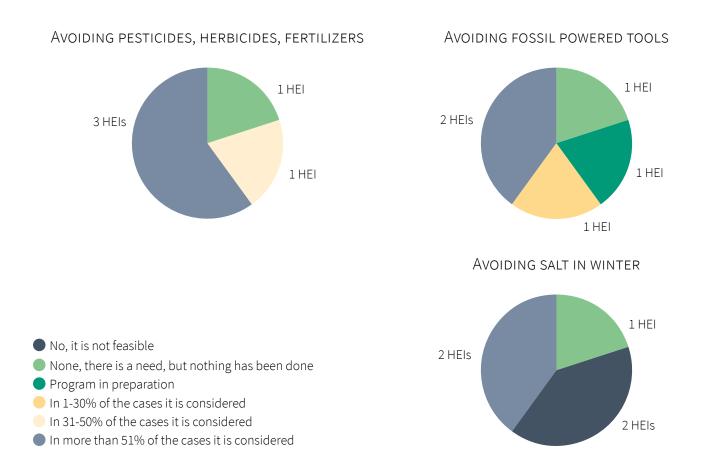
Flora and fauna protection by treatment

Protection by treatment is at least as important as the previous measures: reducing chemicals alone is a big step in the survival of species and using fewer chemicals allows also to accumulate fewer toxic substances in the wildlife food chain.

Two universities (UB, Trinity) avoid fossil-powered devices in estate management in more than 25% of the cases, while three universities have so far been unable to replace these devices at a higher rate than 15% (UU, UM, ELTE).

It is worth noting that avoiding the use of pesticides, herbicides and fertilizers falls into the higher percentages in 4 universities (16-25%: Trinity; more than 25%: UB, UM, ELTE), while there is still some work to be done in one location (UU).

Avoiding salt in winter is not feasible in two universities (UB, UU), in two others more than 25% of the material is environmentally conscious (UM, ELTE), while in the last one it is still a challenge (Trinity). It can also be stated that the removal of invasive plants is more advanced than that of animals, especially in three universities (UB, UU, Trinity) where it is considered not feasible or where invasive species are not a significant issue yet (*figure 20*).



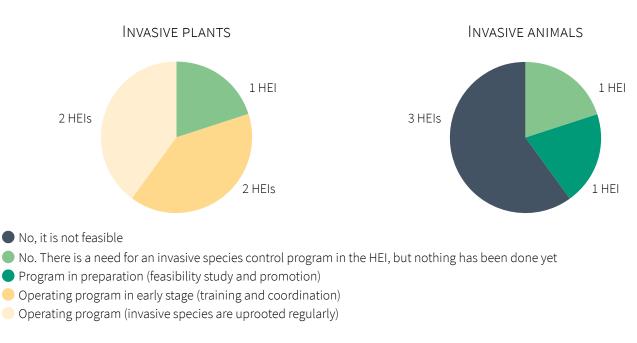


figure 20 - Summary of sustainable methods by treatment

Overall, in almost 3/4 of the cases, chemicals cannot be avoided in adequate proportions at present.

SWOT

The information gathered in the National reports brought out the following similarities between partner universities according to the SWOT analysis concerning biodiversity:

- Strengths: strong research programs; encouraging student and staff to observe and record biodiversity.
- Weaknesses: urban environment; large, sprawling campuses; no detailed monitoring system.
- Opportunities: increasing interest of students and staff; new buildings may incorporate measures for supporting biodiversity.
- Threats: ongoing loss of biodiversity; building activities; urban pollution.

Mobility

General findings

In the framework of this survey, mobility has also been examined due to its significant impact on the economy, health and the emission of pollutants and greenhouse gases. While mobility plays a transversal role in achieving several UN Sustainable Development Goals (SDGs), a direct correlation can be observed in SDG targets 3.6 and 11.2²³.

At the Higher Education Institutions, the following main areas of mobility can be identified: mobility of students and staff from their home to the campuses and/or institutional units; operation of the university vehicle fleet; long-distance mobilities (national/international); communication/campaigns related to mobility.

²³ Sustainable Mobility for All (2017) Global Mobility Report 2017: Tracking Sector Performance. Available at: https://sustainabledevelopment.un.org/content/documents/2643Global_Mobility_Report_2017.pdf

An important general finding of the survey is that transport seems to be a relatively well-developed area in all universities. This is mainly due to the **good conditions of the existing infrastructure network** (urban environment, good public transport), as well as the **promotion of sustainable mobility within the university community**. However, the lack of comprehensive green transport policies hinders fast transition to sustainable mobility.

Another common finding is that several universities have a strong interest in taking advantage of the acceleration of mobility-related processes (home-office, distance learning, rationalization of travels) accelerated in almost every EU country by the COVID-19 pandemic as an opportunity for a more sustainable future.

It is worth noting that, as it was mentioned at the beginning of the summary, the total population of the 5 universities – approaching the quarter-million mark –, on the one hand, has a potentially high environmental burden, on the other hand, any reduction of their ecological footrint, even the minor one, can lead to significant changes in mobility or other areas.

Sustainable mobility policies

One university has a comprehensive mobility policy in place (UM) and the other four have strategies addressing pedestrian mobility and accessibility issues (UB, UU, Trinity, ELTE). Thus, the formulation of an overarching and exhaustive policy document appears to be the first and key step for the meaningful promotion of sustainable mobility in this scenario.

As far as sustainable commuting is concerned, four out of five universities support it financially (UU, Trinity, UM, ELTE).

Carpooling is encouraged by two universities (UB, UM), while it is not a day-to-day practice in the others (UU, Trinity, ELTE).

NOT IMPLEMENTED/EXISTING MOBILITY MEASURES



- General mobility policy
- Pedestrian path policy
- Financial support of sustainable commuting
- Encouraging carpooling
- Encouraging bicycle
- Campus shuttle system
- Plan to avoid parking spaces
- Plan to avoid airplane travel
- Opportunity for working from home

In contrast, the promotion of cycling mobility is a common practice at all five universities which strongly support it through different actions: installation of sufficient and safe bicycle storages and lanes, creation of awareness-raising campaigns, implementation of mechanics workshops and sponsorship of biking communities.

Figures 21, 22, 23 show that many universities have implemented the aforementioned measures.

For those who cover long distances within the campus, a shuttle system could be a valuable solution in order to replace private cars and vehicles. Nonetheless, all campuses are easily accessible thanks

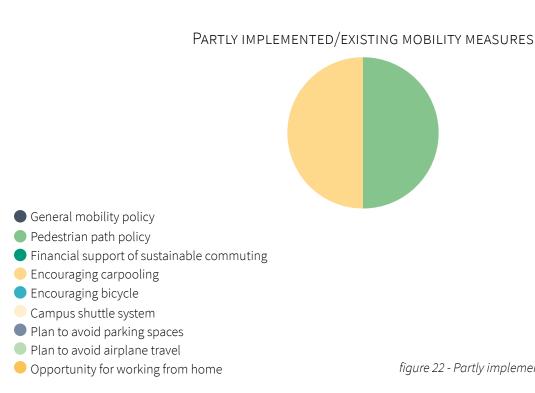
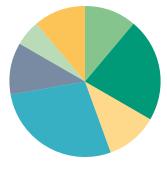


figure 22 - Partly implemented SD mobility measures at HEIs

FULLY IMPLEMENTED/EXISTING MOBILITY MEASURES



- General mobility policy
- Pedestrian path policy
- Financial support of sustainable commuting
- Encouraging carpooling
- Encouraging bicycle
- Campus shuttle system
- Plan to avoid parking spaces
- Plan to avoid airplane travel
- Opportunity for working from home

figure 23 - Fully implemented SD mobility measures at HEIs

to a well-developed public transportation system, which makes the maintenance of an expensive shuttle system unnecessary.

Since every vehicle trip must end in a parking space, limiting parking would significantly reduce miles driven, helping cities cut automotive emissions. Shrinking the number of parking spaces on campus, however, is a difficult goal to achieve as none of the universities have any kind of related initiatives underway, while only two of them are considering to act (UU, Trinity).

Before the coronavirus outbreak, only one university had a specific climate policy aimed at reducing aviation emissions (Trinity). Now that students and professors are making greater use of videoconferencing technology, this trend could nudge people toward new behaviours that could create lasting emissions cuts. Home-office policies could also have the same beneficial effects on the environment. However, their elaboration is quite limited in two universities (UB, UU), partial at one (ELTE) and extensive at the remaining two (Trinity, UM).

Another concrete option for the reduction of GHG emissions is the university support and use of Zero-Emission Vehicles (ZEVs), which favourably represent 45.9% of the whole vehicle fleet of the five institutions. A closer look at each of them, however, reveals significant differences in the percentage of ZEVs that move around each of the campuses (*figure 24*), pointing to the need for greater investment to accelerate the transition to this relatively new technology.



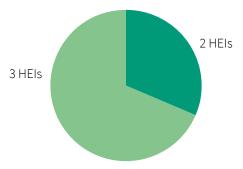




figure 24 - Zero-Emission and non-Zero Emission Vehicles at HEIs

University	Percentage of ZEV-s (%)
UB	7,6
UU	28,5
Trinity	7,1
UM	50
ELTE	11,1

table 10 - Percentage of ZEVs

SWOT

The information gathered in the National reports helped to identify the following similarities between partner universities according to the SWOT analysis regarding mobility:

- Strengths: existing infrastructures, strong urban public transport, encouraging student and staff.
- Weaknesses: large campuses, missing infrastructure details, no air traffic policies.
- Opportunities: pandemic-forced situations could accelerate processes, cooperation with city councils.
- Threats: personal preferences, increasing number of accidents, high costs.

Operation and human resources Communication

General findings

Sustainability-related operating systems and communication largely determine the effectiveness of all environmental activities. In fact, they should be well-designed in order to create positive synergies and contribute to new ideas and methods. We think it is very interesting to explore existing systems and subsystems in place in the five universities and analyse their operation. Since this topic does not allow for a rather descriptive outline, the chapter will present the systems of individual universities and draw less general common conclusions.

The topic of operation and communication appears in several forms at HEIs. Sustainable operational systems and communication can take place at a formal, top-down university level, but there can also be civic (grassroots) initiatives within the universities that might be very decisive in carrying out environmental activities.

In general, university leadership can make a major contribution to the success of these initiatives and organizations; by leveraging institutional resources, motivating students and staff, or by setting a personal example, highlighting the importance of the topic. The University leaders' decision can majorly influence their future and survival.

Sustainability systems

University of Barcelona

At UB each administrative unit, department or faculty is free to carry out sustainability activities and projects. The Health, Safety and Environment Office provides technical assessments. The university has recently created the Sustainable Development Commission, which is in charge of designing the sustainability plan and monitoring its development. It has the following objectives and purposes: preparing a map of current actions, collecting and writing the objectives, goals and indicators that are related to the SDGs. Proposing and monitoring an action plan (UB Agenda 2030) are also among its tasks just like dissemination, organising meetings and creating alliances with other actors involved. The Commission is made up of the directors of the units and university specialists in sustainability.

UB is currently developing a specific SDGs website and is preparing an annual sustainability report.

University of Utrecht

The Sustainability Programme and the Green Office Utrecht are working to realize the sustainability ambitions of Utrecht University. Together with scientists, staff, faculties, the facilities company and the real estate department, the Sustainability Programme ensures that UU is sustainable by assisting, adjusting and controlling its operations. The Green Office is the platform for employees and students of Utrecht University, where sustainable ideas are formed, plans come together and projects are

launched. This work was largely facilitated by means of the 2016-2020 SD-strategy document. The Strategic Plan for 2020-2025 is in development. The (preliminary) ambitions for 2030 are engaging students and employees so as to contribute to a better world; creating a strong community; and a flexible and innovative organization.

The first Sustainability Report was published in 2019 on the HEI's footprint and 2018 policies. The widely accepted Global Reporting Initiative (GRI) method was used.

Trinity

Sustainability activities and projects are organised as follows:

- 1. Provost's Advisory Committee on Sustainability and Low Carbon Living comprises staff and students (14 nominated members). It is Chaired by the Provost (President) and co-Chaired by the University Registrar. It meets three to four times per year to drive initiatives across the university. Initiatives/projects driven by the Committee are implemented by members- Registrar/ Sustainability advisor/ Estates and Facilities, sub-working groups etc.- and in collaboration with the Green Campus Committee (students and staff are both participating).
- 2. Green Campus Committee comprises 71 members (open membership) of staff/ students. Meets biweekly to drive environmental measures on campus, coordinate Green Week and act as a platform for students and staff to collaborate with others on sustainability.
- 3. Part-time Sustainability Advisor fulfils the role of engaging staff and students, communicating throughout university and leading on various initiatives, reporting to the Registrar and Provost.
- 4. Estates and Facilities take the lead on operational targets concerning energy, water, waste, landscaping etc.

Trinity is the national representative in Climate KIC (Knowledge, Innovation Community), supported by the European Institute of Innovation and Technology (EIT), funded by EU Horizon 2020.

Trinity prepares an annual sustainability report for the previous calendar year – to date four have been published and the 2019 report is underway at the time of writing.

University of Montpellier

From a political point of view, the topic of SD pertains to 3 Vice-Presidencies: the Vice-Presidency for Housing and Sustainable Development, the Vice-Presidency for Social Responsibility and the Vice-President Representative of the students. Therefore, the implementation of SD actions highly relies on the coordination of the work of these Vice-Presidents, as SD is at the intersection of their mandates.

From an operational point of view, several departments, some of which are linked to the mandates of the Vice-Presidencies, intervene in the field of SD. The five directorates are named as follows: Direction du Pilotage (Steering Department) – producing information to assist the decision-making bodies in their work; the Direction du Patrimoine Immobilier – Service Stratégie et Gestion du Patrimoine (Real Estate Department, Strategy and Real Estate Management Service) – producing data on the buildings on the campus and monitoring European and national regulations; the Direction de la Logistique (Logistics Department) – overseeing the processes related to SD, the Direction des Affaires Générales et Institutionnelles (General Affairs Department) – being responsible for public procurement contracts and the Direction Vie des Campus (Department for Campus Life) – ensuring a welcoming campus for all. It relates to social aspects of sustainable development such as gender equality, diversity

management and inclusion.

UM has recently started to develop its annual sustainability report.

Eötvös Loránd University

At ELTE, sustainability activities take place in an institutional and civic form.

A Sustainable Development Council was established in 2011 within an institutional initiative. Its task was to prepare ELTE Sustainable Development Strategy. The members were delegated by the faculties, and student representatives also participated in the work. The renewal of the council is currently underway.

ELTE TEC (ELTE Together for Environmentally Consciousness) hosts Sustainable Volunteers (95% university students, 4% university staff, 1% other stakeholders) to perform SD-activity (recycling, protecting animals and plants, forming attitude of university-citizens and making creative information materials) and to create SD-documents. ELTE TEC is a non-profit NGO cooperating with the institution. The main patron of the cooperation is the rector and chancellor of the university. Volunteers work in sustainability working groups which have a rather flat organisation and are brought together by coordinators. Decision-making is based on environmentally conscious methodologies. The programme is affiliated with other NGOs and companies.

Volunteers work and liaison with the university are guaranteed and supported by the university sustainability coordinator. Their role is to keep in touch with the departments, monitor environmental activities, generate resources, analyse data and promoting volunteering.

2020 annual sustainability report is in preparation at present.

The 5 HEIs use a variety of tools to achieve more sustainable operations and to promote a lower environmental impact. The variety of organizational tools, communication platforms, and events allow getting maximum reach.

Tools for maintaining SD system at the 5 HEIs

Organisations: committees; working groups; Green Office (s); domestic networks; International networks:

Documents: International standards (KPI, GRI); policies; publications; promotional materials; sustainability reports;

Interfaces: university website; separate sustainable website; community platforms = Facebook, Twitter, Instagram; emails, newsletter; personal communication, meetings, videomeetings; posters;

Events: SD-conferences professional meetings; hackathons; summer schools; Sustainability Week/ Days/Festival; food tasting, gamification, film clubs /campaigns; sweepstakes/bicycle services, SD-services; second-hand book sales / SD-actions (tree planting); dumpster diving; garbage collections/ exhibitions, roadshows.

Reducing citizens 'exposure to climate change and avoiding greenwashing in universities has yet to be worked out at UNI-ECO partners.

SWOT

As for the SWOT analysis, the information gathered in the National reports helped identify the following similarities between partner universities concerning operation, human resources, and communication:

- Strengths: personal engagement, institutional commitments.
- Weaknesses: limited communication.
- **Opportunities:** creating new measures.
- Threats: financial threats, greenwashing.

B. Perception of Sustainable Development in HEIs

Introduction

In addition to the institutional questionnaire, a second survey with 34 questions was compiled by the UNI-ECO team in order to get a comprehensive picture of the perception of sustainability among students and staff.

The survey was conducted between March and October 2020 among the population of the participating universities, reaching approximately 5000 people. The major aim was to ask for their personal opinions, habits, and expectations regarding sustainability in general and their views on sustainability at the universities in particular. The survey was largely distributed through so-called multipliers, i.e. official university communication networks, student associations, individuals, NGOs. Emails, university websites, personal communication, and Facebook-groups were used as communication interfaces.

The form (*table 11*) started with general questions on university status, gender, age, occupation, and educational level. The statistical part was followed by questions about personal habits, feelings, and the impact of sustainability on the respondents' everyday life. In the next section, the main goal was to assess the level of knowledge of sustainability (subject areas, SDGs). Finally, the participants were asked about the stakeholders' role and capacity (international institutions, EU, governments, regional and local institutions, NGOs, universities, individuals) and SD-activities promoted by universities (actions, attitudes, communication).

As for question types, there were YES/NO questions, multiple-choice questions, ranking, classification, however, participants could also express their opinion with their own words.

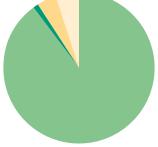
The structure of the student and staff survey	Personal level	University level
General questions	• Age • Gender	 Level of studies University/Faculty/Campus Diploma data Means of transport, distance Communication tools
Perception	 Well-being in the current state of the world Well-being of others in the current state of the world Actions about climate change Associated topic to SD Level of knowledge of SD Personal impact on the environment 	Stakeholders' role Stakeholders' real capacity
Personal commitment	Ecological movementsDaily habits to reduce environmental impact	SD involved in work or studies Participation in HEI SD-movements
SD at the HEI		 Information on SD at the university University's commitment to SD SD dedicated groups at HEI Priority topics at the HEI

General statistics - Q1-Q9

A total of 4941 responses were evaluated for this report; incomplete datasets were disregarded for as much the results were distorted.

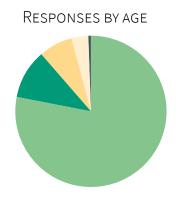
The majority of respondents were students (89.94%), aged 18-25 (78.14%) and female (67.29%) (figure *25, 26, 27*).

RESPONSES BY STATUS



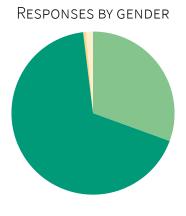
Students Alumna/alumnus Academic staff Non-academic staff

figure 25 - Rate of the respondents at HEIs - status



18-25 26-35 36-50 51-65 65 or older

figure 26 - Rate of the respondents at HEIs - age



Male Female Other Doesn't want to answer

figure 27 - Rate of the respondents at HEIs - gender

Mobility Q10 - Q11

In terms of transport, almost 3/4 of the respondents come to work or study to the university from a 10 km radius (*figure 28*). The relatively short distances, the metropolitan environment, and the easy accessibility of university buildings result in the ecological footprint of their citizens being relatively small in the field of transport. The first three most commonly used means of transport are "by foot" (38.43%), tramway (37.78%) and bus (28%). However, bicycle use is not far behind either (16.35%). All four devices are considered as environmentally conscious ones.

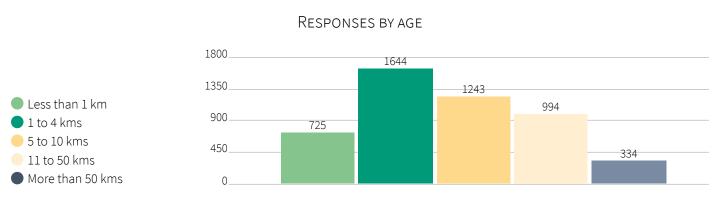


figure 28 - Distance travelled from home to the university

Among the less environmentally-conscious modes of transport, thermic cars reached 13.41%.

Carpooling and the electric car are not yet significant as alternatives to thermic cars (*figure 29*).

MODE OF TRANSPORT USED TO GET TO UNIVERSITY

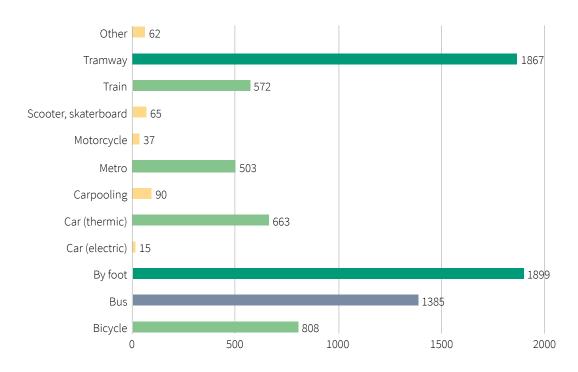


figure 29 - Preferred mode of transport to travel to university at HEIs

Communication - Q12

In the survey, participants were asked what communication tools they considered more efficient. The most frequently named communication platforms are in the following order: e-mails, social networks (Facebook, Twitter, Instagram), personal communication. Social video platforms and paper-based materials are regarded as less effective (*figure 30*).

EFFICIENCY OF COMMUNICATION INTERFACES 5000 4103 3750 2761 2500 2077 1250 846 564 66 \cap **Emails** Paper-based Social network Social video Other Personal materials communication platforms

figure 30 - Preferred interfaces of communication at HEIs

Concerns about the State of the world Q13 - Q14 -Q15

To assess the perception of SD, the first question was: "How concerned are you about the environmental status of the world?" Answers show an average score of 4 on a scale from 1-5, indicating a high degree of concern about the current state of the world. At the same time, the survey also asked what respondents thought about the attitudes of their peers. In this the average was below 4, in one case it was even under 3 (UM: 2.85), so we can state students and staff assume they are more concerned than their classmates or colleagues (*figure 31*).

Effects of negative environmental news have also been measured. 45% of respondents stated that they were worried and 24.53% of them are depressed. Thus, so-called "climate-anxiety" or "eco-anxiety" is well-detectable among this target group (*figure 32*).

Individual responsibility - Q16

In Question 16 we asked about individual environmental responsibility: whether climate demonstrations are useful or they hinder the transition to sustainability. Respondents from all five universities stated the equal importance of both climate demonstrations and real environmental acts. It is also an interesting noting that a relatively large number of respondents have different opinions about the topic (10%, *figure 33*).

LEVELS OF ANXIETY

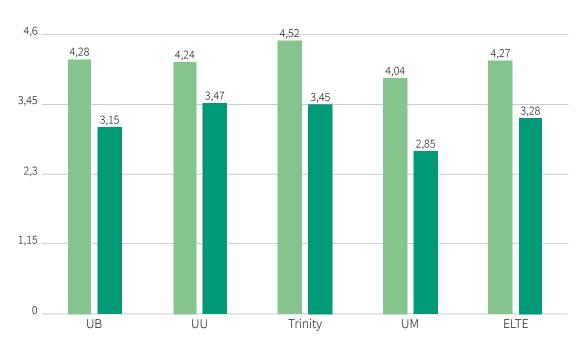


figure 31 - Comparison between self-anxiety and peers' anxiety about SD

EFFECTS OF NEGATIVE ENVIRONMENTAL NEWS - PERCENTAGE



figure 32 - Rate of negative effects on mood by worsening environmental news

INDIVIDUAL RESPONSIBILITY

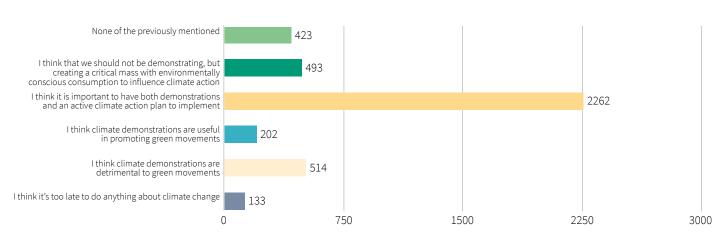


figure 33 - Rate of individual responsibility

Knowledge about SD - Q17 - Q18

In question 17, participants were asked to identify the three topics they most associate with sustainability. The top three were waste management (79.47%), use of natural resources (67.55%), and climate change (65%). These were followed by food production and consumption (62.19%), energy management (58.67%), water management (57.19%), air pollution (54.19%), biodiversity (52.9%), overpopulation (36.12%), human health (29.56%), social inequalities (28.31%), economic development (26%), and urbanism (23.18, *figure 34*).

ASSOCIATION TO SUSTAINABLE DEVELOPMENT

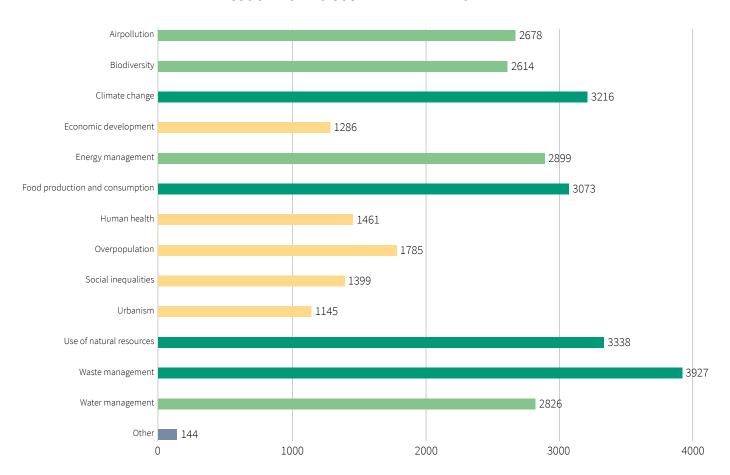


figure 34 - Respondents choices on SD-actions

Question 18 requested participants to assess their knowledge about UN SDG-s from 1 (little knowledge) to 5 (high-level knowledge and SDGs are included in university curricula and operations). The level of knowledge of university citizens varies on a scale from 1.99 to 3.12 (the average being 2.534) indicating a certain awareness of the SDGs, which should be improved (*figure 35*).

Impact on Everyday Life - Q 19

When asked about the impact their lifestyle has on the environment, respondents assessed their footprint on an average of 2.97, where 1 stands for a strong impact and 5 for minimal impact (*figure 36*).

KNOWLEDGE ON SDG-S ON A SCALE OF 5

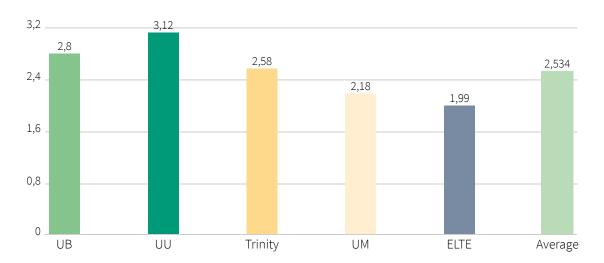


figure 35 - Average knowledge on sustainability at HEIs

PERSONAL IMPACT ON ENVIRONMENT ON A SCALE OF 5

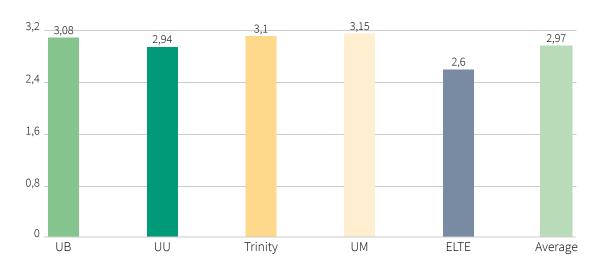


figure 36 - Personal ecological footprint according to the respondents

Stakeholders - Q20 - Q21

In question 20, we asked respondents who should do the most to mobilise society to adopt sustainable development goals. Then in question 21, we tried to understand who had - in fact - more capacity (e.g. resources, skills, capability for implementation) for actions towards sustainable development. In both cases, respondents pointed at EU and national governments with a slight difference. They also consider the responsibilities and real capacities of universities to be less significant. Moreover, it is interesting to mention that individual duty seems to be regarded as relevant when it comes to capacity for actions (*figure 37*).

Daily Habits - Q22 - Q23 - Q24 - Q25 - Q26

The majority of participants does not take part in environmental movements (82,48%), only 14.98%

attends meetings and workshops, while 2.52% of them refused to share their opinion concerning this topic (*figure 38*).

STAKEHOLDERS AT HEIS

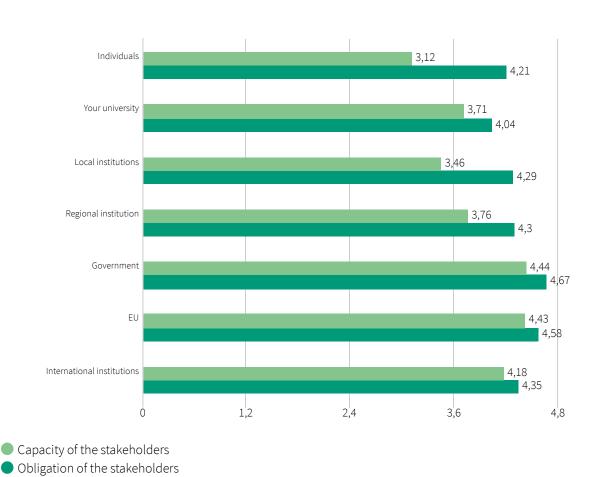
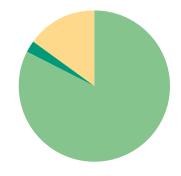


figure 37 - Comparison of the assumed capacity and obligation of stakeholders at HEIs

PARTICIPATION IN ECOLOGICAL MOVEMENTS - Q22



No

Yes

Doesn't want to say

figure 38 - Motivation to participate in ecological movements at the university

Those who said they participate in environmental movements are mainly associated with the following collectives: NGOs, university working groups, student groups, initiative groups, or other. (*figure 39*). The high percentage of the initiative group shows that there is significant capacity in this target group, which is essential for carrying out environmental activities. This fact is also confirmed by the data

Not at allRarelySometimesOftenAll the time

Types of environmental movements in which respondents take part - Q23



figure 39 - Participating in movements at HEIs

Daily habits reducing environmental impact - Q24

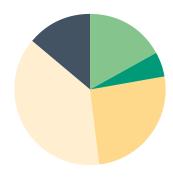


figure 40 - Frequency of daily habits aimed at reducing environmental impact

KINDS OF ACTS ENGAGED IN TO MINIMISE ENVIRONMENTAL IMPACT Q25

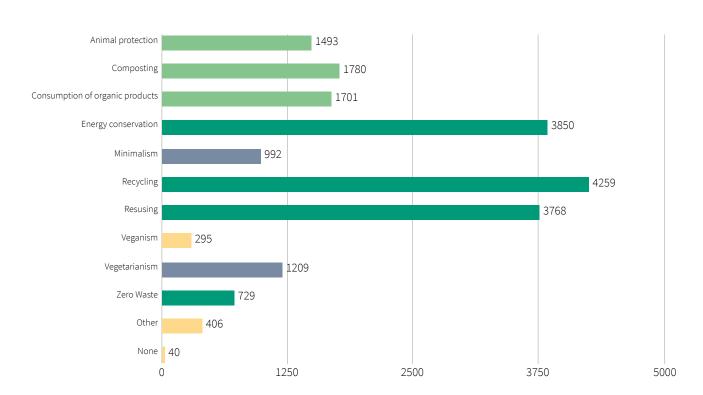


figure 41- Kinds of acts engaged in to minimise environmental impact Q25

gathered from environmentally-conscious daily habits (Q24). Only 20% of respondents have not yet developed daily habits, while about 80% pay attention to the environmental impact of their daily activities to some degree (rarely, sometimes, often, all the time) (*figure 40*).

Interviewees were asked to name other activities (Q25) (*figure 41*) performed to reduce the environmental impact in addition to the above. Among the responses received were: preferring sustainable transport (walking, skating, public transport), avoiding disposable objects, buying second-hand goods, reducing consumption in general, eating less meat, educating peers and family, gardening and moving investments and money from multinational corporations (conscious banking and buying property).

Sustainable Development at the HEI Q27 - Q28 - Q29 - Q30 - Q31 - Q32 - Q33 - Q34

One of the most interesting parts of the survey was about university participation in SD measures. Participants were asked if the university carries out awareness campaigns concerning this topic. (Q27) The average rate is 2.905, equal to 58.1%, meaning that people feel somewhat informed but as much as they wanted to (*figure 42*).

AVERAGE OF BEING INFORMED BY THE UNIVERSITY RELATED TO SD - 027

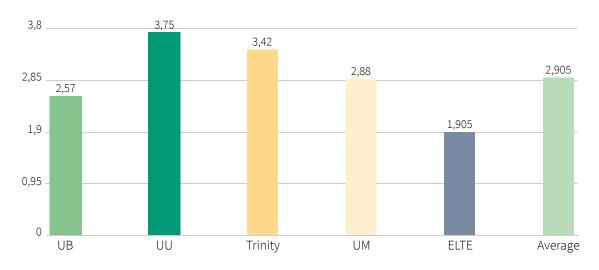


figure 42- Being informed by HEIs

In question 28 participants were asked if their university had dedicated groups or initiatives working on sustainability. The chart shows that nearly half of them were aware of such initiatives (47.2%) and 15.03% felt there were a lot of initiatives at work. 33.3% of respondents were unaware of any existing groups or initiatives. Only 4.46% felt there were not enough initiatives (*figure 43*).

Question 29 asked if students and staff had enough work related to SD. The average is 2.58, showing that many initiatives can still be implemented in this domain (*figure 44*).

Question 30 was set to know if the respondents were satisfied with the sustainability measures implemented by universities. The average is 2.72 (*figure 45*).

INFORMED ABOUT CURRENTLY WORKING SD-GROUPS AT THE UNIVERSITY Q28



figure 43 - Awareness of university working groups on SD

AVERAGE OF SD-RELATED WORK/STUDIES IN UNIVERSITY WORK - Q29

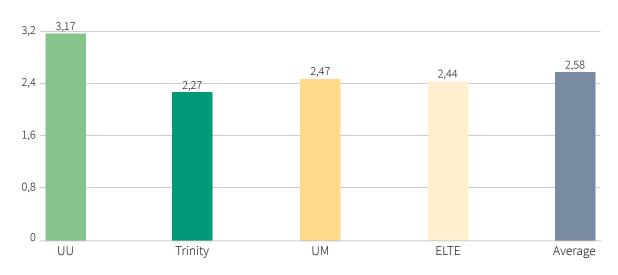


figure 44 - Having SD-related work at the universities

AVERAGE OF SATISFACTION LEVEL WITH THE UNIVERSITIES' SD-ACTIONS - Q30

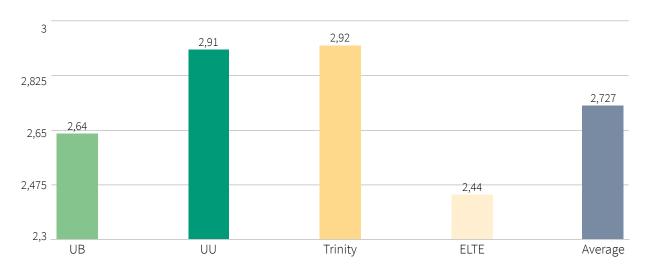


figure 45 - Satisfaction level with the work carried out by universities according to its population

The target group was also invited to answer the following question "which measures should be considered a priority at your university? "and asked to choose a maximum of three different option. 58.49% of respondents ranked waste management as the top priority; 53.83% chose consumption reduction and 53.32% sustainability education as one of the top three priorities. It was followed by energy management (46.16%), food and catering (41.22%), and biodiversity (36.57%). The following options collected fewer votes: sustainability research (35.45%), water management (32.13%), transportation (31.63%), social responsibility (30.37). Procurement got fewer votes (23.55%) (*figure 46*).

PRIORITY SD-TOPICS SUGGESTED BY THE RESPONDENTS TO THE UNIVERSITIES - Q31

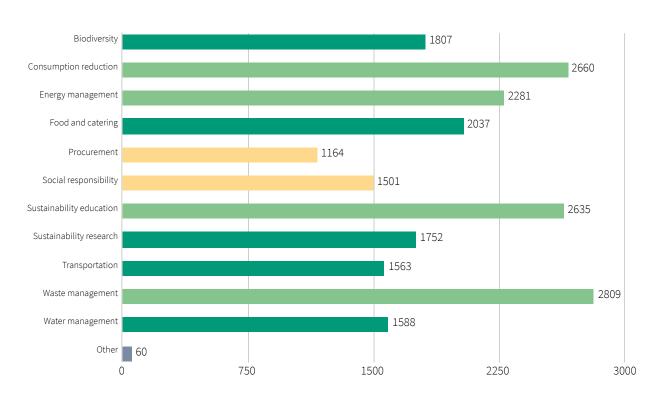


figure 46- Recommended SD-topics by students and staff at HEIs

One of the last questions was to share the opinion about their willingness to participate in SD-processes at the university Q32. (*figure 47*). The average score is 3.39 equal to 67.8%, which means that, under favourable conditions, university students and staff are quite willing to be involved in such processes.

Questions 33 and 34 were open-ended as respondents were free to add any other comments. Here they shared their personal opinion on the topic and the questionnaires.



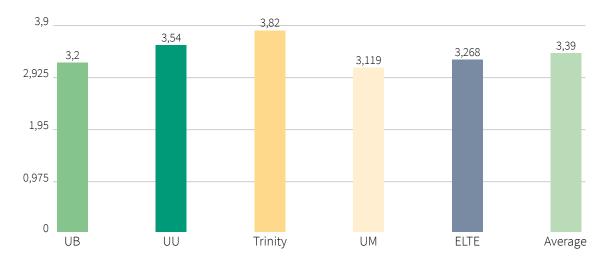


figure 47 - Motivation of students and staff to participate in university SD-groups

C. Best Practices

Faithful to its goals, the UNI-ECO project does not simply aim at creating sustainable institutions, but it also seeks to inspire others, so we asked the UNI-ECO teams to select the best initiatives and results implemented within their institutions in the last five years. The following chapters outline some of them.

University of Barcelona

Topic: Environmental project

■ **Title:** Greenhouse gas emissions inventory (2017-2019)

Description: The University of Barcelona carries out a greenhouse gas emissions inventory since it is affiliated to the Voluntary Emissions Reduction Programme of the Catalan Climate Change Office of the Generalitat de Catalanya (Catalan Government).

Between 2017 and 2019, the emissions associated with the consumption of electricity and gas in buildings, the loss of refrigerant gases in air conditioning equipment, the vehicles providing exclusive service to the university (whether own or company vehicles contracted to provide a service to the UB), waste generated and water consumption have been inventoried.

Total emissions have been significantly reduced between 2017 and 2019, mainly due to the procurement of electricity from renewable sources. Emissions associated with gas and water use have followed the same pattern.

As for emissions associated with the recharging of refrigerant gases in air conditioning equipment, a significant improvement has been detected compared to 2017, which may be due to the replacement of old and less efficient equipment.

Transport emissions have been slightly reduced by gradually incorporating hybrid (Rector's car) and electric vehicles (Audio-visual Unit van). Finally, waste emissions have fallen by 5% since a selective collection of the organic fraction has started within university buildings.

Results

Inventory of greenhouse gas emissions in tons of CO2 equivalent in the main areas of activity at the University of Barcelona. (*table 12*).

Indicator	2015	2016	2017	2018	2019	Evolution
Energy	-	-	18.261,1	6.137,7	2.662,9	
Electricity	-	-	15.688,5	3.185,7	0	<u> </u>
Fossil fuels	-	-	2.572,6	2.952,1	2.662,9	(3)
Fugitive emissions of fluorinated gases	-	-	2.655,5	1.362,1	1.526,4	\odot
Transport	-	-	95,1	98,1	98,6	<u> </u>
Waste	-	-	494,4	498,4	470,4	<u> </u>
Water	-	-	70,4	63,9	63,8	<u> </u>
Total	-	-	21.576,6	8.160,3	4.815	<u> </u>

table 12 - Result of UB on consumption reduction

■ **Topic:** Teaching project

■ **Title:** Environmental Sciences degree: teaching innovation committed to sustainable development

The course on Sustainable Development is featured in the study programme of the bachelor's degree in Environmental Sciences of the Faculty of Biology. It is taught as a service-learning project as students attend several masterclasses during one month and develop the largest part of the activity at a non-profit entity. This initiative has been selected by the Spanish Network for Sustainable Development to be part of the publication *Implementando la Agenda 2030 en la universidad. Casos inspiradores de educación para los ODS en las universidades españolas*.

Such achievement acknowledges this course not only as a teaching innovation project but also as a contribution from the university to the UN Sustainable Development Goals (SDGs).

The entities that accept the students from Sustainable Development course are very diverse, but they are all non-profit institutions working towards achievement SDGs at a local level. There are neighbourhood associations, cooperatives, environmental organizations and museums. Another unit committed to the implementation of the SDGs in the University campuses is the office of Health, Safety and Environmental Issues (OSSMA) of the UB. Each entity has a group of four students, who have to design a project to help reach organisational objectives based on SDGs.

Among the projects which have been developed so far thanks to the contribution of UB students, there is one on water purification implemented in Madina Souane (Senegal) by the entity Alegria sense Fronteres, which won the Torres & Earth Award to environmental innovation 2019.

Moreover, Associació de Veïns de Can Sant Joan in the town of Montcada I Reixac organized dissemination activities on the positive environmental impact of recovering Rec Comtal and the negative effects of the incineration plant in Montcada. Last but not least, we would also like to mention the sustainability plan of the Maritime Museum of Barcelona.

Results: Like in all service-learning cases, this course is about combining learning processes with services to the community so that students can lead their learning about the SDGs working on the real environmental needs while trying to improve it. They explain what they have learnt to the rest of the class through collective tutoring. In the final sessions, all results and self-assessment are shown in the student report of other groups, which is added to the global assessment by the teaching staff of the course, in which the tutors from the entities also take part.

University of Utrecht

Topic: Environmental project

■ **Title:** Living Lab

Description: The Living Lab is an interplay between four types of players: the Green Office, the university staff, teachers and students. The Green Office provides the possibility to connect people to research on sustainability issues at the university. There are always issues to be investigated. Students might write their thesis on such a topic. For instance, one can analyse waste stream for University College Utrecht, a part of the university with many exchange students, where more habitation-related waste is produced due to frequent moving. Another issue to be explored might be the nudging strategies canteen can encourage sustainable choices.

Students might already have encountered the Living Lab in an earlier stage of their studies. Teachers use this platform to give their students real-life cases to work on. This is an extra motivation for students, and the university and the environment might benefit from students' recommendations once they are implemented. All kinds of staff members can reach out to the Green Office if they identify a sustainability issue they would like to address.

Results: Every year, the Green Office hosts the Living Lab Symposium, where students get the chance to present their research in front of an audience and an expert jury. In 2018, a total of eighteen projects were carried out while four of them were presented at the symposium: reducing food waste at the catered lunches; promoting sustainable energy use through new billing schemes; a battle between ceramic and biodegradable plates to find out which is most sustainable for our canteens; and how to reduce the energy used by student desktop computers. In 2019, the projects included the most sustainable hand dryer methods for the bathrooms; an investigation of the social, economic, individual and spatial factors that influence the choice to use a bike or electrical bike to travel; the sustainability of the digital student card; and urban mining inside an old building which helped decide to renovate it instead of demolishing its core.

Topic: Environmental project
Title: Travel Green Grant

Description: Utrecht University aims to be CO2 neutral by 2030 and is working towards reducing the current air travel by 50%. The UU's 2018 annual sustainability report shows that the exchange journeys made by UU students amount to 4 per cent of the UU's total footprint. Therefore, Utrecht University encourages students to travel to their exchange destination by bus or train. For the academic year 2020-2021, the university offers Travel Green Grants for students who choose to take the train or bus to their European study destinations. The grant entails a maximum of EUR 185: the price of an Interrail ticket. If every applicant requests the maximum reimbursement, 135 grants will be issued.

This is not an entirely new initiative. The university had previously decided to establish a travel fund for employees choosing to travel sustainably to conferences or work trips. Employees' journeys make up no less than 11 per cent of the university's footprint. The UU is not the first European university that encourages its students to scrap their plane journeys when they go on exchange. The Swedish universities of Uppsala and Lund have similar grant programmes.

Trinity

Topic: Environmental projectTitle: Green Campus Programme

Description: The Green Campus programme has given rise to many initiatives in the past 8 years, such as Fossil Free TCD, Green Week, (now heading into its 20th year in 2021), Move Out donation drive (see section 3.9 above) and the corresponding Trash to Treasure sale, a Zero Waste Festival held in the Science Gallery in 2020 and biodiversity projects such as the installation of swift call boxes (sound boxes which mimic the call of swifts, an endangered bird species). Both students and staff have active involvement and the gathering is open to anyone on campus interested in participating. The programme provides a space for sustainability innovators and collaborates with various offices around campus.

■ **Topic:** Platform for engagement

■ Title: OneStepCloser

Description: Our collaboration with and hiring of OneStepCloser - an innovative platform for engagement of our population – has been a game-changer in terms of involving the community in decision making on sustainability topics. It has allowed us to drive sustainability initiatives which otherwise might have taken years to get collective agreement on, such as the sale of eco-friendly products in the Students' Union shops on campus; the installation of additional water fountains on three campuses and the public vote to re-wild public-facing lawns at the front of Trinity's city-centre campus. [Native wildflowers will be planted there in 2020 to educate public opinion about the need for re-introducing Nature to cities.]

■ Topic: Infrastructure

■ **Title:** Changing a chilling plant

Description: Achievements in Infrastructure At Trinity Translational Medical Institute, (TTMI), Estates and Facilities replaced a large centralised chilling plant in 2018. This single replacement reduced energy use significantly for the university, thereby lowering carbon emissions. The existing chiller was

18 years old and was oversized, causing the plant to cycle unnecessarily which reduced its efficiency. The chiller was replaced with a smaller, appropriately sized model with high seasonal efficiency. The new chiller has an improved "turn down ratio" allowing it to operate more efficiently at lower loads. Several ancillary chilled water-circulating pumps were replaced with high efficiency pumps to reduce associated pumping costs.

Result: This project has yielded a reduction of over 400,000 kWh of electricity per annum.

Topic: InfrastructureTitle: New building

Description: Trinity's most recent new building, the Trinity Business School (TBS), was opened in 2019 by the Taoiseach (prime minister) of Ireland, Leo Varadkar and was designed to Nearly Zero Building (NZEB) standards, before the introduction of national requirements. To date, this is the most innovative green building to be built by the university, and features LED lighting throughout, low flow water fixtures, only one printer per floor (to discourage printing), a brise soleil, green external wall and green roof as well as our first solar PV panels.

University of Montpellier

■ **Topic:** Sustainability education

■ **Title:** Eco-guidebook

Description: This guidebook²⁴ was elaborated by the members of the students' association Polyearth composed mostly of students at the Polytech Engineering School of the University of Montpellier. The guidebook is targeted at the student population in Montpellier beyond the sole university and combines both useful information on the city of Montpellier for newcomers and tips and tricks on how to adopt daily gestures and habits to personally contribute to sustainable development.

The guidebook is structured in 8 parts:

- On reducing one's carbon footprint: this part gives useful and referenced information, as well as tips on how to reduce energy, water and food waste at home, regarding recycling, and also the impact of Internet use on pollution. It also presents recipes for DIY cleaning products.
- On mobility, addressing the various possibilities for students to get around the city, with a particular focus on the bicycle, mentioning dedicated shops and workshops and tricks on how to fix a bicycle at home.
- On shops and grocery shopping, presenting places producing or selling local and organic products, as well as cooperative shops, and the schedule of the organic food street markets. It also mentions clothes and charity shop and places where to exchange material and tools.
- On entertainment, introducing a list of restaurants, cafes and bars in Montpellier offering organic or local products, or supporting NGOs and organising events such as conferences and debates, alternative cinemas and the cultural programme of the city.

- On ways to get informed, presenting the local media (local and national socially-concerned newspapers, local radios and TV channels and online networks)
- On ways to get involved with reference to the main Students' associations and societies, as well as local associations or local branches of larger NGOs' networks concerned with or focusing on ecology, human rights, solidarity or humanitarian action
- On the different existing labels (for food products, cosmetics, labels related to recycling, or tourism or fair trade)
- On seasonal consuming with a list of seasonal fruits and vegetables, as well as recipes using these products.

The Eco-guidebook features a 70-page version available online, and an A4 booklet (printed on recycled paper) distributed at different locations at the university with a shorter version of the sustainability tips, a selection of venues and shops in the city and a map of the city centre. This second version is meant as a portable tool and as a preview to the full version.

The guidebook was published in June 2018 and printed in 1850 copies distributed in over 20 institutions in Montpellier. It is regularly distributed beyond the university by NGOs in the region.

■ **Topic:** Sustainability event

■ **Title:** Ecology Fair in Montpellier

Description: The Ecology Fair in Montpellier²⁵ is an example of a successful collaboration among students and university staff which blends a scientific symposium, a job fair and a festival on biodiversity. It takes place for one week in November and has been organised since 2008.

At first, the Fair conceived as a meeting targeted at students, professionals and researchers, as part of an assignment for a course of the Master's degree. It was then taken over by the students who contributed to making the event bigger. In 2015, the staff of the Faculty of Science got involved to support the organisation. Today, the Fair mobilises over 100 volunteers and attracts about 8000 participants to the different initiatives:

- *Ecolo'Tech:* The scientific symposium aims to share the latest developments in science and innovation on the topic of ecology devoted to a specific theme each year. In 2018 more than 300 persons participated in 28 conferences.
- *Ecolo'Job:* The job fair is largely targeted at university students and aims to provide them with information and opportunities, especially in the industry and within civil society, since representatives from expertise agencies, national parks and reserves or NGOs participate in the event. Furthermore, the fair envisages presentations of the curricula in ecology offered by different HEIs in the region, targeting future students.
- Festi'Versité: The Ecology Fair hosts different fewer formal events, including exhibitions, presentations, games, visits and guided tours, screenings of films, performances, roundtables and discussion for a greater audience.

²⁵ Le Salon de l'Écologie (2020). Available at: https://www.salon-ecologie.com/salon-environnement-montpellier/

In 12 years, the organisers of the Ecology Fair have managed to establish partnerships with numerous institutions at the university (other faculties, students' societies) and in Montpellier (regional and local authorities, local associations or the zoological park). The Fair allows to link education, research and innovation, to create connections between the university, businesses and the society, and it is open to neophytes as well as experts at a national level.

The Fair is also labelled *Ecofest*, which qualifies a sustainable organisation of an event in France, and the organisers of the Fair provide a greenhouse gas emission report and strive to compensate for the emissions produced.

Eötvös Loránd University (ELTE)

Topic: InfrastructureTitle: Energy Program

Description: In 2015 ELTE got more than 13829831.32 Euro support from the European Union. Between 2015-2017 thanks to this multi-stage investment, architectural, mechanical and energy renovations were done in Eötvös Loránd University's 15 buildings, including the university's dormitories, public educational institutions and some of its faculty buildings. During the KEHOP project, the heating and control system of the buildings were modernized, the buildings were given new facade insulation, the domestic hot water network was renovated, the doors and windows were replaced and solar panels were installed.

Results: Thanks to this renovation, the university managed to reduce its carbon dioxide emission of 4,500 tons and saved 82978 euro in a year.

■ **Topic:** Complex environmental act

■ **Title:** Together for Environmental Consciousness

Description: ELTE Together for the Environmentally Conscious programme (ELTE EKSZ) is a volunteer-based institutional sustainability programme, developed since 2008 and led by students, employees and volunteers providing the necessary conditions to help their higher education community become sustainable. Activities are supported by donations, applications and volunteer work. The main scope of operation is in the field of Eötvös Loránd University.

They also aim to cooperate and exchange experiences through the pursuit of environmental activities and the implementation of sustainable development projects in Hungarian higher education institutions and related communities. The main activities of the sustainability programme are: waste management; animal protection and community gardening; environmentally-conscious University; craft workshops using waste; sustainability education: development of environmental awareness campaigns, production of films, photos, posters, organization of Sustainability Days, bicycle service, organization of exhibitions in cooperation (Waste Academy, Waste Product Exhibition).

Results: The sustainability programme has so far achieved significant results through the volunteer system: it operates 1,500 collectors, 115,000 litres of selective waste are collected per week, and about 45,000 litters of composting capacity are available. But the most significant achievement is that university students and employees can join long-term volunteering, which involves 150-200 people

every year.

Key results include environmentally-conscious waste disposal, in the framework of which 295 tons of waste in 2018, and about 300 tons in 2019, 450 tons in 2020 were managed in an environmentally-conscious way, thus achieving significant savings of several million forints for the institution.

CONCLUSION AND KEY AREAS OF ACTION WITHIN UNI-ECO

CONCLUSION AND KEY AREAS OF ACTION WITHIN UNI-ECO

State of the Art on Sustainable Development in HEIs

The analysis performed provides a good overview of sustainability initiatives promoted by the five universities. It gives an excellent basis for self-reflection; further analysis and it can serve as the clear starting point for the UNI-ECO project.

Strengths, weaknesses, opportunities and threats have been identified everywhere and can provide input to other university professionals on action points.

As a result of our analysis, some commonalities can be identified, such as the commitment of university students and employees to improve sustainability in and off campuses. Waste and water consumption reduction, education and research seem to be common topics. However, a lot still needs to be done in order to renew energy management systems or change procurement processes.

The five universities also face similar challenges in terms of partly old infrastructure, difficulties in fundraising, rapidly changing circumstances, and growing expectations.

There are many differences among universities concerning size, location, educational portfolio or operating systems, but as the survey has shown, they face a similar challenge: tackling the consequences of climate change, preparing for it and helping each other using Twenty-first-century tools to achieve their goal: to play a social role in the transition to sustainability in addition to the core business: education.

Resulting Orientations, Priorities and Key Areas

Institutional priorities

After having determined similarities and differences, each university has identified several priorities to be pursued within their institutional strategy and also within the UNI-ECO project in the period 2020-2022.

University of Barcelona

Governance

The main aim is to express the willingness of the institution to contribute to the achievement of the SDGs and to establish policies, organizational structures and resources to implement the SDGs across university missions (teaching and learning, research and innovation, and social and environmental commitment). One of the main priorities is to improve dissemination initiatives concerning the implementation, monitoring and results of the UB's 2030 Agenda 2030. Finally, there is an agreement to build and strengthen the alliances at all levels and with all actors needed to achieve the SDGs.

In the area of teaching and learning, the aim is to promote education for sustainable development and the SDGs in all UB degrees and master's degrees. In order to do so, the UB will create and implement innovative, cross-cutting forms of education that incorporate the principles of sustainable development. Moreover, there is a need to promote sustainable development and SDGs training among UB staff (professors/researchers and administrative staff). Finally, the UB will include education for sustainable development and SDGs in training courses and outreach programs aimed at a wider audience.

Research and transfer

The main aim is to identify, promote and give visibility to research in sustainable development and SDGs at the UB and related centres, to encourage transfer and entrepreneurship within the framework of the SDGs and establish alliances with other entities so as to promote research concerning this topic and, finally, to encourage research and knowledge transfer projects on sustainability.

Social commitment

The aim is to encourage and expand international cooperation to achieve the SDGs, to promote the education and raise awareness of the university community and the society in general on sustainability, human rights, a culture of peace and global citizenship. In addition, UB sets to contribute to improving sectors of our society characterised by economic vulnerabilities which are at risk social exclusion and poverty. It is important to guarantee respect for diversity and equal opportunities for all people in UB groups and to grant equal access to the university studies to economically disadvantaged people and groups at risk of exclusion. Training and raising-awareness activities among the university community and society in general about gender equality and gender-based violence should also be fostered through active programs. Finally, the UB aims to foster healthy habits and emotional well-being within the HEI community and society in general

Environmental commitment

The aim is to reduce the environmental impact of university operations by improving the energy efficiency of buildings, integrating renewable energies and attaining a more efficient water consumption inside the campus. Moreover, the UB will foster the sustainability of its building by designing or adapting them so that they meet the structural and activity requirements established by the regulations applicable at any given time. In addition, the UB will continue to promote sustainable mobility, green purchasing and responsible consumption, creation of plastic-free spaces and reduction of the amount and hazard of waste within the university community.

This working plan will identify the specific actions which should be developed within each of these areas as well as define the indicators aimed at assessing and monitoring their compliance with the action plan. This task is being carried out in different working groups that have emerged from the UB's Sustainable Development Commission.

University of Utrecht

Education

Already in the previous Strategic Plan (2016-2020), the goal was set to introduce every student to sustainability. In 2019, 800 new students were introduced to the serious game 'Utrecht 2040'. Through an app, they take mini-lectures and the SDGs challenge students throughout the city, allowing them to familiarise with the breadth of sustainability. This game will be offered to more students in the future.

Currently, the number of courses connected to Sustainable Developed is being explored. There are nine Masters and one Bachelors programmes related to this topic. Such programs are related to specific SDG's. In 2019, 481 students completed their studies. It was the first year that students graduated in Global Sustainability Science. Additionally, courses will be organized based on the SDGs in the coming years.

Research

Pathways to Sustainability is one of the four strategic research themes. Researchers from the humanities, social and natural sciences faculties work along with external partners to develop a more sustainable society. Pathways to Sustainability advances innovative research via selected thematic areas. The focus is on identifying and understanding transformative pathways in five hubs:

- Future Food Utrecht: How can we create diets that are both good for the planet and all its inhabitants?
- Towards Industry with Negative Emissions: How will new technologies and societal choices shape the future of the industry?
- Transforming Infrastructures for Sustainable Cities: How do we envision and identify pathways to future cities and infrastructures?
- Water, Climate and Future Deltas: How can we design and evaluate pathways to sustainable deltas in the future?
- Towards a Circular Economy and Society: How can we create a circular economy and society?

The Copernicus Institute for Sustainable Development is focussed on interdisciplinary research towards sustainable transformation. Their research contributes to improved knowledge related to all SDGs. However, they are specialised in the following SDGs 3, 6, 7, 9, 11, 12, 13 and 15.

Business operation

By 2030 the university should reach carbon neutrality and achieve an actual 33% emission reduction compared to 2014. The gas plant should no longer be needed. Energy should come from local renewable sources where possible and be bought if necessary. Energy consumption reduction should also be achieved, but the first steps are already being taken with the Ambition of Futureproof Buildings. A reduction in flying is a priority. Green Grants are a good way to pursue this. More online communication can contribute to a large extent as well. Considering mobility, bike use and sharing should be stimulated. Biodiversity loss is a concern. The Tiny Forest is expected to have a great positive impact on biodiversity. Nevertheless, the ambitions for a Green Campus need further development. Priority should be given to habitats for priority species.

Trinity

Training and Education on sustainability

One of the priorities identified by respondents to the survey was the need for mandatory training/education for staff and students. On average, (question 27), respondents indicated that they are less than well informed when it comes to sustainability at the university.

Waste management

Given the response to the following question (i.e. "Which topics do you most associate with sustainability?"), 823 people chose waste management and recycling as one of the key topics, and 991 people indicated that they engage in recycling habits. When asked "what should be the priority at your university?" 619 indicated waste management and 652 chose 'consumption reduction'. Better waste guidance and facilities are a priority for interviewees.

Better visibility of research and teaching

It is felt that research and teaching in sustainability topics at Trinity are not adequately publicised and

information on modules, courses and classes that cover sustainability topics are quite inaccessible to those who might be seeking them. Recent (2019) inclusion of the UN SDGs in the RSS feed for the university has begun to gather this information for research areas. However, highlighting research papers with a sustainability theme is dependent on the researcher publishing the paper to be aware of, and it is their responsibility to tick the relevant SDGs in the RSS. At present, it is unknown if all researchers complete this task.

At present there is no provision to highlight or promote modules /classes which feature a sustainability theme, leaving students in a position of having to dig/ search for such modules.

University of Montpellier

Internal organisation

UM intends to create a Sustainable Development Office within the Steering Department, with dedicated staff members to manage SD-related projects. In particular, this office shall be in charge of the elaboration of the Plan Vert (collection of data, follow-up of the strategic and operational variables) with the aim to highlight the good practices of the university and obtain the "DD&RS" label by CIRSES by 2022.

Other initiatives include:

- communication (dedicated webpage, awareness campaigns and events);
- the elaboration of a Charter for Sustainable Development (green procurement, sustainable modalities for the organisation of events, etc);
- the organisation of a Week for Sustainability.

Mobility

UM plans on increasing the capacity of the campuses in terms of bicycle shelters. Priority will be given to the main Montpellier campuses which host the majority of students, but several other delocalised campuses have been identified.

UM also intends to encourage the use of electric/hybrid cars by installing dedicated charging stations on campus.

Energy and water consumption

UM will pursue the renovation of the campuses, based on a new set of tools (software, dashboards). Renovation will be a central part of the next CPER 2021-2027.

Waste management and procurement

UM intends to develop the capacities for waste sorting on campus and generalise the practices to all the sites of the university (outside as well as inside the offices and buildings). A plan to replace plastic goblets with paper one around water fountains is also set for 2021.

The university also means to pursue efforts as regards to its green procurement strategy and increase the influence of environmentally-friendly clauses in the contract through the implementation of "responsible" specifications.

Education and research

Research will continue to be at the core of UM strategy through the MUSE project. In fact, UM intends to strengthen its international position as a leader on sustainability in various fields such as Agronomy, Ecology, Chemistry, Engineering or Social Sciences. Links between research and education will also be fostered.

Regarding education and training, the priority is set for referring to courses and specific curricula on sustainable development in order to advertise them more clearly. The courses offer shall also be enlarged, including new programmes on the topics of MUSE, as well as the training modules for staff members.

The diploma on "Sustainable Development and Social Responsibility", open to all students, shall gain more visibility.

Finally, further efforts will be made towards new teaching methods, including distance and blended learning, in line with both the current pandemic and the strategy of the institution.

Eötvös Loránd University (ELTE)

Energy

Enormous progress has been made in the energy development of the institution in recent years, but this is an area where the university should and will do even more. Renovation of several buildings is in progress, but it would be important to make students and staff even more aware of the importance of energy management.

SD-education

Although one of the strengths of the university is its formal sustainability teaching and research, it is one of the most pressing priorities to develop informal SD materials for staff and students. Staff training and the development of informal educational materials would also facilitate day-to-day operations.

Waste system

Since the introduction of a recycling system at the HEI, the recycling rates have been improving year after year. Unfortunately, there are sub-areas where waste management has not yet been developed or needs major development. In line with the survey, we will also intervene in these areas during UNI-ECO project.

Policies, analyses

One of the most important conclusions of the survey for ELTE is that the existing policies need to be reviewed and the missing ones need to be implemented.

Communication

The answers revealed that university students and employees are not aware of many existing processes and activities, which greatly worsens their results and slows down the processes that have already started. The fifth area identified is the development of sustainability communication.

Priorities identified by the consortium

After having compared the results of the studies, the university self-assessments, the students/staff

survey and the results of the SWOTs, a final proposal concerning key areas for the joint development of activities (the so-called "Green Challenges") was drafted so as to bring the greatest advantages to the consortium members. Feasibility aspects have also been taken into account in compiling the proposal. This constitutes a common thread for the activities of the UNI-ECO project. Green challenges can turn in to studies, researches, or inspire action plans, campaigns, activities, events, etc.

The following topics and subtopics should be considered as priorities:

1. Generalities

- a. Foster the dissemination of SD-related knowledge
- b. Identify key performance indicators to measure sustainability
- c. Study the feasibility of establishing a Green Office
- d. Apply national and international policies

2. Education

- a. Foster the inclusion of sustainability-related issues into subjects/courses
- b. Map out sustainability-related courses in the portfolio of the university
- c. Measure sustainability in education

3. Energy

- a. Reduce energy consumption at the university
- b. Promote the use of renewable energy sources on campus
- c. Enable the community to measure energy consumption

4. Water

- a. Reduce water consumption on campus
- b. Measure and qualify water use
- c. Enable the community to measure water consumption
- d. Study the feasibility of rainwater harvesting systems
- e. Study the feasibility of greywater recycling systems

5. Biodiversity

- a. Measure/monitor biodiversity on campus
- b. Raise awareness about the importance of biodiversity
- c. Support actions to protect biodiversity
- d. Foster cooperation with Botanical Gardens for joint projects

6. Communication

- a. Develop communication on sustainable development
- b. Foster the participation of the community in SD-related projects
- c. Avoid greenwashing

7. Waste

- a. Study waste-minimisation measures on campus
- b. Raise awareness about waste on campus
- c. Measure/monitor waste on campus

8. Food and catering

- a. Study the possibilities to cut food waste on campus
- b. Increase the availability of vegetarian and vegan meals in canteens
- c. Measure/monitor food waste on campus

9. Mobility

- a. Foster vehicle replacement to start using zero-emission vehicles
- b. Raise awareness about soft mobilities
- c. Study the reduction of mobility-sourced emissions

• 10. Procurement

- a. Map out sustainable procurement possibilities
- b. Avoid greenwashing in procurement

BIBLIOGRAPHY

BIBLIOGRAPHY

- Intergovernmental Panel on Climate change (IPCC) (2019). Special Report: Global Warming of 1.5°C.
 Available at: https://www.ipcc.ch/reports/
- National Aeronautics and Space Administration (NASA) (2020). Scientific Consensus: Earth's Climate Is Warming.
 Available at: https://climate.nasa.gov/scientific-consensus/
- Copernicus Climate Change Service (2020). Copernicus: 2020 warmest year on record for Europe; globally, 2020 ties with 2016 for warmest year recorded. Press release, Reading, 8 January 2021. Available at: https://climate.copernicus.eu/2020-warmest-year-record-europe-globally-2020-ties-2016-warmest-year-recorded
- European Commission (2020). Proposal for a decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2030 (2020/0300). Available at: https://ec.europa.eu/environment/pdf/8EAP/2020/10/8EAP-draft.pdf
- United Nations General Assembly (2015). A/RES/70/1 Transforming our world: the 2030 Agenda for Sustainable Development.
 Available at: https://sdgs.un.org/2030agenda
- European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions EU Biodiversity Strategy for 2030 Bringing nature back into our lives (COM/2020/380). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380
- European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions A new Circular Economy Action Plan For a cleaner and more competitive Europe (COM/2020/98). Available at:
 - https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN
- European Commission (2020). Towards zero pollution in air, water and soil EU action plan.
 Available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12588-EU-Action-Plan-Towards-a-Zero-Pollution-Ambition-for-air-water-and-soil
- European Commission (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committe and the Committe of the Regions Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (COM/2020/667). WAvailable at: https://ec.europa.eu/environment/pdf/chemicals/2020/10/Strategy.pdf
- Kidd, C.V. (1992). The evolution of sustainability. J Agric Environ Ethics 5, 1–26. Available at: https://doi.org/10.1007/BF01965413
- World Commission on Environment and Developmen (WCED) (1987). Our Common Future.
 Available at: https://sustainabledevelopment.un.org/content/documents/5987our-commonfuture.pdf

- IUCN/UNEP/WWF (1991). Caring for the Erath: A Strategy for Sustainable Living.
 Available at: https://portals.iucn.org/library/efiles/documents/cfe-003.pdf
- Costanza, R. & Daly, H.E. (1992). Natural Capital and Sustainable Development. Conservation Biology, Vol. 6, No. 1 (Mar., 1992), pp. 37-46.
 Available at: https://www.life.illinois.edu/ib/451/Costanza%20(1992).pdf
- Emission Database for Global Atmospheric Research (EDGAR). Version 4.2, fast track 2010 project. Availableat:https://data.jrc.ec.europa.eu/dataset/jrc-edgar-jrc-edgarv42_ft2010_ghg_gridmaps
- International Energy Agency (IEA) database.
 Available at: https://www.iea.org/regions/europe
- European Environment Agency (2017). Urban Waste Water Treatment in Europe.
 Available at: https://www.eea.europa.eu/data-and-maps/indicators/urban-waste-water-treatment/urban-waste-water-treatment-assessment-5
- European Commission (2017). Buying Green! A Handbook on green public procurement.
 Available at: https://ec.europa.eu/environment/gpp/buying_handbook_en.htm
- United Nations (2017). Resolution adopted by the General Assembly on 6 July 2017, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/ RES/71/313).

Available at: http://ggim.un.org/documents/a_res_71_313.pdf

- Sustainable Mobility for All (2017) Global Mobility Report 2017: Tracking Sector Performance.
 Available at: https://sustainabledevelopment.un.org/content/documents/2643Global_Mobility_Report_2017.pdf
- Polyearth (2018). L'ecoguide de l'étudiant.e montpelliErain.e.
 Available at: http://polyearth.igpolytech.fr/assets/documents/Ecoguide.pdf
- Le Salon de l'Écologie (2020).
 Available at: https://www.salon-ecologie.com/salon-environnement-montpellier/

GLOSSARY



2030 Agenda

The Sustainable Development Goals (SDGs) or Global Goals are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set in 2015 by the United Nations General Assembly in the Agenda and are intended to be achieved by the year 2030.

BMS

Building Management System, otherwise known as a building automation system (BAS), is a computer-based control system installed in buildings to control and monitor the mechanical and electrical equipment (ventilation, lighting, power systems, fire systems, and security systems).

BREEAM

Building Research Establishment Environmental Assessment Method. It was first published by the Building Research Establishment (BRE) in 1990, and it is the world's longest established method of assessing, rating, and certifying the sustainability of buildings.

Brundtland Report

The Brundtland Commission was created by the United Nations in 1983 to reflect about ways to save the human environment and natural resources and prevent deterioration of economic and social development. This commission published a Report in 1987. The Brundtland Report deals with sustainable development and the change of politics needed for achieving that.

Carpooling

It is the sharing of car journeys so that more than one person travels in a car, reducing each person's travel costs and the pollutant emissions per capita.

CESIE

It is an Italian non-profit and non-governmental organisation, committed to promote the cultural, social, educational and economic development of the society based on the active participation of citizens, civil society and institutions through the use of innovative learning approaches

CHARM-EU

It is an European University alliance, co-funded by the Erasmus + Programme, between the University of Barcelona (coordinator), Trinity, Utrecht University, the University of Montpellier and Eötvös Loránd University Budapest. CHARM-EU works together to design and create a new university model to become a world example of good practice to increase the quality, international competitiveness and attractiveness of the European Higher Education landscape. CHARM-EU represents a Challenge-Driven, Accessible, Research-based and Mobile model for the co-creation of a European University aligned with the European Values, the European Green Deal and the sustainable development goals (SDGs). (https://charm-eu.eu)

Climate KIC

Climate-KIC is a Knowledge and Innovation Community (KIC), working to accelerate the transition to a zero-carbon, climate-resilient society. It is supported by the European Institute of Innovation and Technology. The main goal is to support innovation that helps society mitigate and adapt to climate change.

ECO-label

Eco-labels and Green Stickers are labeling systems for food and consumer products. They are a form of sustainability measurement directed at consumers, intended to facilitate environmentally-conscious shopping. There are different types of labels quantifying pollution or energy consumption, among others.

Ecological footprint

The ecological footprint is a method promoted by the Global Footprint Network to measure human demand on natural capital, i.e. the quantity of nature it takes to support people or an economy. It is a measure of human impact on the environment.

EGD

European Green Deal: The European Green Deal is a set of policy initiatives developed by the European Commission with the overarching aim of making Europe climate neutral by 2050. An impact assessed plan will also be presented to increase the EU's greenhouse gas emissions reduction target for 2030 to at least 50% and towards 55% compared with 1990 levels.

EIT

European Institute of Innovation and Technology. EIT is an independent EU Body created by the European Union in 2008 to strengthen Europe's ability to innovate, being an integral part of Horizon 2020, the EU's Framework Programme for Research and Innovation. The Institute drives innovation across Europe by integrating business, education and research organisations to collaborate and find solutions to pressing global challenges.

ELTE

Eötvös Loránd Tudományegyetem, Eötvös Loránd University, university based in Hungary in 1635. (https://elte.hu)

ESD

Education for Sustainable Development (ESD) was a United Nations program encouraging changes in knowledge, skills, values and attitudes to enable a more sustainable and just society for all. ESD aims to empower and equip current and future generations to meet their needs using a balanced and integrated approach to the economic, social and environmental dimensions of sustainable development.

EU

The European Union (EU) is a political and economic union of 27 Member States that are located primarily in Europe.

EC

The European Commission (EC) is the executive branch of the European Union, responsible for proposing legislation, implementing decisions, upholding the EU treaties and managing the day-to-day business of the EU.

EP

The European Parliament (EP) is one of three legislative branches of the European Union and one of its

seven institutions. Together with the Council of the European Union, it adopts European legislation, commonly on the proposal of the European Commission.

Fair Trade label

The Fairtrade certification initiative was created to form a new method for economic trade. This method takes an ethical standpoint, ensuring producers earn a living income.

Flora and fauna

Flora is all the plant life present in a particular region or time, generally the naturally occurring (indigenous) native plants. The corresponding term for animal life is fauna.

FOP

Fully Operating Program

GAP

Global Action Program on Education for Sustainable Development

GHG

A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor (H2O), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and ozone (O3). Without greenhouse gases, the average temperature of Earth's surface would be about –18 °C (0 °F), rather than the present average of 15 °C (59 °F).

GPP

Green Public Procurement (GPP) is a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact. Organizations practicing sustainable procurement meet their needs for goods, services, utilities and works not on a private cost–benefit analysis, but also with the intention to maximizing net benefits for themselves and the wider world.

Greenwashing

Also called "green sheen", it is a form of marketing spin in which green PR (green values) and green marketing are deceptively used to persuade the public that an organization's products, aims and policies are environmentally friendly while they are not.

GRI

Global Reporting Initiative (GRI) is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption.

HEI

Higher Education Institution.

Invasive animals

An invasive species (in this case animals) is an introduced organism that negatively alters its new environment. Although their spread can have beneficial aspects, invasive species adversely affect the

invaded habitats and bioregions, causing ecological, environmental, and/or economic damage.

Invasive plants

An invasive species (in this case plants) is an introduced organism that negatively alters its new environment. Although their spread can have beneficial aspects, invasive species adversely affect the invaded habitats and bioregions, causing ecological, environmental, and/or economic damage.

ISCN

The mission of the International Sustainable Campus Network (ISCN) is to provide a global forum to support leading colleges, universities, and corporate campuses in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching.

IUCN

The International Union for Conservation of Nature (IUCN) is an international organization working in the field of nature conservation and sustainable use of natural resources. It is involved in data gathering and analysis, research, field projects, advocacy, and education.

KPIs

Key Performance Indicators (KPIs) are a type of performance measurement. KPIs evaluate the success of an organization or of a particular activity (projects, programs, products and other initiatives) in which it engages.

ktoe

Kilogram of oil equivalent. The tonne of oil equivalent (toe) is a unit of energy defined as the amount of energy released by burning one tonne of crude oil. It is approximately 42 gigajoules or 11.630 megawatt-hours, although as different crude oils have different calorific values, the exact value is defined by convention.

kWh

Kilowatt-hour (SI symbol: kWh or kW h; commonly written as kWh). It is a unit of energy equal to 3600 kilojoules (3.6 megajoules). The kilowatt-hour is commonly used as a billing unit for energy delivered to consumers by electric utilities.

NDI

Non-drip irrigation system (NDI) is the opposite of drip irrigation, which is a system that has the potential to save water and nutrients by allowing water to drip slowly to the roots of plants, either from above the soil surface or buried below the surface. The goal is to place water directly into the root zone and minimize evaporation. Drip irrigation systems distribute water through a network of valves, pipes, tubing, and emitters.

NGO

Non-governmental organization NGOs) are a subgroup of organizations founded by citizens, which include clubs and associations that provide services to their members and others. NGOs are usually non-profit organizations, and many of them are active in humanitarianism or the social sciences.

OP1

Operating Program with one measure

OP₂

Operating Program with two measures

OP3

Operating Program with at least three measures

Palm oil

Palm oil is an edible vegetable oil derived from the mesocarp of the fruit of the oil palms. Widely used in the food industry. The field of the trees has encouraged wider cultivation, leading to the clearing of forests in parts of Indonesia and Malaysia to make space for oil-palm monoculture.

PES

Operating Program at Early Stage

PEV

Operating Program in Evolution (1-2 years of working)

PP

Program in Preparation (feasibility study and promotion)

PP1

Program in Preparation (Feasibility study and promotion)

PP2

Program in Preparation (Budget provided, project under construction)

SBI

Smart Building Implementation

SD

Sustainable development (SD) refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Its three pillars are environment, economy and society.

SOS International

The Students Organizing for Sustainability (SOS) International is an international student organisation aimed at supporting students and youth groups to lead on sustainability and social justice.

SWOT

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. A SWOT Analysis is, therefore, a technique used to assess these four aspects.

Times Higher Education rankings

The Times Higher Education World University Rankings 2020 includes almost 1,400 universities across 92 countries, standing as the largest and most diverse university rankings ever to date. It is based on 13 performance indicators across teaching, research, knowledge transfer and international outlook. The only university ranking audited by PWC.

Trinity

Trinity, university based in Ireland in 1592. (https://www.tcd.ie/)

UB

University of Barcelona, university based in Spain in 1450. (http://ub.edu/)

UM

University of Montpellier, university based in France in 1289. (http://umontpellier.fr/)

UN

The United Nations (UN) are an intergovernmental organization that aims to maintain international peace and security, develop friendly relations among nations, achieve international cooperation, and be a centre for harmonizing the actions of nations. It is the largest, most familiar, most internationally represented and most powerful intergovernmental organization in the world. The UN is headquartered on international territory in New York City, with its other main offices in Geneva, Nairobi, Vienna, and The Hague.

UN SDGs

United Nation Sustainable Development Goals (UN SDGs). It is a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future". The SDGs were set in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030. For more information: https://sdgs.un.org/goals

UNEP

The United Nations Environment Programme (UNEP) is responsible for coordinating responses to environmental issues within the United Nations system.

UNESCO

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialised agency of the United Nations aiming at promoting world peace and security through international cooperation in education, the sciences, and culture.

UNI-ECO

Erasmus+ Strategic Partnership project that started in 2019 with the objective to raise awareness about environmental issues and actions in 5 European universities (UB, UU, Trinity, UM, ELTE)

UNIMED

Mediterranean Universities Union (Italian: Unione delle Università del Mediterraneo, UNIMED). It consists of 127 universities from 23 countries of the Mediterranean basin (or that have a specific interest in the Mediterranean region). The association has its head office in Rome.

University of Indonesia Greenmetrics

The UI GreenMetric World University Ranking is an initiative of Universitas Indonesia which is being launched in 2010. The aim of this ranking is to provide the result of online survey regarding the current condition and policies related to Green Campus and Sustainability in the Universities all over the world.

USFL

The Association of University Leaders for a Sustainable Future (ULSF) is the Secretariat for signatories of the Talloires Declaration (1990), which has been signed by over 500 college and university presidents and chancellors worldwide. ULSF supports Talloires signatories and promotes sustainability as a critical focus of teaching, research, operations and outreach in higher education through publications, research, and assessment.

UU

University of Utrecht, university in based in Netherland in 1636. (https://www.uu.nl/en)

Waste hierarchy

Waste hierarchy is a tool used in the evaluation of processes that protects the environment alongside resource and energy consumption from most favourable to least favourable actions.

WCED

The UN's World Commission for Environment and Development (WCED), chaired by former Norwegian Prime Minister Gro Harlem Brundtland and thus referred to as the Brundtland Commission, published the report "Our Common Future," also known as the "Brundtland Report," in 1987.

WWF

The World Wide Fund for Nature (WWF) is an international non-governmental organization founded in 1961 working in the field of wilderness preservation and the reduction of human impact on the environment. It was formerly named the World Wildlife Fund, which remains its official name in Canada and the United States.

ZEV

A Zero Emission Vehicle (ZEV) is a vehicle that never emits exhaust gas from the onboard source of power.

ANNEX 1



Institutional questionnaire

Nowadays, reports on the global climate crisis and the negative impact of mankind on the environment are drawing the attention of more and more people and groups to sustainability issues.

States and private institutions, formal and informal groups and individuals demand immediate real deeds to achieve the United Nations Sustainable Development Goals (SDGs) and voting on laws to counteract negative effects in the world.

Universities as a key stakeholder have a defining role in these processes.

The main goal of the UNI-ECO project is to raise the level of environmental awareness at universities' operational and educational levels.

Thank you for your cooperation.

We, as the UNI-ECO team, are committed to protect your personal data. To comply with the current GDPR regulations of the EU, we do not share any data with third parties that we receive through this questionnaire. Your data are protected on a secured university site of ELTE (Eötvös Loránd University) and will only be used anonymously to produce a report.

General questions

In the first part of the questionnaire, we would like to ask for general data and sustainability information from each university. It concerns some technical and infrastructural questions, the existence of basic SD documents, SD-innovations. Please, if you have any further question, consult the instructions for completing the questionnaire.

Basic information about each HEI

- 1 Name Please, enter your name. /Provided by text, please./
- 2 Contact email address Official email address. /Provided by text, please./
- 3 Contact phone number Official telephone number of the data provider. /Provided by number, please./
- 4 What is the name of the HEI? Please, enter the name of the HEI. /Provided by text, please./
- **5** When was the HEI founded? Please, enter the year the HEI was founded. /Provided by number, please./
- 6 Legal address of the HEI? Please, enter the legal address of the HEI. /Provided by text, please./
- 7 How many full-time students are enrolled at the HEI? Number of full-time students at the HEI in the 2019/2020 academic year. (Without the number of the evening class students.) /Provided by number, please./
- 8 How many students are enrolled in evening classes at the HEI? (Number of evening or part-time students at the HEI, without the number of the full time students in the 2019/2020 academic year.)
- **9** How many students are enrolled in online/distance learning classes at the HEI? (Number of the online/distance learning students at the HEI in the 2019/2020 academic year.) /Provided by number, please./
- How many non-academic staff works in the HEI? (Number of non-academic staff e. g.: operating staff, administrators, maintainers, cleaners.) /Provided by number, please./
- How many academic staff works in the HEI? (Number of academic staff e.g.: teachers, professors, researchers. /Provided by number, please./)
- Please, list all the faculties at your HEI: Please, list the faculties at your HEI e. g.: Faculty of Law, Faculty of Special Education, Faculty of Science. /Provided by text, please./
- How many dormitories/accomodation houses are there at the HEI? Please, give the number of dormitories and the other type of houses./Provided by number, please./
- 14 How many students live in the dormitories of the HEI? Number of students to whom the university provides housing. /Provided by number, please./
- How many different buildings are there at the HEI? Please, provide the complete of the university linked sites, different addresses e. g. if the university sports ground is at another address than the campus, then it is counted two. If it is inside the campus with the same address, then it is counted one. /Provided by number, please./

- What other facilities are linked to the HEI? Please, list the type of units in the university (excepting the faculties and the dormitories) that exists at the HEI? e. g.: sports ground, libraries, kindergartens, grammary schools, botanical gardens, university resorts.
- How would you describe the climate in the region of the HEI? Please, select one of the following options that describes the climate in the region of the HEI.
 - **Mediterranean**
 - Marine west coast / Oceanic Climate
 - Humid continental
- How would you describe the surroundings of the HEI? Please, select one of the following options that describes the current surroundings of the HEI.
 - Rural
 - Suburban
 - Urban
 - City center
 - High-rise building area
- 19 What is the ratio of the total budget spent on SD purposes at the HEI? Please, choose one of the following options that describes the current financial situation for sustainability at the HEI? The percentage of the total budget needed.
 - Not provided, there is no separate budget for SD goals.
 - 1% to 3%
 - 4% to 6%
 - 7% to 9%
 - More than 9%
- Do you have a greenhouse gas emission reduction program at the HEI? Please, choose one of the following options that describes the current state of the GHG policy at the HEI. Please, relate to these fields: 1. Combustions/emissions 2. Purchased electricity 3. Waste 4. Travel and commuting
 - None. There is a need for greenhouse gas emission reduction, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program with measures in 1 field
 - Operating program with measures in 2 fields
 - Operating program with measures in 3 fields
- Do you have a water conservation program for the HEI? Please, choose one of the following options that describes the current state of the water conservation program at the HEI?
 - None. There is a need for a water conservation program, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program saving, 1% to 25% water conserved
 - Operating program saving, 26% to 50% water conserved
 - Operating program with more than 50% water conserved

- Do you have a waste management program for the HEI? Please, choose one of the following options that describes the current state of the waste management program at the HEI? Please, relate to these themes: avoiding landfill and incineration; preferring reducing, reusing and recycling.
 - None. There is a need for a waste management program, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program providing 1% to 35% treated waste
 - Operating program providing 36% to 70% treated waste
 - Operating program providing more than 71% treated waste
- Do you have a biodiversity program for the HEI? Please, choose one of the following options that describes the current state of the biodiversity program for the HEI. Please, relate to these themes: protecting animals, protecting plants, protecting soil, environmentally conscious gardening, research programs etc. at the HEI?
 - None. There is a need for a biodiversity program, but nothing has been done yet.
 - Program in preparation (feasibility study and promotion)
 - Operating program with measures in 1 field
 - Operating program with measures in 2 fields
 - Operating program with measures in 3 fields
- 24 Do you have a sustainable transport program for the HEI? Please, choose one of the following options that describes the current state of the sustainable transport program for the HEI. Please, relate to these themes: motivating students and staff to use public transport, zero emission vehicles in the university, reducing air travel, video conferencing, remote attendance at meetings, research programs etc.
 - None. There is a need for a sustainable transport program, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program with measures in 1 field
 - Operating program with measures in 2 fields
 - Operating program with measures in 3 fields
- Do you have a comprehensive SD strategy for the HEI? Please, choose one of the following options that describes the current state of the SD strategy for the HEI.
 - None. There is a need for a SD strategy, but nothing has been done yet
 - There is a SD strategy, but it needs to be renewed
 - Renewal of the SD strategy is in progress
 - Operating SD program in early stage
 - Fully operating SD program with periodic renewal
- Please describe any innovative technical or methodological sustainability solutions, processes that have been developed and successfully applied at your university. Please, describe knowhows, methods in SD at HEI. /Provided by text, please./
- In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text,

please./

- In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think are the opportunities of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think are the threats of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 31 If you have any other remark on the above questions, you can enter it here: Please, enter here all the additional details about the settings and infrastructure of the HEI. /Provided by text, please./

Energy

In the second section of the questionnaire, we will ask questions about institutional energy management. It concerns renewable and non-renewable energy sources and insulation activities. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 32 Is there a priority of using energy reduction tools and methods at the HEI? Please, choose one of the following options.
 - No, there is no priority of using energy conscious tools and methods
 - There is a priority, but not consistently
 - There is always a priority
- Is there a Smart Building Implementation at the HEI? Please, choose one of the following options that describes the current state of the SBI at the HEI?
 - None. There is a need for a SBI program, but nothing has been done yet
 - Program in preparation 1 (feasibility study and promotion)
 - Program in preparation 2 (Budget provided, project under construction)
 - Operating program in early stage
 - Fully operating program with measurable results
- What is the average electricity use per year (in kilowatt-hour)? Quantity of electricity use in kWh per year at the HEI. /Provided by number in kilowatt-hour, please./ This measure will show the ratio of electricity consumption per capita. /Per capita=full time students and staff/
- What is the ratio of renewable energy efficient use compared to the total energy use? (from 0 to 100%) Please, choose one of the following options that describes the best the ratio of the renewable energy use at the HEI?
 - None. There is no renewable energy use at the HEI
 - 1% to 3%
 - 4% to 10%
 - 10% to 15%
 - More than 16%

What non-renewable energy sources are being consumed at the HEI? Please, choose from the following options that describes the non-renewable energy sources at the HEI?

- **36** We use Coal based energy sources
 - None. There is no coal based energy being consumed at the HEI
 - 1% to 5%
 - 6% to 15%
 - 16% to 30%
 - More than 30%
- **37** Oil-based energy sources
 - None. There is no oil based energy being consumed at the HEI

- 1% to 5%
- 6% to 15%
- 16% to 30%
- More than 30%

38 Gas based energy sources

- None. There is no gas based energy being consumed at the HEI
- 1% to 5%
- 6% to 15%
- 16% to 30%
- More than 30%

39 Nuclear based energy sources

- None. There is no nuclear energy being consumed at the HEI
- 1% to 5%
- 6% to 15%
- 16% to 30%
- More than 30%

What is the ratio of the renewable energy sources at the HEI? Please, choose one of the following options that describes the renewable energy sources being consumed by the HEI?

40 Bio diesel

- None. There is no bio diesel in use at the HEI
- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

41 Clean biomass

None. There is no clean biomass energy being consumed by the HEI

- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

42 Combine heat and power

None. There is no combined heat and power in use at the HEI

- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

43 Geothermal

None. There is no geothermal energy in use at the HEI

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- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

44 Hydropower

- None. There is no hydropower energy being consumed by the HEI
- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

45 Solar power

- None. There is no solar power being consumed by the HEI
- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%

46 Wind power

- None. There is no wind power being consumed by the HEI
- 1% to 2%
- 3% to 5%
- 6% to 10%
- More than 10%
- In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think are the opportunities of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think are the threats of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- If you have any other remark on the above questions, you can enter it here: Please, enter here all the additional details about the energy of the HEI. /Provided by text, please./

Waste

The third section of the questionnaire deals with questions related to the waste management of the institution. We ask you about the institution's waste procedures and waste flow by material. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- Is there a priority set on environmentally innovative tools and methods and resources in general? Please, choose one of the following options.
 - No, there is no priority of using
 - There is a priority, but not all the times
 - There is always a priority
- Does the HEI encourage reusing of secondhand items (e.g. furnitures, books, lab equipment, machines)? Please, choose one of the following options that describes the culture of reuse at the HEI?
 - No, in our HEI secondhand items are not reused at all
 - 1% to 10% are reused
 - 11% to 25% are reused
 - 26% to 50% are reused
 - More than 50% are reused
- Does the HEI offer a platform or tool to share or reuse items within the HEI? Please, choose one of the following options that describes the culture of reuse at the HEI.
 - None. There is a need for platforms, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Yes, but it is informal
 - Yes and it is managed by a dedicated staff member
 - Yes and we also share and reuse with local non profit charities
- Does the HEI mesure the amount of the recyclable waste? Please, choose one of the following options.
 - None. There is a need for measurement of the recyclable waste, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Program in preparation (project under construction)
 - Operating program in early stage
 - Fully operating program with measurable results
- Does the HEI recycle regular paper waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Paper waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- 57 Does the HEI recycle confidential paper waste? Please, choose one of the following options that

best describes the recycling at the HEI?

- None. Confidential paper waste is not recycled at the HEI
- 1% to 25%
- 26% to 50%
- 51% to 75%
- More than 76%
- Does the HEI recycle plastic waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Plastic waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI recycle glass waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Glass waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI recycle metal waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Metal waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI recycle electronic waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Electronic waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI compost food waste? Please, choose one of the following options that best describes composting at the HEI?
 - None. Food waste is not composted at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%

- More than 76%
- Does the HEI recycle cooking oil waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Cooking oil waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI recycle wood waste? (furniture) Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Wood waste is not recycled at the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI compost organic waste garden and landscaping waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Garden and landscape waste are not composted by the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Does the HEI recycle organic waste kitchen green crops? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. Kitchen green crops are not recycled in the HEI
 - 1% to 25%
 - 26% to 50%
 - 51% to 75%
 - More than 76%
- Which hazardous waste does the university collect separately and dispose of it properly? Please select the waste that are properly collected and disposed of at the HEI?
 - Batteries
 - Detergents and cleaning products
 - Ink toners
 - Lab chemicals
 - Lightbulbs
 - Paint waste
- Does the HEI recycle sewage disposal other than through the sanitary sewer? Please, choose one of the following options that best describes the recycling at the HEI?

- None. There is no possibility of recycling sewage waste locally
- There is a need and possibility of recycling sewage waste, but nothing has been done yet
- Program in preparation (feasibility study and promotion)
- Operating program in early stage
- Fully operating program with measurable results
- Does the HEI mesure the non-recyclable waste? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. There is a need for measurement of the non-recyclable waste, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Program in preparation (project under construction)
 - Operating program in early stage
 - Fully operating program with measurable results
- 70 Does the HEI reduce the amount of the mixed waste by further measures? Is there a monitoring system? Please, choose one of the following options that best describes the recycling at the HEI?
 - None. There is a need for a monitoring system, but nothing has been implemented yet
 - Program in preparation (feasibility study and promotion)
 - Program in preparation (project under construction)
 - Operating program in early stage
 - Fully operating program with measurable results
- 71 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 72 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 73 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 74 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 75 If you have any other remark on the above questions, you can enter it here: Please, enter here all the additional details about the waste system of the HEI. /Provided by text, please./

Water

The fourth section of the questionnaire deals with questions related to the water management of the institution. We ask questions about the institution's prevention processes of water wastage and cleaning. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 76 Is there a priority on water saving tools and methods in general? Please, choose one of the following options.
 - No, there is no priority of using environmentally conscious tools and methods
 - There is a priority, but not all the times
 - There is always a priority
- 77 Is rainwater collected at the HEI? Please, choose one of the following options.
 - None. There is a need for rainwater collecting at the HEI, but nothing has been implemented yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (1-30% rain water saved)
 - Operating program in evolution (31-50% rain water saved)
 - Fully operating program (more than 51% rain water saved)
- 78 Is there any system to clean up and use grey water by the HEI as a local solution? Please, choose one of the following options.
 - None. There is no possibility of recycling grey water in place at the HEI
 - There is a need and possibility of recycling grey water in place, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage
 - Fully operating program with measurable results
- 79 Do you use aerators in the campuses (for example in taps) for saving water? Please, choose one of the following options.
 - None. There is a need of using aerators in the faucets at the HEI but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (1-30% water saved)
 - Operating program in evolution (31-50% water saved)
 - Fully operating program (more than 51% water saved)
- 80 Do you use water saving toilet tanks at the HEI? Please, choose one of the following options.
 - None. There is a need of using water saving toilet tanks at the HEI but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (1-30% water saved)
 - Operating program in evolution (31-50% water saved)
 - Fully operating program (more than 51% water saved)
- 81 Do you have water saving shower heads at the HEI? Please, choose one of the following options.
 - None. There is a need of using water saving shower heads at the HEI but nothing has been done yet
 - Program in preparation (feasibility study and promotion)

- Operating program in early stage (1-30% water saved)
- Operating program in evolution (31-50% water saved)
- Fully operating program (more than 51% water saved)
- 82 Do you have drip irrigation equipment at the HEI? Please, choose one of the following options.
 - None, nothing has been done yet, we use non-drip irrigation equipment
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (1-30% water saved)
 - Operating program (31-50% water saved)
 - We do not sprinkle in the gardens
- 83 Do you have water saving awareness campaigns at the HEI? Please, choose one of the following options.
 - None. There is a need of water saving campaigns at the HEI but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program with 1-3 tips of saving water
 - Operating program with 4-5 tips of saving water
 - Fully operating program with regular renewal (more than 5 water saving tips)
- 84 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 87 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 88 If you have any other remarks on the above questions, you can enter them here: Please, enter here all the additional details about the water managing system of the HEI. /Provided by text, please./

Procurement

The fifth section of the questionnaire deals with questions related to the procurement processes, institutional supplies. We ask you about the institution's material and service procedures and material flow by type of device. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 89 Does the university's public procurement system favour environmentally conscious products and services? Please, choose one of the following options.
 - No, there is no priority of purchasing environmentally conscious products and services
 - There is a priority, but not all the times
 - There is always a priority
- 90 Is the public procurement system based on a transparent evaluation system? Please, choose one of the following options.
 - None. There is a need for a transparent evaluation system at the HEI, but nothing has been implemented yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (evaluation system yet to develop)
 - Operating program in evolution (evaluation system tested yet to correct)
 - Fully operating program, with total transparency
- 91 Is the Green Public Procurement System professionally sound and technically and economically feasible at your university? Please, choose one of the following options.
 - None. There is no Green Public Procurement System at the HEI
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage
 - Fully operating GPPS program with measurable results
- 92 Is the EU eco-label or other international eco-label taken into account in public procurement? Please, choose one of the following options.
 - None. There is a need of taking into action eco-labels in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of cases it is considered)
 - Operating program in evolution (In 31-50% of cases it is considered)
 - Fully operating program (In more than 51% of cases it is considered)
- 93 Are the national eco-labels taken into account when purchasing products and services? Please, choose one of the following options.
 - Not feasible
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of cases it is considered)
 - Operating program in evolution (In 31-50% of cases it is considered)
 - Fully operating program (In more than 51% of cases it is considered)

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94	 Are employees trained at any level in green public procurement? Please, choose one of following options. None. There is currently no education about green public procurement at the HEI Program in preparation (feasibility study and promotion) Operating program in early stage (organising) Operating program in evolution (education done but needs to be developed) Fully operating program (professional and legal know-how is educated on the basis of continual feedback) 							
	se rank which of the following is a barrier to green public procurement. Please, rate the option (1 = very hindering; 5 = most hindering)							
95	Lack of political support at the HEI 1 2 3 4 5							
96	Prejudice against higher prices for environmentally friendly products 1 2 3 4 5							
97	Lack of necessary legal knowledge 1 2 3 4 5							
98	Lack of practical tools and information 1 2 3 4 5							
99	Difficulties in integrating into the management system 1 2 3 4 5							

- **100** Lack of education
 - 2 3 5
- **101** Lack of cooperation among procurement organizations
 - 2 3 4 1 5
- 102 Are eco-labels taken into consideration when purchasing office paper? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- 103 Are eco-labels taken into consideration when purchasing office supplies? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet

- Program in preparation (feasibility study and promotion)
- In 1-30% of the cases it is considered
- In 31-50% of the cases it is considered
- In more than 51% of cases it is considered
- **104** Are eco-labels taken into consideration when purchasing furniture? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet.
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- **105** Are eco-labels taken into consideration when purchasing electronic devices? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- **106** Are eco-labels taken into consideration when purchasing cleaning products? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- **107** Are eco-labels taken into consideration when purchasing experimental-educational tools? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- **108** Are eco-labels taken into consideration when purchasing event organizing materials? Please, choose one of the following options.
 - None. There is a need to take eco-labels into account in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered

- **109** Are environmentally conscious aspects taken into consideration when purchasing cleaning services? Please, choose one of the following options.
 - None. There is a need to take these aspects into account within the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- 110 Are environmentally conscious aspects taken into consideration when purchasing building renovation services? Please, choose one of the following options.
 - None. There is a need to take these aspects into account within the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- **111** Are environmentally conscious aspects taken into consideration when purchasing event organizing services? Please, choose one of the following options.
 - None. There is a need to take these aspects into account within the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- 112 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 113 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 114 In relation to the above, what do you think are the opportunities of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 115 In relation to the above, what do you think are the threats of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 116 If you have any other remark on the above questions, you can enter it here: Please, enter here all the additional details about the water managing system of the HEI. /Provided by text, please./

Food and catering

In the sixth section of the questionnaire, we will ask questions about institutional food and catering habits. These concern catering and food supplies and rules for canteens/cafeterias and events. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 117 Is there a priority of using environmentally conscious products and services in practice for food and catering at the HEI? Please, choose one of the following options.
 - No, there is no priority of using environmentally preferable products and services
 - There is a priority, but not all the times
 - There is always a priority
- 118 How many university-run canteens are there within the HEI? Please, enter the number. /Provided by a number./
- **119** What is the number of outsourced canteens/cafes at the HEI? Please, enter the number. /Provided by a number./
- **120** Is the purchase of organic materials an important consideration in university dining? Please, choose one of the following options.
 - No, it is not important to choose non-chemical raw materials
 - It is important, but it is not feasible all the times
 - It is highly important and feasible
- **121** Do university canteens plan healthy food options for the menu? Please, choose one of the following options.
 - No, it is not feasible.
 - It is important, but it is not feasible all the times
 - It is highly important and feasible
- **122** Are university canteens actively seeking for organic certification of food? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - More than 51% of the cases it is considered
- **123** Are university canteens seeking to source provisions from Fair Trade labelled items? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - More than 51% of the cases it is considered

- **124** Are university canteens seeking to source food from local producers (within 50 km of the HEI)? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of the cases it is considered
- 125 Do university canteens have vegetarian meals on the menu each mealtime? Please, choose one of the following options.
 - No, there are no vegetarian options provided
 - Program in preparation (feasibility study and promotion)
 - 1-30% of the meals are vegetarian in the menu
 - 31-50% of the meals are vegetarian in the menu
 - More than 50% of the meals are vegetarian in the menu
- 126 Do university canteens try to have vegan meals on the menu? Please, choose one of the following options.
 - No, there are no vegan options provided
 - Program in preparation (feasibility study and promotion)
 - 1-10% of the meals are vegan in the menu
 - 11-25% of the meals are vegan in the menu
 - More than 25% of the meals are vegetarian in the menu
- 127 Do university canteens have at least one day without meat in the weektime? Please, choose one of the following options.
 - No, this is not done at any day during the week
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the canteens there is at least one day without meat in the week
 - In 31-50% of the canteens there is at least one day without meat in the week
 - In more than 51% of the canteens there is at least one day without meat in the week
- 128 Are university canteens avoiding the use of palm oil? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - 1-30% of the canteens try to avoid using palm oil
 - 31-50% of the canteens try to avoid using palm oil
 - More than 51% of the canteens try to avoid using palm oil
- 129 Is there a possibility for a personalized portion of food in a university cafeteria to minimize food waste? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - 1-30% of the canteens provide personalized portions of food
 - 31-50% of the canteens provide personalized portions of food

- More than 51% of the canteens provide personalized portions of food
- **130** Do university canteens have programs in place to avoid disposable tableware? Please, choose one of the following options.
 - No, this has not been implemented at this time
 - Program in preparation (feasibility study and promotion)
 - 1-30% of the canteens avoid disposable tableware
 - 31-50% of the canteens avoid disposable tableware
 - More than 51% of the canteens avoid disposable tableware
- 131 Is there a possibility in the university canteen to deliver leftover food to those in need? Please, choose one of the following options.
 - No, this is not done at this time
 - Program in preparation (feasibility study and promotion)
 - 1-30% of the canteens deliver remaining food
 - 31-50% of the canteens deliver remaining food
 - More than 51% of the canteens deliver remaining food
- 132 What do you think about the pricing of environmentally-friendly university meals? Please, share your opinion. /Provided by text, please./
- 133 Does the HEI buy eco-labelled food for catering during university events? Please, choose one of the following options.
 - No. There is a need to take action on this, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the cases it is considered
 - In 31-50% of the cases it is considered
 - In more than 51% of cases it is considered
- 134 Does the HEI use only reusable tableware during university events? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the events disposable tableware is avoided
 - In 31-50% of the events disposable tableware is avoided
 - In more than 51% of the events disposable tableware is avoided
- 135 Does the HEI avoid food waste during university events? Please, choose one of the following options.
 - No, it is not feasible
 - Program in preparation (feasibility study and promotion)
 - In 1-30% of the events food waste is avoided
 - In 31-50% of the events food waste is avoided
 - In more than 51% of the events food waste is avoided

- 136 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 137 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 138 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 139 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 140 If you have any other remark on the above questions, you can enter it here: Please, enter here all the additional details about the water managing system of the HEI. /Provided by text, please./

Biodiversity

In the seventh section of the questionnaire, we will ask questions about institutional actions and habits related to protect plants and animals and their habitats. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 141 Is there a priority for biodiversity protection at the HEI? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No, biodiversity is not prioritized
 - There is a priority, but not all the times
 - There is always a priority
- 142 Does the HEI avoid using pesticides, herbicides and fertilizers on university grounds? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No, there is a need to avoid these chemicals, but no reduction program has been implemented yet
 - Program in preparation (feasibility study and promotion)
 - Only 1% to 15% of the chemicals are harmless to the environment
 - 16% to 25% of the chemicals are harmless to the environment
 - More than 25% of the chemicals are harmless to the environment
- 143 Does the HEI use non fossil-fuel powered or non electricity-powered tools for gardening? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No, there is a need to avoid these tools, but nothing has been done
 - Program in preparation (feasibility study and promotion)
 - Only 1% to 15% of the tools are non-electric and non-oil based
 - 16% to 25% of the tools are non-electric and non-oil based
 - More than 25% of the tools are non-electric and non-oil based
- **144** Are plant maintenance works well planned, taking into consideration their breeding/ flowering periods? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No. There is a need of taking into account these aspects in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of cases it is considered)
 - Operating program in evolution (In 31-50% of cases it is considered)
 - Fully operating program (In more than 51% of cases it is considered)
- 145 Does the HEI actively plan for the protection of animal habitats during landscape maintenance? Please, choose one of the following options that describes landscaping practices at the HEI?
 - No
 - It is currently being discussed
 - Yes
- 146 Does the HEI create community gardens maintained by students or staff? Please, choose one of the following options that describes best the biodiversity measures at the HEI?

- No. There is a need for community gardening in the HEI, but nothing has been done yet
- Program in preparation (feasibility study and promotion)
- Operating program in early stage (Tools, organisation has been done)
- Operating program in evolution (Established at least 1 or 2 years ago)
- Fully operating program (More than 2 years of working)
- 147 Does the HEI have any green roofs on buildings? If so, please indicate what percentage of roof space is occupied by green roof for the whole HEI. Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - None implemented yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (1% to 5% of roof space is green roof)
 - Operating program in early stage (6% 15% of roof spaces is green roof)
 - Operating program (More than 15% of roof space is green roof)
- 148 Does the HEI actively put in place protection for habitats for native animals during building renovations or new builds? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No. There is a need to take action on these aspects in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of cases it is considered)
 - Operating program in evolution (In 31-50% of cases it is considered)
 - Fully operating program (In more than 51% of cases it is considered)
- 149 Does the HEI avoid using salt for salting ice in winter? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No, it is not feasible
 - No. There is a need to replace salt with an alternative method in the HEI, but nothing has been done yet
 - 50 % of the material we use is not salt (e. g. grit, sand or other alternative)
 - 75 % of the de-icing material is grit, sand or another non chemical alternative
 - 100 % of the de-icing material is grit, sand or another non chemical alternative
- 150 Does the HEI strive to minimize outdoor light pollution? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No. There is a need to minimize outdoor light pollution at the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of cases it is minimized)
 - Operating program in evolution (In 31-50% of cases it is minimized)
 - Fully operating program (In more than 51% of cases it is minimized)
- 151 Does the HEI have bird stickers on the windows to avoid animals colliding? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No. There is a need of minimalizing colliding at the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)

- Operating program in early stage (In 1-30% of the buildings there are stickers)
- Operating program in evolution (In 31-50% of the buildings there are stickers)
- Fully operating program (In more than 51% of the buildings there are stickers)
- 152 Has the HEI created a Bird protection program in university gardens, courts? (lairs, watering, feeding) Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No. There is a need of bird protection program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-30% of the buildings the program works)
 - Operating program in evolution (In 31-50% of the buildings the program works)
 - Fully operating program (In more than 51% of the buildings the program works)
- 153 Has the HEI created a pollinator protection program in university gardens, courts? (Insect attracting plants, bee-houses) Please, choose one of the following options that best describes the biodiversity measures at the HEI?
 - No, it is not feasible
 - No. There is a need for a pollinator protection program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - 25% of the goals in the program have been implemented
 - More than 25% of the goals in the program have been implemented
- 154 Does the HEI strive to maximize the varieties of flowers, bushes, trees? Please, choose one of the following options that best describes the biodiversity measures at the HEI?
 - No, it is not feasible
 - No. There is a need of plant variation program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (In 1-20% of the buildings the program works)
 - Operating program (In more than 20% of the buildings the program works)
- 155 Does the HEI check the condition of the plants at least annually? Please, choose one of the following options that describes best the biodiversity measures at the HEI?
 - No, it is not feasible
 - No. There is a need of plant control program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and planning)
 - Operating program in early stage (plants checked at least annually)
 - Operating program (the plants are checked twice a year)
- **156** Does the HEI have botanical gardens or woods? Please, choose one of the following options.
 - Yes
 - No
- **157** If yes, please describe them. (Size of area, purpose, operation, accessible to students/ staff/ public) Please, describe the areas in detail. /Provided by text, please./

- **158** Does the university remove invasive species (plants) in its area? Please, choose one of the following options that describes best the invasive prevention at the HEI?
 - No, it is not feasible
 - No. There is a need for an invasive plant control program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (training and coordination)
 - Operating program (invasive plants are uprooted regularly)
- 159 Does the university minimize chemical methods against invasive plants? Please, choose one of the following options that describes best the recycling at the HEI?
 - No, it is not feasible
 - The HEI prevents only chemically
 - The HEI prevents chemically and mechanically 50-50 %
 - The HEI prevents mostly mechanically
 - The HEI prevents only mechanically
- 160 Does the university remove invasive species (animals) in its area? Please, choose one of the following options that describes best the invasive prevention at the HEI?
 - No, it is not feasible
 - No. There is a need for an invasive animal control program in the HEI, but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (training and coordination)
 - Operating program (invasive animals are uprooted regularly)
- 161 Does the university minimize chemical methods against invasive animals? Please, choose one of the following options that describes best the recycling at the HEI?
 - No, it is not feasible
 - The HEI prevents only chemically
 - The HEI prevents chemically and mechanically 50-50 %
 - The HEI prevents mostly mechanically
 - The HEI prevents only mechanically
- 162 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 163 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 164 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 165 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text,

please./

166 If you have any other remarks on the above questions, you can enter them here: Please, enter here all the additional details about the waste system of the HEI. /Provided by text, please./

Education and research

In the eighth section of the questionnaire, we will ask questions about the HEI's educational and research profile on SD. In this section we focus on formal educational processes and measures. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- 167 Does sustainable development play a prominent role in the university's education and research portfolio? Please, choose one of the following options.
 - No, there is no priority of SD goals at the university in our education and research
 - There is a priority, but only in a few disciplines
 - SD is prioritized in all educational areas
- **168** What is the total number of courses registered at the HEI? Please, give the number of courses. / Provided by numbers./
- **169** How many sustainability-related subjects do you have at the HEI? Please, give the number of courses. /Provided by numbers./
- 170 Do university professors regularly write scholarly publications on sustainability, climate change or sustainable development? Please, choose one of the following options.
 - Yes
 - No
- 171 Does your institution often apply for university research funding programs on sustainability? Please, choose one of the following options.
 - No, it is not in the university's profile
 - Yes, 1- 15% of funding applications are related to sustainability
 - Yes, 16 25% of funding applications are related to sustainability
 - Yes, more than 25% of funding applications are related to sustainability etc.
 - SD research is the main profile of the university
- 172 Please give some examples of sustainability research projects the university has won over the last three years. Please, describe some projects. /Provided by text, please./
- 173 Does the HEI encourage teachers to reduce paper use in their modules/ classes? Please, choose one of the following options.
 - No. The university does not motivate the teachers to do so
 - Program in preparation (feasibility study and promotion)
 - Yes, sometimes
 - Yes, very often
 - Yes, it is highly recommended
- 174 Does the HEI accept essays and other coursework submitted electronically? Please, choose one of the following options.
 - Yes

175	Does the HEI accept final theses to be submitted electronically? Please, choose one of the following options.
	Yes No.



Yes No

No

- 177 Did the university libraries introduce an electronic book lending system for the students? Please, choose one of the following options.
 - Yes No
- 178 Does the HEI encourage people to use a carbon neutral search engine at the university? Please, choose one of the following options.
 - Yes No
- 179 Does the HEI encourage teachers to integrate SD studies in every subjects offered at the university, not only the SD related ones? Please, choose one of the following options.
 - Yes No
- 180 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 181 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 182 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 183 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 184 If you have any other remarks on the above questions, you can enter them here: Please, enter here all the additional details about the education and research aspects of the HEI. /Provided by text, please./

Mobility

In the ninth section of the questionnaire, we will ask questions about the HEI's transport policy, system and measures. If you have any further questions, consult the instructions for completing the questionnaire.

ques	tionnaire.
185	Is there a priority of environmentally conscious transportation at the HEI? Please, choose one of the following options. No, there is no priority of using environmentally conscious transport methods There is a priority, but not an official policy There is an official policy and full implementation of the program
186	Is there a pedestrian path policy at the HEI? Please, choose one of the following options. Yes No
187	Does the HEI financially support sustainable commuting? Please, choose one of the following options. Yes No
188	Does the HEI encourage students and staff to go to university by carpooling? Please, choose one of the following options. Yes No
189	Does the HEI encourage students and staff to go to university by bicycle? Please, choose one of the following options. Yes No
190	Does the HEI have a campus shuttle system? Please, choose one of the following options. Yes No
191	Does the HEI have a plan to avoid increasing the number of parking spaces? Please, choose one of the following options. Yes

192 Does the HEI have a plan/ policy to reduce airplane travel? Please, choose one of the following options.

Yes

No

No

- 193 How many zero emission vehicles (ZEV) does the HEI have? Please, give the number of ZEVs.
- **194** How many zero emission vehicles (NON-ZEV) does the HEI have? Please, give the number of NON-ZEVs.
- **195** Do university staff have the opportunity to work from home? Please, choose one of the following options.
 - Yes
 - No
- 196 In relation to the above, what do you think is the strength of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 197 In relation to the above, what do you think is the weakness of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 198 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 199 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 200 If you have any other remarks on the above questions, you can enter them here: Please, enter here all the additional details about the water managing system of the HEI. /Provided by text, please./

Operation and communication, human resources

In the tenth and final section of the questionnaire, we will ask questions about the HEI's operational and communication tools and the informal educational options. In this section we also focus on human resources. Please, if you have any further questions, consult the instructions for completing the questionnaire.

- **201** Does the HEI encourage the establishment of sustainability/ SD organisations/working groups run by students? Please, choose one of the following options.
 - Yes
 - No
- 202 Does the HEI encourage the establishment of sustainability/ SD organisations/working groups run by staff? Please, choose one of the following options.
 - Yes
 - No
- **203** Could you please describe how SD activities and projects are organised? (Participants, places, working methods, tools, decision-making processes) Please, describe the SD activities system.
- **204** What communication tools are used to convey sustainability information? Please, choose among the following options.
 - Facebook
 - Newsletter
 - Personal communication
 - Separate sustainability website
 - Twitter
 - University radio
 - University TV broadcast
 - University website
 - YouTube
 - Other
- **205** Please describe in details how SD activities, projects are communicated? (Participants, frequency, working methods, tools, decision-making processes) Please, describe in details the SD communication system.
- **206** Does the university prepare an annual sustainability report? Please, choose among the following options.
 - None. There is a need for an annual sustainability report at the HEI but nothing has been done yet
 - Program in preparation (feasibility study and promotion)
 - Operating program in early stage (data collection, organizing)
 - Operating program in evolution (1 or 2 reports are already done)
 - Fully operating program (more than 2 reports are already done)

- **207** What kind of SD-related events are organized at the HEI? Please, choose among the following options.
 - Bicycle service
 - Community gardening
 - Exhibitions
 - Film clubs
 - Handicraft workshops
 - Presentations
 - Sustainability Days
 - Vegan food tasting
 - Other
- **208** Could you, please, describe in details what SD events look like? (Participants, frequency, working methods, tools, decision-making processes, contents) Please, describe in details the SD-events.
- 209 Does the HEI have an active program in place to protect students against the effect of climate change? Please, describe how the HEI protects the students.
- 210 Does the HEI have an active program in place to protect staff against the effect of climate change? Please, describe how the HEI protects the staff.
- 211 Does the HEI take steps to avoid greenwashing by informing students and staff? Please, describe how the HEI avoids greenwashing by communication to the university citizens.
- 212 Does the HEI take steps to avoid greenwashed products? Please, describe how the HEI avoids greenwashing, greenwashed products.
- 213 In relation to the above, what do you think is the strengths of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 214 In relation to the above, what do you think is the weaknesses of the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 215 In relation to the above, what do you think are the opportunities for the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 216 In relation to the above, what do you think are the threats to the university? Please, share your opinion. Provide up to 3 examples, from the most important to the less important. /By text, please./
- 217 If you have any other remarks on the above questions, you can enter them here: Please, enter here all the additional details about the communications and HR aspects of the HEI. /Provided by text, please./

ANNEX 2



Students and staff survey

Nowadays, reports on the global climate crisis and the negative impact of mankind on the environment are drawing the attention of more and more people and groups to sustainability issues.

States and private institutions, formal and informal groups and individuals demand immediate real deeds to achieve the United Nations Sustainable Development Goals (SDGs) and voting on laws to counteract negative effects in the world.

Universities as a key stakeholder have a defining role in these processes.

The main goal of the UNI-ECO project is to raise the level of environmental awareness at universities' operational and educational levels.

Thank you for your cooperation.

We, as the UNI-ECO team, are committed to protect your personal data. To comply with the current GDPR regulations of the EU, we do not share any data with third parties that we receive through this questionnaire. Your data are protected on a secured university site of ELTE (Eötvös Loránd University) and will only be used anonymously to produce a report.

General questions

In the first part of the questionnaire, we would like to ask some personal questions about you and your relationship with the university. Please fill in the form.

- 1 What is your legal connection with the university? Please, choose one of the following options.
 - Alumnus
 - Non-academic staff
 - Professor/researcher
 - Student
- 2 Age. Please, choose one of the following options.
 - 18-25
 - 26-35
 - 36-50
 - 51-65
 - Over 65
- **3** Gender. Please, choose one of the following options.
 - **Female**
 - Male
 - Other
 - Prefer not to answer
- 4 University. Please, choose one of the following options.
 - Trinity
 - University Eötvös Loránd
 - University of Barcelona
 - University of Montpellier
 - University of Utrecht
- 5 If alumnus, what subject is your degree/ diploma in, and in what year did you graduate? Please, indicate your diploma and the year of your graduation.
- 6 If non-academic staff member, what is the title of your position? Please, indicate your work title at the university.
- 7 If professor/researcher, what is your discipline? Please indicate your discipline at the university.
- 8 If student, which faculty are you in? What is your level? Please indicate your faculty and the level of your studies at the university. (BA, MA, PhD, other)
- **9** Which campus are you located at? Please indicate the campus (or campuses) you are most connected with at the university.

10	How far do you live from the campus? Please, choose one of the following options. Less than 1 km 1 to 4 kms 5 to 10 kms 11 to 50 kms More than 50 kms
11	Which means of transport do you usually use to go to class/to work? Please, choose the means of transport you use. Bicycle Bus Car Carpooling Electric car By foot Metro Motorcycle Train Tram Trolleybus Other
12	What communication tools do you consider more efficient? Please, select the communication tools you use. Emails Paper-based material Personal communication Social networks (Facebook, Twitter, Instagram) Video-sharing sites (YouTube, Dailymotion, TikTok)

Perception / knowledge

In the second section of the questionnaire, we will ask you questions about your knowledge related to sustainability and your point of view in the theme.

13	How concerned are you about the environmental status of the world? Please, choose one of the
	following options. (1= not concerned at all; 5 = very much concerned)

1 2 3 4 5

14 How does negative environmental news affect your everyday mood? Please, choose among the following options.

- I do not care
- I am worried
- I am depressed
- I am angry
- Other

How much do you think your classmates/colleagues are concerned about the environmental status of the world? Please, choose one of the following options. (1 = not concerned at all; 5 = very much concerned)

1 2 3 4 5

16 Which statements do you agree with? Please, choose among the following options

- I think it's too late to do anything about climate change
- I think climate demonstrations are detrimental to green movements
- I think climate demonstrations are useful in promoting green movements
- I think that we should not be demonstrating, but creating a critical mass with environmentally conscious consumption to influence climate action
- I think it is important to have both demonstrations and an active climate action plan to implement
- None of the previously mentioned

17 Which topics do you most associate with sustainable development? Please, choose among the following options.

- Air pollution
- Biodiversity
- Climate change
- Economic development
- Energy policy
- Food production and consumption
- Human health
- Overpopulation
- Social inequalities
- Urbanism
- Use of natural resources
- Waste management and recycling

Other

How much do you know about the Sustainable Development Goals (SDGs) set by the United Nations? Please, choose among the following options. (1 = never heard of them; 2 = have heard of them but not very familiar; 3 = I know some of them; 4 = I know them in detail; 5 = my work/ study involves the SDGs)

1 2 3 4 5

How would you assess how your personal life impacts the environment? Please, choose among the following options. (1 = big impact; 5 = minimal impact)

1 2 3 4 5

Who do you think should do the most to mobilise society to adopt sustainable development goals? Please, rate the following. (1 = does not have to do a lot; 5 = has to do a lot)

International institutions

1 2 3 4 5

EU

1 2 3 4 5

Governments

1 2 3 4 5

Regional institutions

1 2 3 4 5

Local institutions

1 2 3 4 5

Your university

1 2 3 4 5

Individuals

1 2 3 4 5

21 Who do you think has more capacity (eg. resources, skills, capability for implementation) for actions towards sustainable development? Please, rate the next ones. (1 = no capacity; 5 = maximum capacity)

International institutions

1 2 3 4 5

EU

1 2 3 4 5

Governments

1 2 3 4 5

Regional institutions

1 2 3 4 5

Local institutions

1 2 3 4 5

Your university 1 2 3 4 5

Individuals
1 2 3 4 5

Personal commitment

Zero Waste

Other

In the third section of this questionnaire, we will ask you questions about your personal commitment to sustainability.

22	Are you currently involved in any ecological movement/organisation? Please, choose between the following options. Yes No
23	If yes, please indicate what kind of movement/organization. Please, choose among the following options. Initiative group NGO Student group University workgroup Other
24	Have you adopted daily habits to reduce your impact on the environment? Please, choose one of the following options. Not at all Rarely Sometimes Often All the time
25	What kind of acts do you engage in, to minimise environmental impact in your life? Please, choose among the following options. — Animal protection — Composting — Energy conservation — Minimalism — Recycling — Reusing — Veganism — Vegetarianism

Apart from the above, what other sustainable behaviours or habits do you engage in? P l e a s e , give some other examples if you do anything else. /Provided by text./

Sustainability at your university

In the fourth section of the questionnaire, we will ask you questions about your point of view related to sustainability measures at your university. Please share your opinion with us.

- Do you feel you are informed enough about sustainability at the university? Please, choose one of the following options. (1 = not feeling informed at all; 5 = very well informed; 6 = too much information)

 1 2 3 4 5 6
- Does your university have SD dedicated groups or initiatives? Please, choose among the following options. (SD groups, green office)
 - I haven't heard of any
 - Some initiatives
 - A lot of initiatives
 - Not enough initiatives
- Are any sustainability topics included in your coursework (if student) / daily work (if staff)? Please, choose one of the following options. (1= not at all; 5= a lot; 6=too much)
 - 1 2 3 4 5 6
- Do you think the actions taken for SD by the university are sufficient? Please, choose among the following options. (1=Not at all; 5= Absolutely)
 - 1 2 3 4 5
- 31 What topic do you think should be the priority at your university? Please, choose among the following options. Choose maximum three of them.
 - Biodiversity
 - Consumption reduction
 - (Sustainability) education
 - Energy management
 - Food and catering
 - Procurement
 - Research
 - Transportation
 - Waste management
 - Water management
- Would you participate in initiatives geared towards SD taken by your university? Please, choose one of the following options. (1 = no; 2 = probably not; 3 = maybe, if I have time; 4 = probably yes; 5 = definitely yes)
 - 1 2 3 4 5
- 33 What would you propose from your perspective? Please, share your opinion.
- 34 Do you have any further comments? Please, enter here all the additional details about your point of view of SD topic. /Provided by text, please./















Project

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Partnership

- UNIVERSITE DE MONTPELLIER (France, Coordinator)
- UNIVERSITAT DE BARCELONA (Spain),
- THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN (Ireland),
- UNIVERSITEIT UTRECHT (the Netherlands),
- EOTVOS LORAND TUDOMANYEGYETEM (Hungary),
- UNIMED UNIONE DELLE UNIVERSITÀ DEL MEDITERRANEO (Italy),
- CESIE (Italy)

Communication

Follow up on the project's social networks...



... and on our website!



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