



A Sustainable University Model Developed and Applied by the University of Sopron



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ABSTRACT

The University of Sopron has developed the Sustainable University Model of the University of Sopron (SUM-UoS) based on its best practices and employing a systemic approach that incorporates sustainability criteria. The Institutional Sustainability Strategy defines the university's vision and SMART goals, for which it assigns an Implementation Program. Through university measures and work packages (WP), the model supports the implementation, operation, and continuous development of a Sustainable University. The SUM-UoS exists within a pyramid model aiming to create a university operating culture that prioritizes sustainability and expands it to other sectors and wider societal circles. Stemming from its Sustainability Strategy, the university has announced its "Sound of Earth University of Sopron" Implementation Program (SOE-IP), which is under trademark. The implementation program of measures aligns with the UN Sustainable Development Goals (SDGs) and provides a framework for the complex implementation and continuous development of the institutional sustainability culture. An essential element of the SOE-IP is the "University as a Living Lab Concept" approach.

TANULMÁNY INFÓ

Kulcsszavak:

Fenntarthatóság a
gyakorlatban
Piramismodell
Fenntartható egyetem
Megvalósítási program
Föld Hangja

KIVONAT

A Soproni Egyetem Alkalmazott Fenntarthatósági Modellje. A Soproni Egyetem a fenntarthatósági kritériumokon nyugvó, rendszerszemléletű megközelítést alkalmazva, legjobb gyakorlatai alapján létrehozta a Soproni Egyetem Fenntartható Egyetem Modelljét (SOE-FEM). Intézményi Fenntarthatósági Stratégiájában meghatározza vízióját, SMART céljait, amelyekhez Megvalósítási Programot rendel. Egyetemi intézkedéseken, munkacsomagokon (WP) keresztül a modell támogatja a Fenntartható Egyetem megvalósítását, működtetését és folyamatos fejlesztését. A SOE-FEM egy piramismodellben ölt testet, amellyel cél egy olyan egyetemi működési kultúra kialakítása, amely a fenntarthatóságot prioritásként kezeli, és más szektorokban, szélesebb társadalmi körben is tovább terjedhet. A Fenntarthatósági Stratégiára alapozottan a Soproni Egyetem meghirdette a védjegy oltalom alatt álló „Sound of Earth University of Sopron” Megvalósítási Programját (SOE-MP). Az intézkedéseket felvonultató implementációs program összhangban van az ENSZ Fenntartható Fejlődési Célokkal (SDG), és keretet ad az intézményi fenntarthatósági kultúra komplex gyakorlatba ültetésének és folyamatos fejlesztésének. A SOE-MP lényeges eleme az „Egyetem, mint Élő Labor (Living Lab Concept)” megközelítés.

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1 INTRODUCTION

Universities aim to help implement the 17 UN Sustainability Goals, which guide sustainable development in higher education institutions (Chankseliani–McCowan, 2021). While Žalėnienė and Pereira (2021) note that universities contribute decisively to implementing seven UN Goals (1, 3, 5, 8, 12, 13, 16), many other studies have created models to understand and analyze the goals and the methods leading to them (Gutiérrez–Mijares et al., 2023).

The studies vary in their models of sustainability in higher education (Velazquez et al., 2006; Urquiza Gomez et al., 2015). While Souza Silva et al. (2022) analyze campus energy consumption and its related costs from a technical perspective, Giannetti et al. (2023) base their model on student attitudes and student rankings based on performance, happiness, and ecological footprint. Using cross-impact matrix multiplication, Menon and Suresh (2022) discovered ten factors that support sustainability in universities, including political aspirations, sustainability audit, and institutional commitment.

Many universities have set strategic objectives to ensure sustainable operations (Brundiers et al., 2021); however, various environmental, social, and economic conditions lead to distinct paths to sustainable university operations (Salvia et al., 2019). According to Dlouhá et al. (2017), universities in the Central and Eastern European region, including Hungary, have had to abandon the ideologies of the pre-1990 system and orient their institutions towards green thinking. Comprehensive strategies that impact an entire institution appear most successful. Silova (2009) found that the sustainability performance of Hungarian universities ranks among post-socialist countries. Opportunities for sustainable development and a green transition broadened significantly after Hungary joined the European Union in 2004. The University of Sopron hopes to serve as a model for other universities in Hungary and Central Europe (Fábián et al., 2023).

2 MATERIALS AND METHODS

Organizational approach: The University of Sopron is a significant intellectual, educational, and research center in western Hungary. Centuries of tradition permeate education at the university's four faculties—Faculty of Forestry, Faculty of Wood Engineering and Creative Industries, Elek Benedek Faculty of Pedagogy, Sándor Lámfalussy Faculty of Economics—and at the Forest Research Institute, founded in 1898. The Forest Research Institute's research and development projects support sustainable forest management (Prins et al., 2023) in a wide range of fields, including ecology, silviculture, forestry breeding, forest protection, plantation-like tree production, and economics (Prins et al., 2023). Our university strives to shape natural, social, and human environments. Its activities aim to preserve and improve the quality of life through environmentally conscious thinking (Urbański, 2020). The university cultivates moral and human values through operations and objectives to improve and enhance the region and the country.

Within the framework of its operational model change (becoming a foundation-maintained university), the University of Sopron has put sustainability at the heart of its activities, including education, research, services, third mission initiatives, and institutional operations.

Tradition-based and strategic approach: Due to its traditions and history, the University of Sopron has embraced the “Green University” concept since its inception. It strives to be a constantly renewing, determinant, and valuable academic knowledge center in Central Europe. The development of green infrastructure and social awareness is a strategic goal, and the university aims to achieve its milestones by communicating the message of net-zero climate

neutrality (Köhnke, 2023; Mishra, 2023), climate and nature positivity, and environmental awareness by actively involving university students and the public.

Sustainability is a key focus of the University of Sopron's four university faculties and its research institute, and it increasingly influences its day-to-day operations. The university can engage in knowledge-intensive management and sustainable use of forest ecosystems (Hein–Van Ierland, 2006; Chen, 2022). The wood produced serves as the basis of a sustainable biomass-based economy. In addition to research in the natural sciences, climate adaptation, and engineering, the university addresses complex sustainability issues in environmental education, pedagogy, economics, and social sciences.

Educational approach: We have implemented a curricular reform at our university by integrating an elevated level of sustainability in all our courses. Sustainability pervades the whole curricula of some courses (e.g., forestry engineering, wood engineering, environmental engineering, and conservation engineering). In others, it appears in blocks (e.g., wood architecture aspects of architecture, environmental education issues in early childhood education and kindergarten, and ecological economics aspects of economics courses).

Nature-based approach: The University of Sopron pays special attention to climate and biodiversity protection and ecosystem restoration in its sustainability efforts (Doelman, 2022). It is a founding member and the first Hungarian registered member of the “Nature Positive Universities Alliance” (NPU 2022), a global network of universities launched by the United Nations Environment Program (UNEP) in partnership with the University of Oxford. The University of Sopron has registered its development programs through SMART targets (Nature Positive Pledge). The university's main objectives are the comprehensive development of the Botanical Garden (campus development), the shift towards institutional carbon neutrality, and the Loyalty Forest afforestation program.

Knowledge sharing approach: The University of Sopron is an outstanding example of sustainability implementation in Hungary. It aims to make its activities available to partner institutions as best practices and is moving towards dialogue, knowledge sharing, joint sustainability courses, and peer learning through networking. The University of Sopron is a founding member of the Sustainability Platform of Hungarian Universities (SPHU 2022), a group of Hungarian higher education institutions committed to implementing and achieving the 17 UN Sustainable Development Goals.

Through its sustainability-related activities and performance, the university contributes to both its development and that of future generations. As Hungary's “Green University,” it is fully committed to initiatives that support economic, social, and environmental sustainability. This commitment is also conveyed through the university's motto, “Naturally with You!” which emphasizes the interconnectedness of individuals and nature.

The University of Sopron decision-makers, including the green university panel, have created their sustainability model. This framework defines the relevant criteria from a general and economic perspective, providing a structured approach to integrating sustainability into university operations.

3 RESULTS AND DISCUSSION

3.1 The Sustainable University Model of the University of Sopron

Societal expectations regarding sustainable development, transparency, and accountability have emerged. Mounting environmental pressures from pollution, climate change, inefficient resource use, waste management, ecosystem degradation, and biodiversity loss have affected

social standards for sustainable development, transparency, and accountability, motivating organizations to adopt a systematic approach to support these efforts (Velazquez et al., 2006; Urquiza Gomez et al., 2015; Souza Silva, 2022; Menon–Suresh, 2022).

In response, the University of Sopron has developed the Sustainable University Model (SUM-UoS) based on best practices, employing a systems-based approach grounded in sustainability criteria. The Institutional Sustainability Strategy (UoS 2019) presents the university's vision and SMART goals to which it assigns an Achievement Program. The model supports the implementation, operation, and continuous improvement of the Sustainable University through University actions and work packages (WP).

The university also lays the foundations for strategic steps that extend beyond theory by putting sustainability, environmental protection, and conscious and voluntary conservation into practice. The pyramid model in *Figure 1* shows the Sustainable University Model of the University of Sopron (SUM-UoS), developed in detail based on a logical structure. Through the model, we aim to create a university culture that prioritizes sustainability. The arrows illustrate the relationships between levels. With the help of implementers and stakeholders, this university-sustainability culture can spread within higher education, other sectors, and society. Implementers can administer recommended the university's best practices and projects in their organizational context in a tailor-made way. In the following sections, we provide an overview of this.

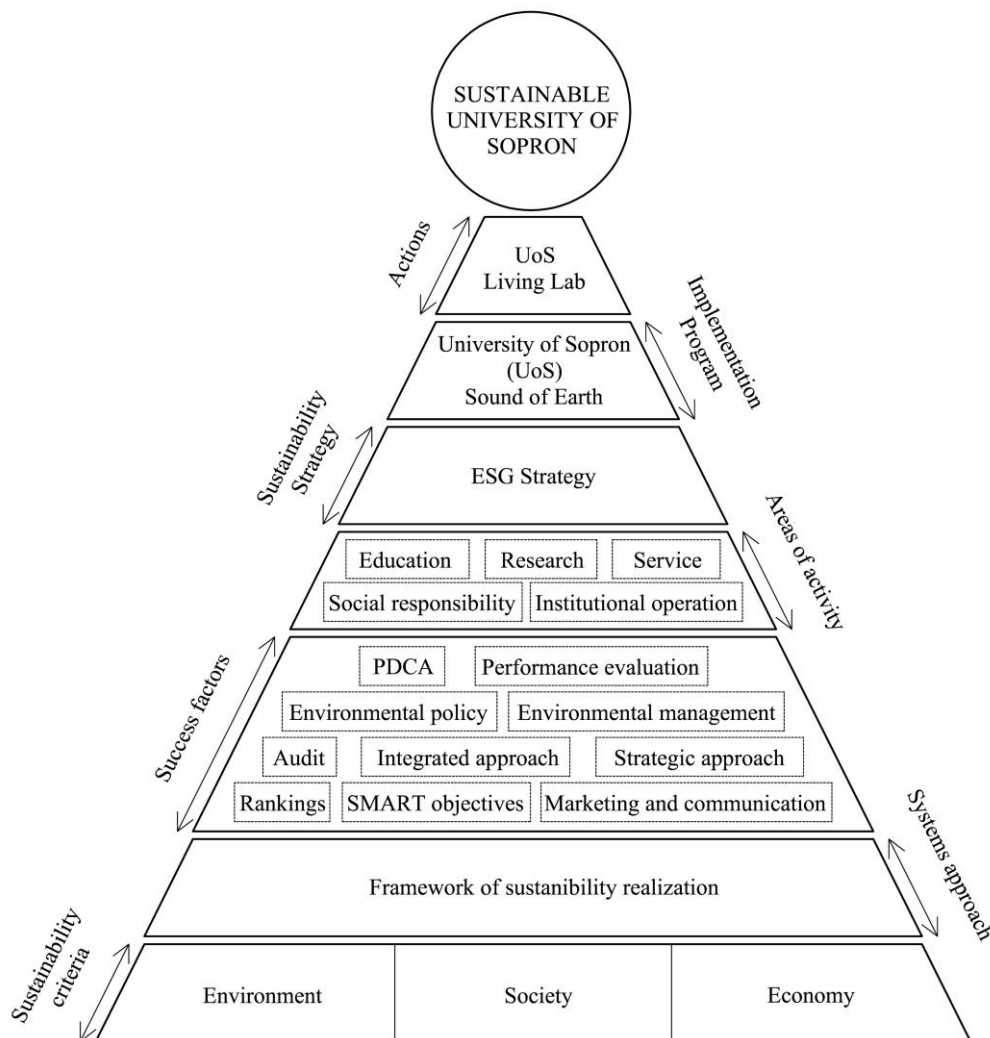


Figure 1. Pyramid model. The Sustainable University Model of the University of Sopron (SUM-UoS).

The University of Sopron Sustainable University Model is based on sustainability criteria (triple bottom line) (Jum'a et al., 2022) and a systems approach. Concerning its environmental impact, the University of Sopron systematically integrates and defines itself in its stakeholder relations and physical, landscape, and organizational environment.

The University of Sopron is certified according to the international standard ISO 14001:2015 Environmental Management System (EMS). As a framework, the model continuously improves institutional environmental performance and contributes to sustainability pillars. Based on environmental management system components, the structure defines scope, roles, responsibilities, and authorities, establishes environmental policy, monitors and addresses compliance obligations, sets SMART targets, and provides support and resources. It also ensures documentation, readiness, marketing communication, and management review.

Several success factors influence the Sustainable University Model of the University of Sopron (SUM-UoS) effectiveness, including management and staff commitment, a strategic approach, an integrated approach, applying the PDCA principle, the continuous improvement principle (ISO 2015), the process approach, developing a conscious self-evaluation system, developing evaluation cycles, third-party validation, and environmental and sustainability performance assessment.

Environmental and sustainability benchmarking can occur in many ways. Successfully certifying an institutional environmental management system to the MSZ EN ISO 14001:2015 standard demonstrates compliance with the international standard requirements. The university must be able to compare the outcomes of its efforts with those of other higher education institutions on a national and international scale. Participation in international university sustainability rankings (UI GreenMetric 2023; THE Impact Rankings 2023) provides an excellent opportunity to do just that. The rankings employ a set of predefined indicators to measure and demonstrate performance, responding to changing environmental conditions.

The model includes traditional university activities, including teaching, research, service, third missions, and institutional operations. Transparent operations and economic sustainability that adhere to environmental, social, and governance (ESG) criteria are vital (Khan, 2022; Baratta et al., 2023). A sustainable approach guides activities organized innovatively around ESG compliance and the UN Sustainable Development Goals (SDGs), with a significant thematic overlap.

The University of Sopron has launched its trademark-protected Sound of Earth University of Sopron Implementation Program based on the Sustainability Strategy (*Figure 2*).



Figure 2. Protected trademark of the Sound of Earth University of Sopron Implementation Program

The implementation program aligns with the UN Sustainable Development Goals but extends beyond mere SDG compliance by providing a framework for the complex implementation and continuous improvement of an institutional sustainability culture.

The Sound of the Earth University of Sopron Implementation Program comprises thematic work packages based on SDGs (UN 2015) (*Table 1*). The University as a Living Laboratory (Kumdokrub et al., 2023; Verbeek et al., 2023) framework includes the partnership work package, planet work package, people work package, prosperity work package, and peace work package. In action, the balance between theory and practice is paramount. The Living Laboratory Concept, which provides a framework for the work packages and action areas, is a vital element. The Living Laboratory Concept involves the multifunctional use of the green and built campus environment in the service of sustainability. Students, teachers, mentors, researchers, and employees develop their ideas in a real environment and can test their implementation through feedback loops.

Table 1. Areas for action in the Sound of Earth University of Sopron Implementation Program thematic work packages

The University as a Living Laboratory				
Partnership WP (SDG 17)	Planet WP (SDG 6, 12, 13, 14, 15)	People WP (SDG 1-5)	Prosperity WP (SDG 7-11)	Peace WP (SDG 16)
Strategy	Environment	Policies	Renewable energy	Moral
Organization	Plan documents	Training	Conditions	Individual
Dashboard	Transport	Library, databases	Finance	Performance evaluation
Network of relations	Institutional operation	Incentives	University welfare	Catalyst
Activity		Green Hygiene Community involvement	Expert databases Procurement Food/Nutrition Outdoor activities	Dissemination

The following outlines the individual work packages concerning integration and international best practices. The “Partnership WP” (SDG 17) work areas and related system components are also shown below. Developing a sustainability mission statement and vision element capturing the necessary philosophy and attitude is essential to the well-articulated representation of sustainability in the institutional “Strategy” and provides a framework for a university sustainability strategy reflecting an integrated approach.

An “Organization” responsible for sustainability is required to ensure efficient operation. Defining this entails documenting the institutional sustainability story, identifying the significant achieved and targeted milestones, and comprehending the foundation of sustainability identity. To meet the needs of the present and the future, it is necessary to establish a coordination-based sustainability organizational structure that is implementable at the level of a designated responsible individual or a working group. Within the organization, data managers ensure the continuous availability of inventory data required for sustainability performance indicators. Furthermore, within organizational units, additional responsible individuals acting in the role of sustainability ambassadors assist in facilitating the work.

A “Dashboard” provides transparency, quantification, knowledge, awareness, and management based on measured data by making public data on sustainability (e.g., instantaneous trends in GHG emissions) available in time series or even in real-time.

A vast “Network of Relations” is critical to successful information exchange and collaborative efforts. Global thinking could occur at the international level, while local action can occur at the university–city–region level (Vinogradova et al., 2020).

Whether general or specific, the “Activity” section of a university profile outlines the achievable sustainability efforts. Performance is developed along the specificities of the main activities of sustainability teaching, learning, research, awareness, and service. The University and Community Plan Documentation System (Master Plan) provides a systematic and methodical approach and comprehensive activity planning. As a system theory of the Living Lab Concept, the university sets the stage for concrete implementation, which can be intricately linked to various campaigns (Alsaati et al., 2020) (e.g., special days, TeSzeddl!, voluntary waste collection movement).

The following characterize the “Planet WP” (SDG 6, 12, 13, 14, 15) activity areas. The institution also positions itself at the level of environmental complexes and systems to comprehend a sustainable “Environment.” The development of a green environment, the enhancement of nature positivity and biodiversity at the natural environment level, the continuous improvement of infrastructure at the artificial environment level, and the system elements of landscape-level sustainability research at the environmental system level provide the opportunity for a complex approach.

Concerning the Master Plan, various “Planning Documents” outline and elaborate on the main directions, as well as the methods for ensuring compliance with specific requirements. Such documentation may include the Sustainability Report, Land Use Plan, Climate Strategy, GHG Inventory, Carbon Footprint Calculation, Carbon Neutrality, CO₂ Reduction Plan, Climate Action Plan (Malthan and Hill et al., 2019), Watershed Strategy (Li et al., 2022), Waste Management Plan, and Zero Waste Action Plan (Hannon et al., 2019).

“Transport” is responsible for the direct and diffuse environmental impacts and the indirect background impacts. Optimizing areas for sustainable (public) transportation (Luttik–Maters, 2022), commuting, posting, car-free and pedestrian-friendly campuses, zero-emission vehicles, carpooling (Werkmeister et al., 2021), business air travel, and increasing efficiency should be prioritized.

In addition to traditional university activities, sustainable “Institutional Operations” mandate several tasks to achieve the lowest possible environmental impact from operations. In addition to conscious institutional waste management, separate collection (Gulyás and Veres, 2023), and composting (Saalah, 2019), emphasis should be on reusing materials, prioritizing durable products, and eliminating paper and plastic (Gherheş et al., 2021). In the fight against global warming, institutional climate protection and adaptation, conscious institutional energy management (Javed, 2021), and energy efficiency enhancement are both priorities and significant economic issues. Sustainable water management entails reviewing institutional water management, water conservation, rainwater retention (Pachamuthu, 2021), water protection, and wastewater management. Together with the green building guidelines (Abdelalim et al., 2015), good orientation, natural ventilation, natural lighting options, and air conditioning through a green environment enable a variety of advantages. The system element of sustainable consumption (Castillo Longoria et al., 2021) allows and plans careful resource management.

The “People WP” (SDGs 1-5) appear below. The institution should reconsider its human-related policies, including child protection, maternity and paternity policies, lifelong learning, and accessibility, in the “Policies” activity area.

“Training” increases awareness and competence. It should include sustainability training for staff and students and continuously monitor sustainability courses, particularly climate education. Sustainability micro-certificates certify the acquired competencies and complement the respective diplomas. The maintenance and development of “Library Services and Databases,” available to all, provide strong support.

Success requires effective “Incentives” like sustainability science programs, sustainability scholarships (students, teachers, researchers), climate scholarships (students, teachers, researchers), and support for priority research groups.

The recent pandemic and infectious diseases in general highlight the importance of hygiene and environmentally friendly cleaning products, i.e., constantly emphasized “Green Hygiene” solutions.

Student action groups, organizing sustainability events and programs, and regular news and reports all help to achieve “Community involvement.”

The energy trilemma prioritizes “Affordable, clean, renewable energy and security of supply” for the “Prosperity WP” (SDGs 7-11). An effective WP requires the right “Conditions,” i.e., proper working, education, and learning environments and, in a broader sense, the harmony of the systemic elements of urban ecology and innovation (Wu, 2014).

The “Finance” domain must address climate change and sustainability-related financial issues and new financial challenges (e.g., environmental costs).

“University Well-being” and “Expert databases” activities affect the work package. Fair trade (Kim, 2023), sustainable supply chains (Mejía and Manzano et al., 2023), and ethical material sourcing are among the sustainability priorities in the ‘Procurement’ area, which impacts well-being. However, “Food” also addresses sustainable food (Pasquier Merino, 2022) or community garden initiatives (Baur, 2022).

“Activities in open/green spaces” help people understand the emotional and cultural aspects of humanity’s relationship with nature, including art, music, literature, gentle tourism (Rinaldi et al., 2022), basics of natural sciences, knowledge of edible plants, and systematic elements of relevant engineering analyses.

“Morality” is the primary area of activity of “Peace WP” (SDG 16). Here, systemic aspects of the university freedom policy, human rights protection, anti-discrimination efforts, and sustainability policies (with SDG connections) are implemented at the community level. The dominant motives at the individual level are student responsibilities, leadership development, and creating a sustainability identity.

“Performance evaluation” is crucial for system optimization and analyzing the achievement of the established goals. Ensuring comparability in this regard requires a system for rating and evaluating sustainability. Competing in the global university sustainability rankings (Galleli et al., 2022) and winning awards (IGGA 2022) will be beneficial in this activity field.

This work package also aims to strengthen the university’s “Catalyst Role” by developing dissemination activities related to sustainability, performance, best practices, and continuous improvement.

3.2 Economic Sustainability Issues of the University of Sopron

Universities operating in crisis areas, outlying areas, or fiercely competitive environments are those moving toward sustainable management (Lukman–Glavic, 2007; Grecu–Ipina, 2014). These universities also tend to have training structures that guarantee low operational efficiency. Using an alternative to the standard management and maintenance system models is best. Circumstances and opportunities are the result of necessity. These institutions must innovate due to inefficient plant sizes, fierce market competition, and an ardent desire to succeed. Conflicts initially accompany the transition, including institutional crises, multiple

conflicts of interest, unexpected turns, and occasional failures. Whether the academic community wins or loses the reform will determine how well the shift to a sustainable management model goes. The short-term success of the previously prosperous developers will depend on the modernization of the university's core operations. It may also be necessary to finance tasks unknown to institutions with large student populations and an economic center. These include basic infrastructure rehabilitation, organizational rationalization, rationalizing space utilization, energy audit, savings strategy, and a renewal plan. Without such interventions, these institutions would be unable to survive independently or in the competitive higher education market. Everyone must support the objectives, necessitating the full leadership of the university's common mindset and practice for successful implementation.

The People & Planet University League (People & Planet, 2015; Jones, 2017), which ranks the environmental and ethical performance of UK universities, cites several criteria that are essential parts of governance reform. Universities can take advantage of the following opportunities for intervention and challenges, supplemented by independent and university-level principles:

- developing environmental policy and strategy
- developing environmental management and audit systems (ISO 2015)
- building a team of experts committed to sustainability
- involving employees and students in the process
- developing an internal legal framework for employees (tasks, powers, responsibilities)
- teaching sustainable development
- developing a carbon emissions strategy
- reducing carbon emissions (ISO 2018)
- using sustainable energy sources (lighting, heating, cooling - combined use of solar energy, geothermal energy, and biomass) (Javed, 2021)
- reducing water use (Pachamuthu, 2021; Li et al., 2022)
- developing SMART measuring systems, building supervision and audit (building, energy, asset protection system (EnergySMART))
- sustainable investments and building structures (development and use of wood and green architecture, capsule house program, autonomous air conditioning program, etc.)
- waste management and recycling (Gherheş et al., 2021; Gulyás and Veres, 2023) (conventional, bio- and e-waste management strategy, industrial by-product from industrial waste, University of Sopron: wood waste management strategy instead of wood by-product strategy)
- sustainable food and packaging materials (Pasquier Merino, 2022)
- sustainable transport strategy (Luttik and Maters, 2022) (car-free zones, electric vehicles, support for cycling and walking)
- developing ethical investment and recovery policies (Pereira and da Silva, 2017) (e.g., Energy Efficiency Obligation Scheme, White Bonds, the market appearance of secondary CO₂ quota)
- optimizing the use of land and space (Abdelalim et al., 2015).

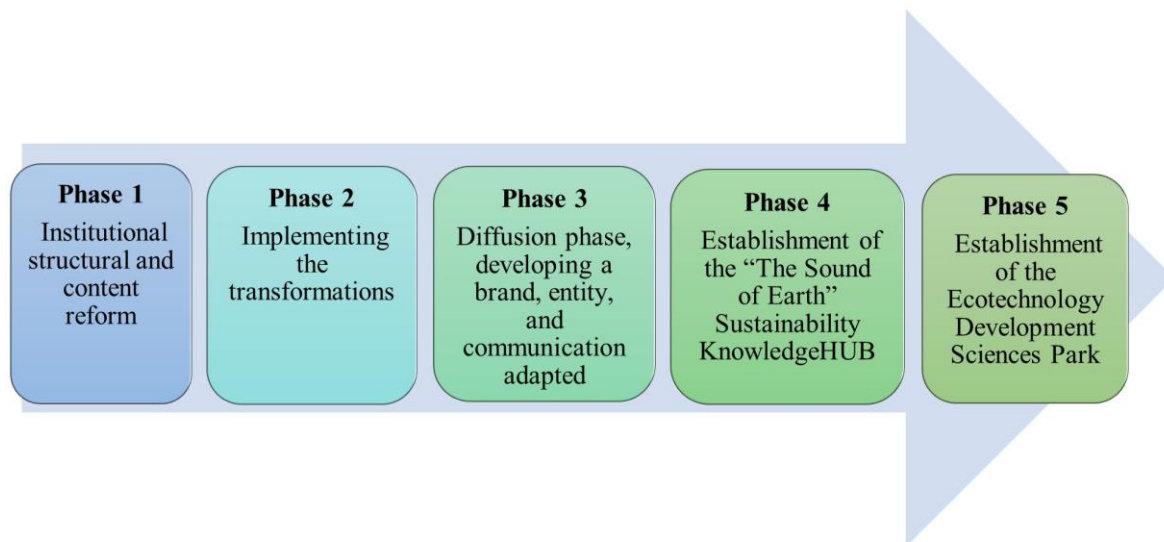


Figure 3. The Sustainable University Management Model of the University of Sopron

The University of Sopron will implement the five phases in the following order (Figure 3):

- Phase 1: Institutional structural and content reform, space reduction planning, energy modernization planning (health check, designing the new status)
- Phase 2: Implementing the transformations, energy, property, and disaster management monitoring system. The “Sound of Earth” implementation program was introduced in Sopron under the SMART UNI program (Berdnikova et al., 2020) and focuses on technical, financial, and professional control systems (energy, material, and equipment flows, supervision and regulation of infrastructure development and operation) and implementing and operating process management and control systems.
- Phase 3: Diffusion phase, developing a brand, entity, and communication adapted to the new situation, including educational development, consistent research strategy, organizational development, and communication steps.
- Phase 4: Establishment of the “The Sound of Earth” Sustainability KnowledgeHUB to disseminate and market good practices and developments. The management of green initiatives at the university, the operation of accredited measurement and certification systems, knowledge tourism, and the marketing of the resultant assets will all fall under the responsibility of this organization.
- Phase 5: Establishment of the Ecotechnology Development Sciences Park at the University of Sopron, into which the Sustainability Knowledge HUB will eventually be integrated.

4 CONCLUSIONS

Sustainability has become a key concept in most areas of life, including science. Universities and their managements must consider environmental, social, and economic dimensions. The University of Sopron has acknowledged this and increasingly emphasizes the implementation of its sustainability strategy.

The coherent, systemic design, implementation, maintenance, and operation of the work packages, activity areas, and system elements presented in the University of Sopron's Sound of the Earth Implementation Program guarantee ongoing sustainability performance improvement. One of the main challenges lies in maintaining a systemic mode of operation, which requires continuous commitment, institutional-level coordination, and sufficient resources, while the university's operational environment – particularly its economic and energy conditions – may change rapidly. The success of the model largely depends on the active engagement of both the leadership and the university community.

The University of Sopron is highly committed to evaluating its sustainability performance. It has ranked in the sustainable world university lists, such as UI GreenMetric, since 2020. The university continuously improves its results. In 2023, we are ranked 130th (near the top 10%) in the worldwide ranking list, 47th among European universities, and third among Hungarian HEIs. The University of Sopron earned 82% of the total score (8,200/10,000 scores) in 2023, an approximately 180% increase in four years, which is unique in Hungary. To maintain its high rankings, the university leadership invested in sustainable infrastructural development, including the construction of a biomass heating plant, the comprehensive development of a waste management system, and the purchase of selective bins and bikes. In our case, the strongest indicator groups are “Energy and Climate Change,” “Water management,” “Transportation,” and “Education and Research.” We hold a leading position among Hungarian Universities in these categories.

The goal of the transformation and development is to create an energy- and environment-conscious, innovation-oriented, frugal, efficient, and sustainable university. In this way, not only can it be among the best on international sustainability rankings (Galleli et al., 2022; UI GreenMetric 2023; THE Impact Rankings 2023), which are so important for institutions, but the institution's management becomes sustainable, its resilience to economic and energy crises is strengthened, and its exposure is reduced. Ultimately, its sales potential is also strengthened. The University of Sopron aims to become the Central European innovation center for eco-technology and one of the most sustainable universities in the world.

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