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The Response of Higher Educational Institutions to Sustainability Challenges in Hungary

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Abstract: Higher Educational Institutions can not avoid sustainability issues as related steakholder demands are becoming ever dynamic. Generation Z places greater emphasis on environmental and social sustainability than any previous generations. As a result, during university admissions, green rankings (GreenMetric Ranking of World Universities, Times Higher Education Impact Ranking) are getting increasingly emphasized.

In Western Europe, the ESG model (Environment, Social and Governance) has already been included in the curriculum of numerous university programs, acknowledging the importance of the topic, while this endeavor is still in its infancy in the universities of Central and Eastern Europe.

Even in the medium term, ESG development has a serious positive impact on the financial performance, stakeholder satisfaction and health of institutions, as well as their standing in university rankings. The topics of the GreenMetric world ranking are closely related to the areas to be measured in the ESG processes, so participation in the two processes can develop in an intertwined manner.

Our study shows how the effectiveness of the GreenMetric and Times Higher Education world rankings among Hungarian higher educational institutions develops, why institutions choose to be listed, and what results the institutions aim to achieve.

Keywords: *higher education, sustainability, responsibility*

JEL Codes: *I23, M20, M48, O44*

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Introduction

Sustainability in higher education has emerged as a critical and imperative focal point, preparing a paradigm shift in institutional policies, practices and curricula. As global concerns intensify, academic institutions play a pivotal role in cultivating a generation of environmentally, socially and economically conscious and responsible citizens (Fási, 2023).

Integrating sustainability into higher education not only aligns with societal demands but also serves as a catalyst for fostering innovation, critical thinking and interdisciplinary collaboration. By embracing sustainable practices, universities can significantly reduce their ecological footprint, model sustainable behaviours and contribute meaningfully to the broader sustainability agenda.

Moreover, embedding sustainability principles into academic programs equips students with the knowledge and skills needed to address complex challenges facing our planet, preparing them to be leaders in a rapidly changing and interconnected world (Lambrechts, Hindson, 2016). Thus, the incorporation of sustainability in higher education is not only a moral obligation but a strategic investment in the future well-being of both society and the planet.

The escalating interest in sustainability among university applicants and students reflects a societal shift towards prioritizing environmental consciousness and ethical responsibility, highlighting a growing recognition of the role higher education plays in shaping responsible leaders for the future.

According to a recent research conducted by the World Economic Forum in 2022, Generation Z cares about sustainability more than anyone else – and is starting to make others feel the same (Wood, 2022).

In response to the escalating importance of sustainability among applicants and students, universities are compelled to adapt and integrate sustainably conscious practices into their structures and academic offerings. (This evolution is driven by the recognition that addressing sustainability concerns is not only a moral imperative but also a strategic necessity for attracting and retaining students who prioritize ethical and eco-friendly considerations. Institutions that actively respond to these evolving expectations are better positioned to meet the demands of a socially and environmentally conscious student body, contributing to a more sustainable and responsible higher education landscape (Filho et. al., 2021).

Research Design

After conducting an overall secondary research on the current literature of the topic, in our primary research we adhere to the exploratory-sequential Mixed Methods Design, employing a combination of qualitative and quantitative methodologies to provide a comprehensive understanding of the factors influencing sustainability practices in higher educational institutions. The initial phase involved qualitative analysis conducted in December 2023, wherein an online interview was conducted at a selected university actively participating in both above mentioned sustainability rankings.

This qualitative phase served as a foundational step, allowing us to delve into the detailed aspects of the university's sustainability initiatives and gain insights from key stakeholders. Building on the qualitative findings the subsequent phase of our research, scheduled for the second quarter of 2024, will implement a survey. This survey design aims to gather quantitative data, facilitating a broader and more systematic analysis of sustainability practices across multiple universities in Hungary. Through this phased approach our research seeks to contribute deep insights to the ongoing discourse on sustainable practices in higher education (Taksás, 2023).

Within the framework of our research, we focus on universities in Hungary that are presently engaged in sustainability rankings. These can be seen in the table 1.

Key findings of the online interview

Through our interview with the representative of the chosen university, it was evident that sustainability is regarded as a strategic imperative. This perspective encompasses not only viewing sustainability as a responsibility but also recognizing it as a strategic tool for attracting students, thus presenting a dual perspective on the topic.

On one hand, the university employs strategies aimed at promoting sustainability, exemplified by initiatives such as energy conservation and waste management.

Conversely, the university demonstrates a keen awareness of the evolving expectations of students regarding sustainability and is prepared to implement corresponding measures.

These two approaches complement each other and establish a solid foundation for nurturing a future generation that prioritizes sustainability.

Table 1: The participation of Hungarian Higher Eductaional Institutions in sustainability rankings

University	GreenMetric	THE Impact Ranking
Budapest Business School	x	x
Budapest Metropolitan University	x	
Corvinus University of Budapest	x	
Eötvös Loránd University	x	x
Eszterházy Károly Catholic University		x
Hungarian University of Agriculture and Life Sciences		x
John von Neumann University		x
Semmelweis University	x	x
Széchenyi István University		x
University of Debrecen	x	x
University of Miskolc	x	
University of Pannonia	x	
University of Pécs	x	x
University of Sopron	x	x
University of Szeged	x	x

Source: own research

Research questions

Our primary research inquiry is centered on uncovering the reasons behind the participation of Hungarian universities in sustainability rankings. Based on the initial interview conducted as part of the qualitative research, we have formulated the following statements that can serve as baseline for final hypotheses:

Higher Educational Institutions in Hungary consider good results on international sustainability rankings as a mode of attracting students.

a) They actively work on improving their sustainability ranking positions.
b) They measure the impact of their sustainability ranking positions on student attraction.

Higher Educational Institutions in Hungary consider the introduction of the ESG model.

a) They introduce the ESG model as part of their curriculum.
b) They introduce the ESG model as part of their operational model.
c) They measure the impact of the introduction of the ESG model.

Sustainability Rankings at Higher Educational Institutions

Higher educational institutions increasingly recognize the importance of participating in sustainability ranking models as a strategic imperative aligned with global priorities. Engagement in such rankings not only enhances a university's reputation but also demonstrates a commitment to addressing pressing environmental and social challenges. Sustainability rankings serve as a valuable benchmark, providing institutions with a framework to assess and improve their ecological and social impact. By participating, universities contribute to a collective effort in promoting responsible practices, innovation in sustainability, and the integration of environmental consciousness into academic and operational spheres. Moreover, sustainability rankings offer universities a platform to showcase their initiatives, attract environmentally conscious students and faculty, and foster collaboration with like-minded institutions. In an era where environmental concerns are paramount, participation in sustainability rankings reflects a higher education institution's dedication to being a responsible global citizen and a catalyst for positive change.

GreenMetric

GreenMetric is an annual university ranking system that evaluates and assesses the sustainability and environmental friendliness of universities worldwide. Developed by the University of Indonesia, GreenMetric measures various aspects of university operations and policies that contribute to environmental sustainability, such as campus infrastructure, energy usage, waste management, and transportation. The ranking aims to encourage universities to adopt eco-friendly practices, reduce their carbon footprint, and promote environmental consciousness within their academic communities.

Participating institutions are evaluated based on a set of criteria that reflect their commitment to sustainable development and environmental responsibility. GreenMetric serves as a valuable benchmark for universities seeking to enhance their green initiatives and contribute to a more sustainable future.

The model utilizes a set of criteria that have been considered to be straightforward and simple to complete while still credible on critical indicators. In the current performance evaluation tool there are 39 indicators and 6 criteria:

- Setting and Infrastructure (SI)
- Energy and Climate Change (EC)
- Waste (WS)
- Water (WR)
- Transportation (TR)
- Education (ED)

The weighting of the criteria is shown in the picture bellow:

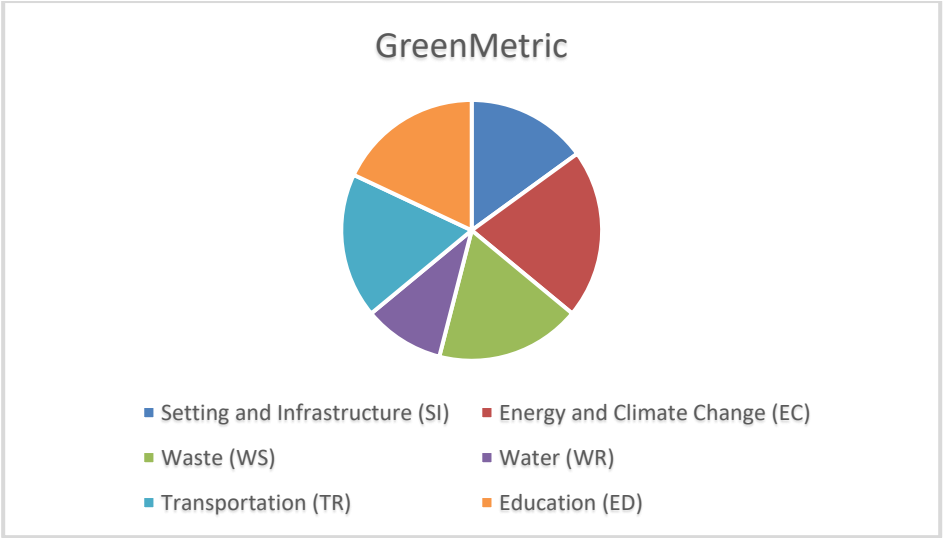


Figure 1: The weighting of the GreenMetric criteria
Source: own illustration based on https://greenmetric.ui.ac.id/about/methodology

The criteria also include baseline information such as the size of the university, both spatially and in terms of population, the campus location and the amount of green space, and also information on energy use, transport, water use and recycling and waste treatment (www.greenmetric.ui).

THE Impact Ranking

THE Impact Ranking, developed by Times Higher Education (THE), is a global university ranking system that evaluates universities based on their social and economic impact. Launched in 2019, this ranking is unique in its focus on assessing the contributions of higher education institutions towards addressing global challenges and promoting sustainability.

THE Impact Ranking considers various criteria, including research, outreach and stewardship to measure a university's effectiveness in achieving positive societal change. It emphasizes areas such as environmental sustainability, social inclusion and gender equality, providing a comprehensive perspective on how universities are actively contributing to the betterment of society.

By acknowledging and celebrating institutions that make substantial strides in fostering positive impacts beyond academic achievements, THE Impact Ranking encourages universities to prioritize their roles as agents of social progress and change.

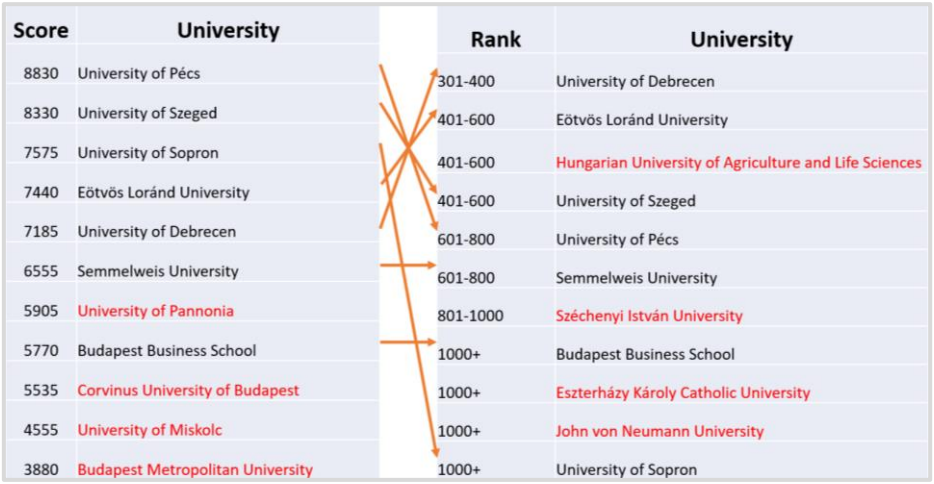
The Times Higher Education Impact Rankings are the only global performance tables that assess universities against the United Nations' Sustainable Development Goals (SDGs). They use carefully calibrated indicators to provide comprehensive and balanced comparison across four broad areas:

- research
- stewardship
- outreach
- teaching

The Impact Rankings are inherently dynamic: they are growing rapidly each year as many more universities seek to demonstrate their commitment to delivering the SDGs by joining the database; and they allow institutions to demonstrate rapid improvement year-on-year, by introducing clear new policies and by providing clearer and more open evidence of their progress (www.timeshighereducation.com).

Comparison of Results

Due to the fact that the GreenMetric and THE Impact ranking methodologies are different, there is a shift in the scoring of the participating universities. This can be seen in Picture 2.



Score	University
8830	University of Pécs
8330	University of Szeged
7575	University of Sopron
7440	Eötvös Loránd University
7185	University of Debrecen
6555	Semmelweis University
5905	University of Pannonia
5770	Budapest Business School
5535	Corvinus University of Budapest
4555	University of Miskolc
3880	Budapest Metropolitan University

Rank	University
301-400	University of Debrecen
401-600	Eötvös Loránd University
401-600	Hungarian University of Agriculture and Life Sciences
401-600	University of Szeged
601-800	University of Pécs
601-800	Semmelweis University
801-1000	Széchenyi István University
1000+	Budapest Business School
1000+	Eszterházy Károly Catholic University
1000+	John von Neumann University
1000+	University of Sopron

Figure 2: Comparison of standings of the Hungarian universities in the GreenMetric and THE Impact ranking lists
Source: own research

Universities that participated in both models, as indicated in black, exhibit variations in performance based on the respective methodologies. It is essential to note that these differences should not be viewed as discouraging but rather as motivating factors for universities to enhance their sustainability-related policies and practices. Recognizing the divergent outcomes provides an opportunity for reflection and refinement, encouraging a proactive approach among institutions to continuously elevate their commitment to sustainability and align more effectively with the specific criteria outlined in the assessment methodologies.

ESG in Higher Education and its Perception

ESG in Higher Education

Environmental, Social and Governance (ESG) considerations have gained significant prominence in higher educational institutions, reflecting a broader commitment to responsible and sustainable practices. ESG, a framework for evaluating a company's or institution's impact on the environment, society and governance, is increasingly being adopted by universities to align their operations with ethical and sustainable principles.

Higher educational institutions recognize the importance of integrating ESG factors into decision-making processes, encompassing areas such as resource management, social inclusion and ethical governance. By incorporating ESG principles, universities can enhance their overall sustainability, mitigate environmental impacts, foster social equity and ensure transparent and accountable governance. The use of ESG in higher education not only contributes to a more environmentally conscious and socially responsible academic community but also aligns with global efforts to address pressing challenges related to climate change and social justice.
Universities globally play a major role in shaping the mindsets of future decision makers. It is their responsibility to approach sustainability on a holistic level, incorporating traditional elements of environmental sustainability as well as people, buildings, ground, policies and community, to name a few (Esteves et.al., 2021).

Generation Z`s Attitude towards Sustainability

Given our research's central premise that universities engage in sustainability rankings with the aim of attracting students, it is crucial to examine the attitudes of Generation Z towards sustainability.

A common perception is that Generation Z (Gen Z) is the most actively green generation. Several contemporary researches underline their strong dedication and high concerns towards sustainability matters (Petro, 2021). The corporate world responds to these features almost instantly while for higher educational institutions it is in most cases a challenge (Hilton, Hatami, 2022). While it may initially appear negative, the phenomenon could have a positive aspect. In the corporate world, the prevalence of greenwashing has reached such heights that members of Generation Z are beginning to lose trust in the credibility of reports and rankings (Husson 2021). In contrast, the more measured and deliberate approach adopted by higher educational institutions seems to be carefully considered. This approach holds the potential to maintain the confidence of Generation Z, offering a contrast to the pervasive skepticism emerging from the corporate sphere. The conscientiousness of educational institutions in embracing sustainability practices may serve to build a more genuine and enduring trust with the younger generation (Jahns, 2021; Husson, Kodali, 2023).

A great response with SDG 17 in the focus: Sustainability Platform of Hungarian Universities

Although higher eductaional institutions are naturally competitors to each other, there is a great initiative in Hungary that could potentially serve as an example to other countries. On 22nd September, 2022 the Sustainability Platform of Hungarian Universities has been founded with the participation of 14 Hungarian universities. The purpose of the association is to share good practices in the field of sustainability, organize regular joint actions, and establish closer cooperation for the sake of developments serving sustainability goals (Kottász, 2022). The list of participating universities is shown in Table 2.

Table 2: Members of the Sustainability Platform of Hungarian Universities

University
University of Pécs
University of Szeged
University of Sopron
Semmelweis University
University of Pannonia
Budapest Business University
Corvinus University of Budapest
University of Miskolc
Budapest Metropolitan University
Eszterházy Károly Catholic University
Hungarian University of Agriculture and Life Sciences
University of Nyíregyháza
University of Óbuda
Budapest University of Technology and Economics

Source: own research

Such initiatives ought to underscore the genuine dedication of participating universities, with the hope that they will ultimately earn the long-term trust of younger generations.

Conclusions and Further Research Directions

The data gathered in this stage of the research leads to a compelling conclusion: sustainability is emerging as a crucial factor in the attraction and retention of both students and staff in higher educational institutions. The growing significance of sustainability in influencing the choices of students and faculty necessitates further studies to delve deeper into the dynamics of this trend. Understanding the intricate connections between sustainable practices and the appeal of academic institutions can provide valuable insights for universities seeking to enhance their competitiveness in the recruitment and retention of diverse talent. The need for ongoing exploration in this field underscores the evolving nature of higher education and the imperative for institutions to adapt to the changing priorities of their academic communities.

Utilizing sustainability-based models and rankings proves to be a valuable method for comparing endeavors in this direction. The synergistic application of both the GreenMetric and THE Impact Factor systems emerges as particularly advantageous, given their distinct approaches and focus on different facets of sustainability. While GreenMetric offers a comprehensive evaluation of various sustainability dimensions in higher education institutions, THE Impact Factor emphasizes the social and economic impact of universities. This combined approach enhances the depth and breadth of the assessment, providing a more nuanced understanding of an institution's overall commitment to sustainability across diverse realms.

As indicated before, a primary data collection and analysis is planned to further investigate the topic and draw conclusions that can serve as baseline to further actions. We look forward to publish the results of the second phase of our research at the next given opportunity.

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