

# CEE UNIVERSITIES AND SUSTAINABLE DEVELOPMENT GOALS: SPECIFIC PATTERNS?

TAMÁS SZEMLÉR

Budapest Business School, Faculty of Commerce, Hospitality and Tourism, Budapest, Hungary  
szemler.tamas@uni-bge.hu

The present contribution, going beyond the author's previous general work on the topic provides a panorama and an analysis of the performance of EU CEE-11 universities (universities from the 11 Central and Eastern European Member States of the European Union) regarding the United Nations' Sustainable Development Goals (SDGs). The analysis uses the results of the Times Higher Education Impact Rankings that are available in five editions (for the period 2019-2023). The present analysis focuses on the individual SDGs: it provides a picture of which individual SDGs look to be the most strongly represented in the performance of EU CEE-11 universities and which ones are less present in it. Based on the results, we discuss the presence or the absence of specific patterns regarding the individual SDGs in the case of the universities in the CEE region and in the countries constituting it. Based on the findings of this analysis, proposals for future actions are presented.

DOI  
[https://doi.org/  
10.18690/um.epf.5.2024.41](https://doi.org/10.18690/um.epf.5.2024.41)

ISBN  
978-961-286-867-3

**Keywords:**  
SDG,  
Central and Eastern  
Europe,  
higher education,  
The Impact Rankings,  
sustainability

**JEL:**  
A13,  
I23,  
Q01



University of Maribor Press

## 1 Introduction

This paper deals with the performance of EU CEE-11 universities (universities from the 11 Central and Eastern European Member States of the European Union) regarding the United Nations (UN) Sustainable Development Goals (SDGs). The analysis is based on the results of the Times Higher Education Impact Rankings which are available in five editions (for the period 2019-2023). The paper focuses on the individual SDGs, providing a picture of which individual SDGs look to be the most strongly represented in the performance of EU CEE-11 universities and which ones are less present in it.

A brief outline of the theoretical and historical background of sustainable development is followed by a description of the methodology and the presentation and interpretation of the results. Remarks related to potential policy replies and related future research conclude the paper.

## 2 Theoretical Background / Literature Review

During the last five decades, sustainable development has become one of the most discussed multidisciplinary issues. Without the need to establish an exhaustive list, the most important milestones of this process have been the following:<sup>1</sup>

- The United Nations Conference on Human Environment in Stockholm in 1972, set up an action plan based on 26 principles and 109 recommendations (United Nations, 1973).
- The Brundtland Report defined the notion of “sustainable development” 15 years later (Brundtland, 1987).
- The Rio Earth Summit in 1992 put sustainability again into the focus of attention of masses of people.
- The Marrakesh Agreement Establishing the World Trade Organization (World Trade Organization, 1995), in which reference to the objective of sustainable development was made.

---

<sup>1</sup> This part is an edited and updated version of the overview by Szemlér (2023).

- The Kyoto Protocol (United Nations Framework Convention on Climate Change, 1997) was an important milestone (despite the difficulties regarding its ratification).
- The definition of the 8 UN Millennium Development Goals in 2000 in the Millennium Declaration (United Nations, 2000).
- The adoption by the UN of the 2030 Agenda including the 17 SDGs (United Nations, 2015) which, since then, constitute a cornerstone of the analyses on sustainability; see Box 1 for the sort titles of the SDGs.

**Table 1: The UN Sustainable Development Goals**

SDG 1: No poverty; SDG 2: Zero hunger; SDG 3: Good health and well-being; SDG 4: Quality education; SDG 5: Gender equality; SDG 6: Clean water and sanitation; SDG 7: Affordable and clean energy; SDG 8: Decent work and economic growth; SDG 9: Industry, innovation and infrastructure; SDG 10: Reduced inequalities; SDG 11: Sustainable cities and communities; SDG 12: Responsible consumption and production; SDG 13: Climate action; SDG 14: Life below water; SDG 15: Life on land; SDG 16: Peace, justice, and strong institutions; SDG 17: Partnerships for the goals

Source: UNDP (n.d.).

Several analyses have dealt with the presence of various aspects of sustainable development in higher education. Owens (2017) as well as Chankseliani & McCowan (2021) focus on SDG 4 and related university strategies. The works of Boeve-de Pauw et al. (2015) and Crespo et al. (2017) discuss empirical examples of potential actions in higher education to reach the SDGs. In Hungary, the wide range of contributions in Lányi & Kajner (eds.) (2019) offer a panorama on sustainability in higher education; Szemplér (2023) tackles the performance of Central and Eastern European universities based on their presence in the THE rankings 2019-2022.

### 3 Methodology

This paper presents the “strengths” of EU CEE-11 universities in the Times Higher Education Impact Rankings. These rankings are available for five years, from 2019 to 2023, concentrate on four broad areas (research, stewardship, outreach and teaching) and take into account all 17 SDGs.

Any university providing data on SDG 17 (briefly defined as partnerships for the goals) plus at least three other SDGs can be included in the overall ranking. Szemplér (2023) analysed the final overall score of the EU CEE-11 universities; the present

paper focuses on the three best scores (the SDGs that represent the best results for the given university) that appear in the final overall score.<sup>2</sup> For this analysis, the top three SDGs of the participating EU CEE-11 universities have been selected and analysed. The method used in the paper is descriptive and comparative analysis.

#### 4 Results

Table 2 presents the results based on the five available editions of the THE Impact Rankings. For each year and for each country, the SDGs in the top 3 positions (1., 2., 3.) are presented. Each cell of the table contains the numbers of SDGs mentioned (for the given country's higher education institutions in the given year at the given (1st, 2nd, or 3rd) position. The figures in brackets show the number of mentions of the given SDG(s).

It is worth mentioning that no university from Estonia appears in the rankings; of course, it does not mean that there would be no activity related to sustainability there, but we cannot evaluate it when we use these rankings. In some countries, we have data only for a part of the five-year period. This can be explained by the novelty of the rankings and the gradually increasing interest towards it. This latter is reflected in the increasing number of participating higher education institutions (while in 2019, 467 (among them 17 EU CEE-11) universities participated in the THE Impact Rankings, the corresponding figures for 2023 are 1591 and 80).

**Table 2: The top 3 SDGs in the EU CEE-11 universities (number of SDGs; in brackets: number of mentions)**

Year	2019			2020			2021			2022			2023		
Position	1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2.	3.
Bulgaria	5 (1)	4 (1)	3 (1)	8 (1)	11 (1)	4 (1)	8 (1)	11 (1)	7 (1)	11, 5 (1)	4 (2)	8, 9 (1)	5, 16 (1)	3, 8 (1)	4, 7 (1)
Croatia	-	-	-	-	-	-	16 (1)	8 (1)	11 (1)	4, 3 (1)	3, 11 (1)	5, 8 (1)	5 (2)	4 (2)	3, 5, 16 (1)
Czechia	3, 5, 8, 11 (1)	4 (2)	13 (2)	3, 5, 7, 8,	8 (2)	9 (2)	3 (2)	8 (2)	11 (2)	4 (2)	3, 5, 7, (2)	3, 8, 16 (2)	8 (4)	16 (3)	3, 4, 5, 8,

<sup>2</sup> The final overall score of a university is the combined score in SDG 17 (with a 22% weight in the final score) and of the scores in the top three scores of the other 16 SDGs (with a 26% weight each in the final score). Full information on the latest methodology is available at THE Impact Rankings (2023a).

Year	2019			2020			2021			2022			2023			
		(1)	(1)	10 (1)	16 (1)	16 (1)	8, 9, 13 (1)	9, 12, 16 (1)	5, 6, 8 (1)	11, 13 (1)	12, 16 (1)		9, 13 (1)	4, 5, 7 (1)	11, 12, 14, 16 (1)	
Estonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hungary	3 (2)	4, 9 (1)	8, 11 (1)	3 (2) 4, 8, 13, 14 (1)	3 (2) 4, 5, 14, 16 (1)	9 (2) 1, 4, 5, 8 (1)	3 (3) 2, 10, 11 (1)	16 (2) 4, 5, 8, 9 (1)	14 (2) 4, 5, 8, 10 (1)	3 (2) 1, 4, 8, 11, 16 (1)		3, 5, 8, 15 (2)	4, 11 (2) 6, 9, 10, 13 (1)	8 (4) 2, 3, 4, 5, 10, 15, 16 (1)	3, 8, 16 (2) 1, 4, 5, 7, 12 (1)	4, 11, 15 (2) 3, 5, 8, 9, 10 (1)
Latvia	8, 9 (1)	11 (2)	13, 16 (1)	16 (2) 3, 7 (1)	8, 13, 15, 16 (1)	11 (2) 8, 9 (1)	3, 8, 9, 11, 16 (1)	5, 8, 9, 11, 16 (1)	4, 8, 13, 15, 16 (1)	3, 4, 5, 9, 16 (1)	5, 9, 13, 15, 16 (1)	11 (2) 7, 8, 16 (1)	8 (2) 3, 9, 16 (1)	5 (3) 8, 11 (1)	4, 8, 9, 12, 15 (1)	
Lithuania	-	-	-	-	-	-	-	-	-	-	5, 8, 16 (1)	4 (2) 9 (1)	4, 10, 11 (1)	5 (2) 3, 8 (1)	5, 9, 10, 16 (1)	4, 7, 8, 10 (1)
Poland	3 (1)	4 (1)	9 (1)	1, 5, 8, 13, 14 (1)	9 (2) 5, 10, 11 (1)	4, 10 (2) 16 (1)	8, 11 (3) 10 (2) 3, 4, 9, 15 (1)	5 (3) 10 (2) 1, 4, 5, 11, 14 (1)	10 (3) 13 (2) 1, 4, 5, 9, 10, 11, 14 (1)	3, 8 (3) 2, 8 (2) 4, 5, 7, 9, 11, 15, 16 (1)		9, 15 (3) 10 (2) 7, 8, 11, 12, 13 (1)	13 (4) 4 (3) 10 (3) 5, 7, 16 (2) 2, 4, 11, 12 (1)	8 (6) 3 (4) 10 (3) 5, 7, 16 (2) 4, 11, 12 (1)	5, 9, 16 (3) 3, 4, 10, 11, 13, 15 (1)	8 (4) 11 (3) 3, 4, 5, 9, 10 (2) 6, 7, 9, 10, 12, 13, 15, 16 (1)
Romania	16 (2) 3, 4, 8 (1)	4, 5, (2) 10 (1)	10 (2) 4, 5, 9 (1)	3, 16 (3) 1, 5, 8 (1)	5 (2) 4, 8, 10 (1)	4 (2) 1, 5, 9, 11, 16 (1)	4 (4) 1, 3 (2) 8, 16 (1)	5 (6) 4, 8 (2)	4, 16 (2) 4, 5, 7, 9, 13, 14 (1)	4 (4) 1, 3, 5, 8 (2) 7 (1)	5 (5) 4, 16 (3) 8 (2)	4 (4) 1 (3) 5, 11 (2) 9, 13 (1)	5 (5) 4 (4) 8 (3) 1, 3 (2) 16 (1)	4, 5 (5) 8, 16 (2) 7, 9, 11 (1)	4 (4) 1, 5, 10 (2) 3, 7, 8, 9, 11, (1)	

Year	2019			2020			2021			2022			2023		
															13, 15 (1)
Slovakia	4, 13 (1)	9, 16 (1)	3, 4 (1)	16 (2)	3, 8, 13, 16 (1)	4 (2)	3 (2)	10, 7, 16 (2)	4, 8 (2)	3 (2)	16 (3)	4 (2), 8, 10, 13 (1)	8 (2), 3, 9, 11, 16 (1)	16 (2), 3, 9, 10, 11 (1)	4 (3), 5, 8, 11 (1)
Slovenia	-	-	-	8 (1)	4 (1)	9 (1)	11 (1)	9 (1)	8 (1)	3, 11 (1)	9 (2)	4, 10 (1)	9 (1)	16 (1)	8 (1)

Source: author's compilation based on THE Impact Ratings data: THE Impact Rankings 2019 (2019); THE Impact Rankings 2020 (2020), THE Impact Rankings 2021 (2021), THE Impact Rankings 2022 (2022), THE Impact Rankings 2023 (2023).

## 5 Discussion

Based on the results presented in Table 2, no specific “CEE pattern” can be identified. The SDGs in top positions are manifold and change considerably over time in many cases. Countries show specifics that in many cases differ from each other to a great extent.

In the case of some countries, however, there is a quite clear and stable “image” of the top 3 SDGs. In Czechia, Hungary and Latvia, SDGs 3, 4, 5 and 8 have an important share, while in Romania, the share of SDGs 4 and 5 in top positions is highly over the average. There is nothing surprising in these results, as these SDGs are directly (in the case of SDG 4) or indirectly closely related to education.

In many countries, the small number of participating institutions (and, as a result, observations) constitutes an important limit to general conclusions. In addition, the fact that the number and the circle of participating institutions change (beyond the general increase of the number of participants also because there are institutions that have withdrawn from the ranking) makes comparisons more difficult and less robust.

## 6 Conclusions

The THE Impact Rankings constitute an important – but not the only<sup>3</sup> – indicator that can contribute to the better visibility of the universities by presenting their commitment to sustainability. As visibility is crucial for higher education institutions in the strongly competitive market, participation in the THE Impact Rankings is expected to increase further, and the analysis of the figures in it can lead to more general and robust conclusions.

An important field for further investigation can be the change in the participating universities' positions (or their stabilization) in the ranking. As the number of participating institutions will develop (in relative terms) more slowly, the positions in the individual years will be more and more worth comparing with each other. As that stage seems approaching, a deeper analysis of the “strengths” – including the examination of the real content of the top 3 SDGs in the participating universities and the reasons for their importance for the universities – can be an interesting and relevant future research task.

## References

- Brundtland, G. (1987), *Report of the World Commission on Environment and Development: Our Common Future*, United Nations General Assembly document A/42/427, Retrieved from <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>
- Boeve-de Pauw, J., Gericke, N., Olsson, D., Berglund, T. (2015), The Effectiveness of Education for Sustainable Development, *Sustainability*, 7, 15693-15717, doi: <https://doi.org/10.3390/su71115693>
- Chankseliani, M. & McCowan, T. (2021), Higher education and the Sustainable Development Goals, *Higher Education*, 81, pp. 1–8, doi: <https://doi.org/10.1007/s10734-020-00652-w>
- Crespo, B., Míguez-Álvarez, C., Arce, M. E., Cuevas, M., Míguez J. L. (2017) The Sustainable Development Goals: An Experience on Higher Education, *Sustainability*, 9(8):1353, doi: <https://doi.org/10.3390/su9081353>
- Lányi, A. & Kajner, P. (eds.) (2022), *A fenntarthatóság témaköre a felsőoktatásban*, a Magyar Tudományos Akadémia és az UNESCO Magyar Nemzeti Bizottság az ELTE Humánökológia mesterszak közreműködésével, 2018. november 19-én rendezett tudományos tanácskozási dokumentumai, UNESCO Magyar Nemzeti Bizottság, Retrieved from [http://real.mtak.hu/78364/1/A\\_fenntarthatosag\\_temakore\\_a\\_felsooktatásban.pdf](http://real.mtak.hu/78364/1/A_fenntarthatosag_temakore_a_felsooktatásban.pdf)
- Owens, T. L. (2017), Higher education in the sustainable development goals framework, *European Journal of Education*, Volume 52, Issue 4, pp. 414–420, doi: <https://www.doi.org/10.1111/ejed.12237>

---

<sup>3</sup> An important example of is the UN Principles for Responsible Management Education (PRME) Programme; for details, see United Nations (n.d.).

- Szemlér, T. (2023), The Performance of EU CEE Universities against the UN Sustainable Development Goals, in: Zlatko, N. – Romana, K. V. (eds.): *Conference Proceedings of the 7th FEB International Scientific Conference: Strengthening Resilience by Sustainable Economy and Business - Towards theSDGs*, University of Maribor, Faculty of Economics and Business, Maribor, Slovenia, pp. 147-154, doi: <https://doi.org/10.18690/um.epf.3.2023.18>
- THE Impact Rankings 2019 (2019), *The Times Higher Education Impact Rankings*, Retrieved from <https://www.timeshighereducation.com/rankings/impact/2019/overall>
- THE Impact Rankings 2020 (2020), *The Times Higher Education Impact Rankings*, Retrieved from <https://www.timeshighereducation.com/rankings/impact/2020/overall>
- THE Impact Rankings 2021 (2021), *The Times Higher Education Impact Rankings*, Retrieved from <https://www.timeshighereducation.com/rankings/impact/2021/overall>
- THE Impact Rankings (2022), *The Times Higher Education Impact Rankings*, Retrieved from <https://www.timeshighereducation.com/rankings/impact/2022/overall>
- THE Impact Rankings (2023), *The Times Higher Education Impact Rankings*, Retrieved from <https://www.timeshighereducation.com/impactrankings>
- THE Impact Rankings (2023a), *Impact Rankings 2023: methodology*, Retrieved from <https://www.timeshighereducation.com/world-university-rankings/impact-rankings-2023-methodology>
- UNDP (n.d.), *Sustainable Development Goals*, Retrieved from <https://www.undp.org/sustainable-development-goals>
- United Nations (1973), *Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972*, A/CONF.48/14/Rev.1, United Nations, New York, Retrieved from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/NL7/300/05/IMG/NL730005.pdf?OpenElement>
- United Nations (2000), United Nations Millennium Declaration, 8 September 2000, General Assembly resolution 55/2, Retrieved from <https://www.ohchr.org/en/instruments-mechanisms/instruments/united-nations-millennium-declaration>
- United Nations (2015), Transforming Our World: The 2030 Agenda for Sustainable Development, A/RES/70/1, Retrieved from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>
- United Nations (n.d.), *Principles for Responsible Management Education*, Retrieved from <https://www.unprme.org>
- United Nations Framework Convention on Climate Change (1997), *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, FCCC/CP/1997/L.7/Add.1, Retrieved from <https://unfccc.int/sites/default/files/resource/docs/cop3/107a01.pdf>
- World Trade Organization (1995), *Marrakesh Agreement Establishing the World Trade Organization*, Retrieved from [https://www.wto.org/english/docs\\_e/legal\\_e/04-wto\\_e.htm](https://www.wto.org/english/docs_e/legal_e/04-wto_e.htm)