



SEINÄJOEN AMMATTIKORKEAKOULU
SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

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Sustainability Measures and Practices at Universities

Case SeAMK

Thesis
Spring 2024
Bachelor of Business Administration
Degree Programme in International Business



SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

Thesis abstract

Degree Programme: International Business

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Title of thesis: Sustainability Measures and Practices at Universities: Case SeAMK

Supervisor: Dario Liberona

Year: 2024

Number of pages: 131

Number of appendices: 02

The Times Higher Education (THE) Impact Rankings serve as a vital benchmark for universities striving to make a meaningful contribution to global sustainability and social responsibility. The 2024 edition of these rankings will evaluate universities based on their performance across 17 United Nations Sustainable Development Goals (SDGs), reflecting a comprehensive assessment of their societal impact.

The objective of this thesis is to provide Seinäjoki University of Applied Sciences (SeAMK) with a significant place in the THE Impact Rankings for 2024. Adopting a mixed-method approach that includes comprehensive data analysis and rigorous research procedures, the study intends to assess SeAMK's current sustainability activities in-depth and to identify areas that might require improvement. Following an in-depth assessment of the advantages and drawbacks recognized in the thesis study, specific recommendations are provided that are adapted to the unique circumstances of SeAMK. These suggestions serve as the foundation for creating a customized action plan intended to improve SeAMK's position in the rankings.

The findings and recommendations derived from this research endeavor will benefit SeAMK and contribute to the broader discourse surrounding sustainability and social impact in higher education. By leveraging these insights, SeAMK can enhance its academic reputation, foster greater community engagement, and demonstrate its commitment to addressing global challenges through concrete action and measurable outcomes.

¹ Keywords: THE Impact Rankings, sustainability, United Nations Sustainable Development Goals, Higher education, SeAMK university,

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Terms and Abbreviations

THE	Times Higher Education
SDG	Sustainable Development Goals
SeAMK	Seinajoki University of Applied Sciences
UN	United Nations
HEIs	Higher Education Institutions
CE	Circular Economy
STEM	Science, Technology, Engineering, Mathematics
SECI	Socialization, Externalization, Combination, Internalization
QS-SR	QS Sustainability Ranking
IR	Impact Ranking
STARS	Sustainability Tracking, Assessment and Rating System
HCD	Human-Centred Design
SAL	Shared Action Learning
UAS	University of Applied Sciences
Intl	International
Fin	Finnish

1 INTRODUCTION

In today's changing education landscape, universities face more pressure to show their dedication to sustainability, making a difference in society, and conducting responsible research. Global issues like climate change and inequality are in the spotlight, making people closely watch how universities contribute. Times Higher Education (**THE**) Impact Rankings have become important for measuring how well universities balance academics with real-world impact. Achieving a high ranking is not just about status it is a commitment to positive change, responsible citizenship, and progress in communities.

SeAMK, as a higher education institution, understands these evolving expectations. It has a long-standing commitment that goes beyond typical academics, aiming to integrate sustainability and societal impact into teaching, research, and community involvement. But in today's world, where global challenges demand complex solutions, there's a need for continuous improvement. This thesis investigates, evaluates, and suggests strategies for SeAMK to excel in the 2024 **THE** Impact Rankings. The motivation behind this effort is clear, SeAMK wants to be a leading institution addressing global issues and nurturing responsible global citizens. Its pursuit of recognition in **THE** Impact Rankings reflects its core principles of sustainability, community involvement, and conscientious research. This thesis aims to connect these values with global recognition, ensuring the world acknowledges SeAMK's potential for meaningful change.

This thesis adopts a rigorous approach, executing extensive analysis and research to identify SeAMK's strengths and potential for development, in collaboration with the SeAMK sustainability department. Practical advice customized to SeAMK's specific circumstances will be presented. Furthermore, this study contributes to the wider topic of sustainable development and societal effect in higher education. SeAMK's road to THE Impact Rankings is a collaborative endeavour with universities globally, all striving toward a more sustainable future. In 2024, universities will be recognized for their contributions to global concerns, with THE Impact Rankings serving as an important measurement.

The most recent edition consists of 1,591 universities from 112 nations, indicating its worldwide significance (Times Higher Education, 2023). In 2022, only seven Finnish universities were listed in THE rankings, making SeAMK's aspiration to join this group more than just seeking prestige it signifies a deep commitment to creating a positive impact. Furthermore, it

is important to mention that SeAMK has already started working on sustainability and making a positive impact on society by getting involved with the SDGs.

As another ranking system for measuring sustainability initiatives in universities, the UI Green Metrics Rankings and the UI Green Metric World University Ranking, initiated by Universitas Indonesia in 2010, assess green campus and environmental sustainability (Green Metric Rankings, 2024) Being recognized for its environmental efforts through Green Metrics shows that SeAMK is serious about being environmentally responsible. During the past years, our university were listed under the Green Metrics Rankings showcasing its contribution towards the sustainability. SeAMK was registered under the green metrics rankings 2021 in the position of 420. (Green Metrics Ranking, 2021). It is significant that SeAMK is in the UI Green Metric Rankings and the aspiration to join THE impact Rankings highlights the organization's commitment to sustainability and its initiative-taking stance in tackling global issues.

These rankings serve as insightful benchmarks for evaluating accomplishment and identifying areas in require more development in addition to acknowledging SeAMK's consistent efforts. Sustainability is becoming a top priority for universities all around the world, thus it is imperative that organizations like SeAMK continue to strive to improve sustainability theory, practices, and principles in higher education. Moving forward, SeAMK's sustained commitment to sustainability will contribute to a more sustainable future for all by improving its standing and encouraging other institutions to prioritize sustainability the utmost importance in their operational and educational endeavours.

Additionally, when we consider the need of the contribution to sustainability, Universities possess duties to contribute to sustainability concept, principles, and issues due to their role as hubs for knowledge creation, research, and innovation. Universities have an obligation to confront major global concerns including social inequity, resource depletion, and climate change as centres of learning and intellectual research. Through the incorporation of sustainability into their research agendas, curriculum, and university operations, universities can nurture the next generation of professionals and leaders with the principles, expertise, and skills needed to address challenging sustainability issues. Universities also function as innovation accelerators, promoting research and development in fields including sustainable agriculture, urban planning, and renewable energy. Universities can leverage their multidisciplinary knowledge and engagement with the community to produce solutions that support social, economic, and environmental sustainability. Universities also have a significant role to play in

promoting policy changes at the local, national, and international levels and drawing attention to sustainability-related concerns. Universities can contribute to the transition toward a more sustainable and equitable society and inspire meaningful action by cultivating a culture of sustainability across the university. As we are discussing about the sustainability and the prestigious rankings, to be recognised in rankings like the UI Green Metric Rankings and to be assessed for participation in prestigious rankings like THE Impact Rankings, institutions like SeAMK will also have to contribute to sustainability concepts, theories, and issues. Adopting sustainability is about beyond obtaining awards, it is about leading an existence that is dedicated to driving about change and addressing the many problems that our world faces. By actively participating in sustainability activities and incorporating them into research projects, academic programs, and university operations, SeAMK fulfils its position as a catalyst for social growth and innovation in addition to exhibiting its commitment to environmental responsibility.

1.1 Sustainability in Higher Education

According to Article by Santander Universidades (2022), sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care, and social well-being. Furthermore, sustainability can be defined as the practices of meeting the needs of the present without compromising the ability of future generations to meet their own needs. It is a holistic and forward-thinking approach that seeks to balance economic, social, and environmental considerations to create a harmonious and enduring system.

Sustainable practices strive to minimize the detrimental effects on the environment, foster social justice, and guarantee enduring economic sustainability. This involves responsible resource management, the reduction of carbon footprints, and the development of strategies that foster resilience and adaptability in the face of global challenges such as climate change. By embracing sustainability, individuals, businesses, and societies contribute to a more equitable and resilient world, where the well-being of both current and future generations is safeguarded.

Viqueira (2023) emphasizes the critical role of higher Education in fostering sustainable development. Also, author describes that while higher Education has the potential to be a

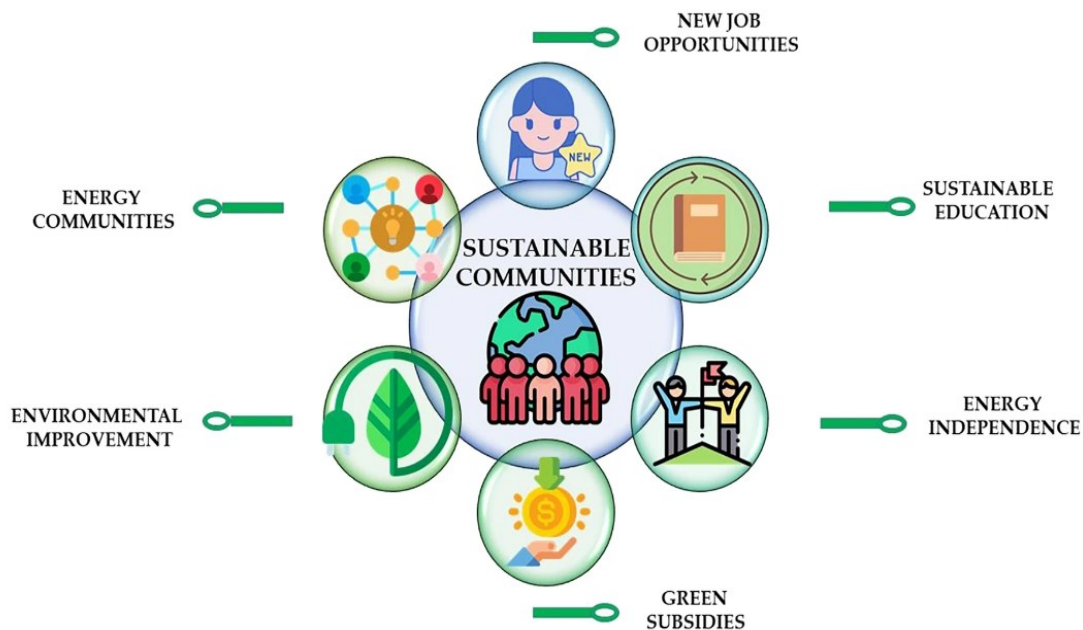
powerful force for sustainability, there exists a prevalent issue where graduates often perpetuate unsustainable behaviours and contribute to environmental damage due to a lack of awareness and understanding of sustainability principles. Despite some institutions recognizing the importance of sustainability, Viqueira contends that many have yet to fully integrate sustainability into their curriculum, research, estate management, and community engagement.

Furthermore, sustainability in higher educational institution is defined as an outcome of international declarations to catalyse changes and influence mind-sets and actions in sustainability (Srivastava et al., 2020). Moreover, according to Gramatakos and Lavau (2019), in the exploration of Higher Education Institutions' (HEIs) role in fostering sustainability, there has been a decade-long focus on analysing various sustainability education approaches. The literature distinguishes between instrumental and intrinsic education, with the former emphasizing content transmission for behavioural change and the latter focusing on empowering students as autonomous, reflective thinkers.

Recent efforts aim for transformative sustainability education, seeking profound changes in knowledge and attitudes related to ecological, social, and economic justice. Transformative learning involves a shift in how we know and think about the world. Challenges exist in making this type of learning achievable for all students, with concerns about connecting with students' real-life experiences. While formal curricula have been studied, there is a growing recognition of the value of informal learning experiences, like student-led activities, volunteering, and campus events, in contributing to sustainability education. Informal learning is seen as valuable for its voluntary, student-directed nature, providing a more flexible and responsive approach compared to formal structures. However, understanding of informal sustainability learning within universities is limited, urging further exploration of student experiences in becoming actively engaged in promoting change.

Furthermore, when we look more deeply the connection between HEI and sustainability, based on the information by Biancardi et al. (2023), the European Green Deal is framed as a strategic initiative to cultivate a just and prosperous society in Europe, championing a modern, resource-efficient, and competitive economy. Within this context, Higher Education Institutions (HEIs) emerge as vital contributors to the Sustainable Development Goals (SDGs), with a special emphasis on the provision of outstanding learning. Anchored on a student-centric approach, as shown by the tetrahedron framework, HEIs place students at the core of

sustainability activities, surrounded by vital elements such as alliances, professors, competences, and new teaching techniques. This narrative emphasizes the power of experiential learning, as demonstrated by student-led projects and dynamic "living lab" models, as effective strategies for actively engaging students with sustainability concerns. Importantly, it emphasizes the need for an innovative pedagogical approach that encourages holistic education and active learning methodologies, preparing students for the multidisciplinary difficulties of sustainability concerns. (Biancardi et al., 2023).



The role of sustainable communities in HEIs.

Figure 1. The Role of Sustainable Communities in HEIs (Biancardi et al., 2023).

Based on Biancardi et al. (2023), the above figure depicts the framework for establishing sustainable communities in higher education institutions (HEIs), which is built on six key pillars. For instance, it promotes the incorporation of sustainability ideas into higher education curriculum and research activities, encouraging courses and research on sustainability issues. Second, the framework emphasizes the significance of achieving energy independence by decreasing dependency on fossil fuels and embracing renewable energy sources like solar panels and wind turbines. Third, its initiatives for green subsidies, which provide financial assistance for on-campus sustainability activities such as student projects and sustainable transportation solutions. The fourth pillar strives to reduce the carbon footprint by improving energy efficiency, decreasing waste, and supporting sustainable mobility. The fifth pillar focuses on community development, which involves the HEI community through sustainability committees, events, and chances for active participation in initiatives. Finally, the framework

encourages students to prepare for green occupations by providing green job training, holding career fairs, and connecting them with environmentally concerned firms. By adopting these pillars, higher education institutions may foster more sustainable communities, benefiting the environment, the economy, and society as a whole.

So, when we delve deep into sustainability in higher education is increasingly vital, acknowledging the need for institutions to address environmental, social, and economic concerns. In response to global issues like climate change, resource depletion, and social inequality, higher Education is integrating sustainability into academics, campus operations, and culture. Universities shape the future by educating leaders, professionals, and citizens. To support sustainability, institutions include eco-friendly topics in their courses, adopt green practices on campus, and engage in research for renewable energy, conservation, and social justice. Incorporating sustainability in higher education goes beyond simply adhering to international trends or complying with regulatory requirements – it additionally assists students to prepare for the challenges of the future.

Sustainability education gives students the multidisciplinary knowledge, ethical awareness, and critical thinking abilities required to tackle significant environmental, social, and economic challenges as we navigate an increasingly complex and interconnected world. Universities develop a generation of graduates who are not only capable of addressing sustainability issues but also empowered to bring about good change within as well as outside of their communities by incorporating concepts about sustainability into their academic programs. Universities additionally serve as living labs, showcasing the viability and positive effects of sustainable living, and encouraging stakeholders, employees, and students to embrace comparable practices in their personal and professional life by integrating sustainable practices into their daily operations.

1.2 Thesis Objectives

This thesis's primary objectives are wide in range and reflect our holistic approach. Our main goal is to provide practical, personalized strategies and recommendations that will assist to create a campus and education which are more sustainable. This include evaluating the extent that SeAMK contributes to these vital SDGs, determining which SDGs are most relevant to SeAMK's mission and activities, and considering both the qualitative and quantitative

dimensions of its effect. After this evaluation, our thesis will develop achievable, specific strategies and recommendations to help SeAMK better align its operations with these selected SDGs, demonstrating its commitment to sustainability and societal enhancement.

Moreover, our thesis adopts a holistic approach, which includes working closely with SeAMK's Sustainability Committee to gain essential support. Our collaborative efforts will involve an in-depth examination of SeAMK's sustainability endeavours, covering both current and future initiatives, which we will scrutinize thoroughly throughout our research journey. This entails a comprehensive analysis of the measures SeAMK has already implemented and its planned actions to align with the SDGs. Our evaluation encompasses all the steps and strategies SeAMK has undertaken to strengthen its commitment to sustainability and societal betterment.

So, this study outlines the following research objectives:

1. To Assess SeAMK's alignment with the SDGs.
2. To provide a comprehensive analysis of the guidelines for participating in impact rankings, ensuring alignment with sustainability and SDGs.
3. To analyze the contribution of participating on sustainability rankings (Impact Ranking – Green metric ranking)
4. Contribute to a better understanding of sustainability in a university community.
5. Analyze possible Circular Economy strategies for Higher Education Institutions.

By concentrating on these exquisite research objectives, this study aims to set a foundation for SeAMK's ongoing development as an indicator of sustainability and social advancement. We seek to not only review the existing situation but also to offer practical solutions that will advance SeAMK toward even better alignment with Sustainable Development Goals and a more sustainable future. We will do this via thorough examination, insightful analysis, and innovative research. We intend to provide a significant contribution to SeAMK's pursuit of sustainability leadership by dedicated work and collaboration, ensuring a lasting positive impact both inside and beyond the organization.

1.3 Structure of the thesis

Below we will explore the structure of this thesis.

Introduction: This section will provide an overview of the thesis, introducing the research objectives and the structure.

Literature Review: This chapter extensively reviews relevant literature on Circular Economy and education, Sustainable Development Goals (SDGs), the relationship between SDGs and higher education, competitive advantages from SDGs, and explores Green Metrics Rankings and THE Impact Rankings. It also includes a comparison between these rankings to offer insightful insights.

Methodology: The chapter on methodology outlines the research strategy used in the thesis, including specifics on the data gathering approaches and subsequently used data analysis strategies.

Case Study of SeAMK: This section explores the case study of SeAMK, delving into an analysis of its Impact Rankings. Additionally, it discusses the knowledge and lessons derived from this case study, along with the challenges encountered. Moreover, the chapter will include an analysis of survey results.

The Role of University Rankings Shaping SDG efforts: This chapter discusses the potential role of universities in contributing to the achievement of SDGs. It will also provide recommendations, drawing from the SECI knowledge management theory and insights gained from the case study analysis.

Challenges and Opportunities in Implementing SDGs in Universities: The focus of this section is to provide insight into the opportunities and difficulties that universities and other higher education institutions have while implementing the SDGs into practice. It will offer a more in-depth investigation of the challenges and opportunities.

Conclusion: This chapter summarizes the findings, implications, and recommendations derived from the thesis, particularly in terms of implementing SDGs and sustainability efforts in Higher Education Institutions (HEIs). It will also highlight future adaptations that could further promote sustainability and Circular Economy in HEIs.

References: This section comprises a list of cited sources, adhering to APA7 guidelines for referencing.

2 Literature Review

2.1 Circular Economy

A circular economy is a systemic approach to economic development designed to benefit businesses, society, and the environment. (Ellen MacArthur Foundation, n.d.) In contrast to the 'take-make-waste' linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources. (Ellen MacArthur Foundation, n.d.) So, the circular economy is about making our economic actions work smoothly with the environment. It believes that using resources efficiently is not just the right thing to do but also makes economic sense. This means keeping materials in a continuous loop to reduce waste and save energy. The idea is to design things to last, encourage reuse, and promote recycling.

Furthermore, according to the Ellen MacArthur Foundation (n.d.), a key supporter of circular economy ideas, this new way of thinking is a shift from the old 'take-make-waste' pattern. Instead, it wants to create a system where products last longer, materials get reused, and the impact on the environment is lessened. This move towards circularity aims to disconnect economic growth from using up limited resources, showing a smart change in how we approach sustainability.

When we consider Circular Economy, it is like diving into an economic approach that aims to restore and regenerate. It is all about making sure our economic activities contribute positively to the entire system, whether it's big businesses, small enterprises, or individuals, both globally and locally.

Based on the information by Ellen MacArthur Foundation (n.d.), It is based on three principles:

- **Eliminate waste and pollution:** This involves addressing issues like the emission of greenhouse gases and dangerous substances, pollution of the air, land, and water, and even problems like traffic congestion. The goal is to design a system that minimizes these negative impacts.

- Circulate products and materials: This involves designing products for durability and encouraging practices like reuse, remanufacturing, and recycling to ensure that products, components, and materials continue circulating within the economy. Circular systems also maximize the use of bio-based materials by promoting multiple applications for these materials as they cycle between the economy and natural systems.
- Regenerate nature: The goal is to steer clear of non-renewable resources and instead safeguard or improve renewable ones. This involves actions such as returning valuable nutrients to the soil to facilitate regeneration or opting for renewable energy sources instead of relying on fossil fuels.

We will dive into the Butterfly Diagram, which serves as a visual representation of the Circular Economy which has been created by the Ellen MacArthur Foundation in 2019, in the section below. This diagram provides a thorough explanation of the circularity and interconnection that are fundamental to the Circular Economy concept. Through a detailed analysis of this visual aid, we aim to provide insights into the principles and strategies underpinning the transition towards a more sustainable economic model.

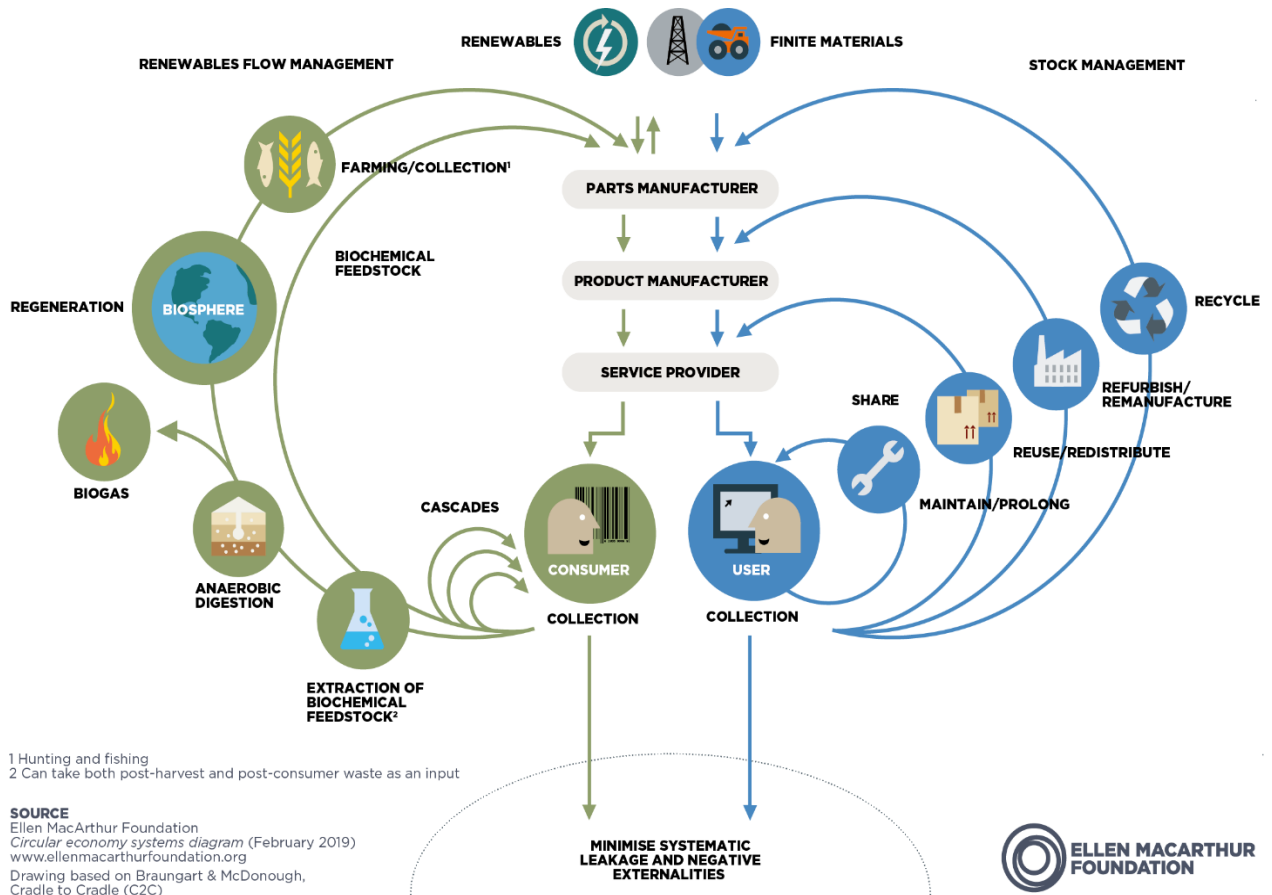


Figure 2. The Butterfly Diagram: Visualizing the Circular Economy (Ellen MacArthur Foundation, 2019)

This butterfly diagram illustrates a visual representation of the circular economy, a system that aims to minimize waste and pollution, circulate products and materials at their highest value, and regenerate natural systems. It is based on the concept of the circular flow of materials, in contrast to the linear flow of the traditional economy, which takes resources from the Earth, makes products, and then throws them away as waste. Furthermore, this cycle is divided into two main cycles as the Biological Cycle and the Technical Cycle.

- The Biological Cycle: The processes -such as composting and anaerobic digestion - that together help to regenerate natural capital. The only materials suitable for these processes are those that can be safely returned to the biosphere. (Ellen MacArthur foundation, 2023). In the Biological cycle the concept of regeneration is considered as the heart of the cycle, and this is the third principle of the circular economy.
- The Technical Cycle: This cycle focuses on products and materials that are not consumed during use, such as metals, plastics, and wood. The goal of the technical cycle

is to keep these materials in circulation as long as possible by using them again and again. This can be done through a variety of methods, including reuse, repair, remanufacture, and recycling.

So, the butterfly diagram is a powerful tool for visualizing and understanding the circular economy. It can be used by businesses, governments, and individuals to identify opportunities to reduce waste, conserve resources, and create a more sustainable future.

Furthermore, if we consider CE, Morseletto (2020) defends that Circular Economy (CE), when viewed as an economic framework, can be considered an effective strategy for optimizing resource utilization by minimizing waste and promoting a closed-loop system for products. This not only contributes to environmental preservation but also yields social advantages. The primary focus is on mitigating the adverse effects of the linear economy by fostering long-term business resilience and economic opportunities, thereby delivering both environmental and social benefits. Moreover, based on the information provided by Giannocaro et al. (2021) the transition toward a CE is gaining momentum in the policy plans of several countries. The European Commission, for instance, has strategically committed to transforming the EU economy into a circular one, launching the first CE Action Plan in 2015 and a subsequent plan in 2020, integral to the European Green Deal. Simultaneously, China has embraced the concept by incorporating the Development Plan for the Circular Economy into its 14th Five-Year Plan Period (2021–2025).

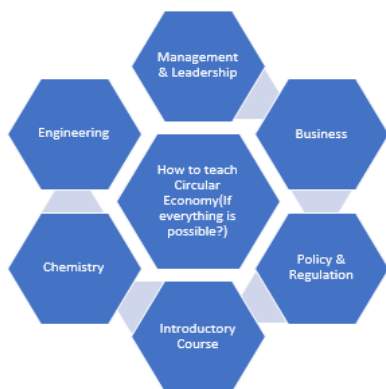
2.2 Circular Economy and Education

Education plays a pivotal role in increasing public awareness and understanding of the Circular Economy, demanding the acquisition of new skills and knowledge (European Environment Agency, 2016). So, through education, individuals gain awareness about the significance of sustainable practices, enabling them to make informed choices in daily life. Learning opportunities extend to the development of skills related to waste management, eco-design, and the principles of a circular economy. Moreover, education empowers consumers to support businesses aligned with sustainable values. It acts as a catalyst for innovation and entrepreneurship, encouraging the creation of products and business models that prioritize environmental responsibility.

Based on an article by Tiippana-Usvasalo et al. (2023), in Finland, Sitra's circular economy initiative aimed to integrate circular economy (CE) principles into the national education system. The goal was to raise the competence level for CE across various sectors of society to meet sustainability targets, including climate neutrality. The education program, launched in 2017, involved engaging with teachers at different levels of education through school visits and discussions with Sitra's experts. Recognizing that CE skills vary across fields such as legislation, business, construction, and healthcare, the initiative aimed to embed CE education at all levels, from early childhood to adult education.

The program supported teachers and schools in developing educational materials on CE, fostering knowledge, and understanding of CE in different sectors. Workshops and consortium projects, funded by Sitra, focused on creating content for CE-related courses. The result was a plan outlining how to incorporate CE teaching into the national curriculum. This Finnish experience provides valuable insights and lessons that can be applied globally in developing and integrating circular economy education into national education systems. Education emerges as a key tool not only for individual awareness but also for the systematic integration of circular economy principles across diverse sectors, aligning with the broader global perspective on the importance of education in advancing sustainability goals.

How to integrate CE in the Finnish National School System (A phase 1)



Creating the courses (A phase 2)

- **Themes in the University of Applied Sciences**
 - Teaching method packages for CE teaching
 - Design for the CE study Package
 - Making the CE a part of the basic Vocational skills of Engineers (All Finnish chemical engineering, education in biotechnology, food technology, Chemical engineering)
 - CE teaching in the natural resources sector & Construction Engineering.
 - CE for sustainable growth
- **Themes in the University Level**
 - Student, teachers guide their pupils to make CE inventions
 - Towards Multidisciplinary expertise in CE. Global Challenges – Team as a solver
 - CE minor Subject: Business & new technologies
 - CE construction & Carbon Neutrality in Building Design & construction-A plan for matter-Level study module on CE for Students
- **The Themes in the Vocational School level**
 - Food Productions-Focus on new protein production
 - CE department store
 - Textiles –Design for CE

Next Steps (A phase 3)

The National Circular Economy Strategic Programme
 How to integrate Circular Economy in the lifelong learning

Figure 3. Implementing CE in the Finnish National School System (adapted from Tiippana-Usvasalo et al., 2023).

As stated in the above figure as well, Finland's Circular Economy Education Program underwent a two-phase initiative with the objective of incorporating circular economy (CE) principles into the national education system, spanning from primary school to university and adult education. During Phase 1, recognition of diverse CE skill requirements in various sectors led to the goal of introducing CE-focused materials across all educational levels. Through workshops, project plans were developed, resulting in the funding of 21 projects. Phase 2 centered on implementation, offering tailored CE courses for each educational level, as outlined in Figure 3. Regular events featuring expert presentations provided educators and organizations with fresh perspectives. This program underscores the crucial role of education in nurturing CE comprehension and equipping future generations with the knowledge and skills essential for a sustainable future.

So, the Circular Economy Education Program in Finland stands as a noteworthy example of how education can drive positive change. By integrating circular economy principles across all educational levels, from primary schools to universities, and fostering hands-on projects through workshops, Finland has laid a solid foundation for a sustainable future. The emphasis on tailored courses and regular events with expert presentations further demonstrates a commitment to providing fresh insights and perspectives. As we reflect on Finland's efforts, it becomes evident that investing in circular economy education not only equips individuals with essential knowledge but also cultivates a mindset that prioritizes sustainability, an important aspect for the well-being of future generations and the health of our planet.

2.3 United Nations Sustainable Development Goals (SDGs)

When discussing sustainability and the circular economy, it is important to have a firm understanding of the UN Sustainable Development Goals (SDGs). According to an article by Slight Savers (n.d.), sustainable development goals were outlined by the UN in 2015 and Sustainable Development Goals (SDGs) aim to eradicate extreme poverty, improve healthcare for all, and promote gender equality.

Furthermore, According to United Nations Department of Economic and Social Affairs (n.d.) the SDGs are a set of 17 global goals adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. The goals are integrated, recognizing that action in one area will affect

outcomes in others, and that development must balance social, economic, and environmental sustainability. They tackle a range of pressing global issues, including widespread destitution, unfair distribution of resources, climate instability, environmental destruction, maintaining peace, and upholding justice.



Figure 4. Sustainable Development Goals (United Nations, n.d.).

- SDG 01 No Poverty: As of 2015, approximately 736 million individuals were still living on less than US\$1.90 per day, facing challenges such as inadequate access to food, clean drinking water, and sanitation. (UNDP, n.d.) So according to information by UNDP organization (n.d.) target goals for Eliminate poverty includes by 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters and By the dawn of 2030, ensure that all persons, particularly the underprivileged and vulnerable, have equal access to economic opportunities, basic services, landownership, property rights, inheritance privileges, natural resources, innovative technology, and financial services, encompassing micro-finance.

- **SDG 02-Zero Hunger:** According to Davis (2022) there are still 821 million people estimated to be chronically undernourished as of 2017, and extreme hunger and malnutrition continue to be a huge barrier to development in many countries and aim of this goal is to end all forms of hunger and malnutrition, especially in children, where 90 million children under five are still dangerously underweight.
- **SDG 03-Good Health and Wellbeing:** Davis (2022) states that at least 400 million people still have no basic healthcare, and nearly 1.8 billion live in settings where indefinite turmoil combined with weak governmental health systems make it more difficult to access quality. Due to this situation this SDG is promoting the good health and well-being of people around the globe.
- **SDG 04-Quality Education:** According to Davis (2022), this Sustainable Development Goal aims to ensure that all children have access to free, equitable, and high-quality primary and secondary Education by 2030. Education is a fundamental aspect of a child's life, and high-quality Education plays a crucial role in shaping a child's future. Therefore, the goal is to provide all children with access to free and quality Education.
- **SDG 05-Gender Equality:** According to article by Sinay Maritime data solution (2021) SDG 05 objectives encompass ending discrimination, eradicating violence, and harmful practices against women, recognizing the value of unpaid care and domestic work, promoting equal leadership opportunities, ensuring access to women's healthcare, and upholding equal rights.
- **SDG 06-Clean Water and Sanitation:** Based on the information by Sinay Maritime data solution (2021) SDG Goal 06 aims to ensure everyone has fair and universal access to clean drinking water, sanitation, and hygiene. It strives to decrease water pollution, enhance the efficient use of water, integrate water-resource management, and safeguard ecosystems reliant on water.
- **SDG 07-Affordable and Clean Energy:** Enhancing access to clean and safe water, sanitation, and hygiene for everyone while ensuring sustainable water management practices and safeguarding the environment are key objectives of Sustainable Development Goal (SDG) 06 (Sinay Maritime data solution ,2021).

- SDG 08- Decent work and Economic growth: UN environment programme (2024) states that this SDG mainly emphasise the importance of preserving the environment to support sustainable economic growth. The natural environment provides essential resources for economic activities, and ecosystem services contribute to economic stability. By maintaining ecosystems and mitigating climate change, countries can reduce the impact of natural disasters on economic activities, preventing widespread poverty. The goal emphasises that sustained and inclusive economic growth is essential for overall development, offering improved livelihoods through better employment opportunities and economic security. Particularly, it aims to narrow the wage gap between developed and developing countries, fostering global prosperity, and reducing inequalities.
- SDG 09-Industry, Innovation, and Infrastructure: Bath (2018) emphasizes that this SDG holds a pivotal role among the 17 global objectives aimed at improving people's well-being, fostering prosperity, and ensuring environmental sustainability. This specific goal focuses on building robust infrastructure, encouraging inclusive and sustainable industrialization, and promoting innovation. The wide-ranging nature of Goal 9 addresses various challenges, including inadequate access to electricity in developing regions, technological disparities in rural areas, and insufficient infrastructure.
- SDG 10-Reduced Inequalities: UN Women Organization (n.d.) states that by 2030, SDG 10 aims to foster a world where every that by regardless of age, gender, disability, race, ethnicity, origin, religion, or economic status, is empowered and included socially, economically, and politically. Additionally, the goal is to ensure that income growth for the bottom 40% of the population outpaces the national average, promoting more equitable economic development. In essence, SDG 10 strives to reduce inequalities within and among countries, fostering a more inclusive and sustainable global community.
- SDG 11- Sustainable Cities and Communities: Based on the information by Daniel (2015) SDG 11, focus on making cities sustainable and inclusive because more than half of the world's people currently live in cities, and this number is going to increase. The success of poverty eradication, equality, climate change mitigation, and health depend on city planning. Achieving SDG 11 requires solid implementation plans,

innovative solutions, and civil society involvement. Ensuring universal access to green and public spaces is vital for the overall well-being of communities, providing health benefits and contributing to environmental sustainability are some of the targeted goals for this SDG and the goals, including tangible and measurable targets, have the potential to impact positive change across various Sustainable Development Goals.

- **SDG 12-Responsible Consumption and Production:** According to Nohra (2023) This SDG aims to establish sustainable consumption and production patterns worldwide by addressing inefficiencies, wastefulness, and environmental impacts. The targets include promoting sustainable policies, managing resources efficiently, reducing food waste, integrating sustainability in business operations, and raising awareness.
- **SDG 13-Climate Action:** Based on the information by UN Women Organization (n.d.) SDG 13 focuses on addressing the impact of climate change through various targets. One key objective is to enhance the ability of least developed countries and small island nations, with a special emphasis on women, youth, and marginalized communities, to plan and manage climate-related challenges effectively. The goal also aims to bolster resilience to climate-related hazards globally, integrate climate measures into national policies, raise awareness, and build capacity for climate change mitigation and adaptation.
- **SDG 14-Life Below water:** Based on the information by United Nation Environment Program (2024) Protecting marine areas not only preserves biodiversity but also helps reduce poverty by boosting fish catches, income, and job opportunities, particularly benefiting coastal communities. However, increasing debris, environmental degradation, overfishing, and climate change pose significant threats to the oceans and coastal areas. The objective is to preserve and responsibly utilize the oceans, seas, and marine resources to promote sustainable development. It addresses challenges such as overfishing, marine pollution, and the impacts of climate change on ocean ecosystems.
- **SDG 15-Life on Land:** Based on the information by United Nations (n.d.) this SDG aims to safeguard, restore, and sustainably utilize terrestrial ecosystems, manage forests, combat desertification, and reverse land degradation and biodiversity loss. With 10 associated targets, it calls for integrating ecosystem and biodiversity values into

national and local planning, development processes, and poverty reduction strategies. The goal also emphasizes mobilizing financial resources to conserve biodiversity and ecosystems. Recognizing the interconnectedness of issues like deforestation, land degradation, and biodiversity protection.

- **SDG 16- Peace, Justice, and Strong institutions:** According to an article by the The Global Goals (n. d.) this SDG claims to build peaceful and inclusive societies, ensure justice for all, and establish effective institutions. It envisions a world where people feel safe regardless of their background. However, global progress has been hindered by increasing conflict-related deaths. The goal stresses the damaging impact of violence on development and highlights the need to address issues like sexual violence and crime in conflict areas. To achieve SDG 16, governments, communities, and civil society must collaborate to strengthen the rule of law, promote human rights, reduce illicit arms flow, fight corruption, and ensure inclusive participation.
- **SDG 17- Partnerships for the Goals:** Based on an article by UNICEF (n.d.) Goal 17 aims to enhance ways of putting plans into action and strengthen global partnerships for sustainable development, playing a crucial role in achieving the overall Agenda. The goal emphasizes the importance of working together with various partners to effectively carry out the Sustainable Development Goals and specific targets are key tools for promoting child rights and well-being globally, influencing factors such as the availability of data to identify vulnerable children at risk of being left behind.

So, exploring sustainable development reveals a powerful collaboration between the Circular Economy and Sustainable Development Goals (SDGs). The Circular Economy's focus on cutting waste, supporting regenerative systems, and efficient resource use aligns seamlessly with the diverse aims of the SDGs. By encouraging responsible consumption, prioritizing environmental care, and promoting social fairness, the Circular Economy offers a practical route to achieve SDGs' goals. This partnership not only addresses global challenges but also highlights the need for comprehensive, systemic approaches. Embracing the Circular Economy within the SDGs framework encourages us to rethink societal and economic systems, contributing to a world where prosperity is intertwined with environmental sustainability and social balance an essential step toward a lasting future.

2.4 Sustainable Development Goals and Higher Education

The connection between Sustainable Development Goals (SDGs) and Higher Education is a crucial intersection where academic institutions, including Seinäjoki University of Applied Sciences, play a vital role. The SDGs, consisting of 17 interconnected goals addressing pressing global issues, provide a significant framework for SeAMK's commitment to higher Education that promotes sustainability and societal impact. SeAMK's aspiration to achieve a strong position in the THE Impact Rankings highlights the importance of aligning with the SDGs. This alignment not only demonstrates SeAMK's dedication to making a positive impact but also positions it as a catalyst for global change. In this context, the thesis aims to evaluate SeAMK's current contributions to the SDGs, identify areas for improvement, and suggest customized strategies for better alignment. This endeavor reflects SeAMK's commitment to shaping a more sustainable, fair, and impactful future through its role in higher Education.

At the core of SeAMK's mission are the SDGs, an ambitious agenda covering a wide range of social and environmental objectives. Among these, SDG 17, which highlights global partnerships, plays a pivotal role in driving progress. As SeAMK strives for a prominent position in the esteemed THE Impact Rankings, the convergence of the SDGs and THE Rankings becomes exceptionally important. The SDGs not only emphasize SeAMK's commitment to sustainability and societal impact but also serve as a guiding beacon on its path to recognition in the higher education sector. Furthermore, when universities actively integrate SDGs into their teaching, research, and campus operations, they play a vital role in catalyzing significant societal change. This potential for transformation is not limited to SeAMK alone it highlights the shared responsibility of higher Education to empower students with the knowledge, abilities, and values needed to make positive changes in a world dealing with intricate global challenges.

As SeAMK strives for recognition in the Times Higher Education Impact Rankings, the SDGs serve as a guiding force, showing the way to a future that's more sustainable, fair, and impactful, not only for the institution itself but also for the broader realm of higher Education. Furthermore, below Figure 5 explain the relationship between the Sustainable Development Goals and it highlights how universities and higher institutions can develop their expertise in improving SDGs.

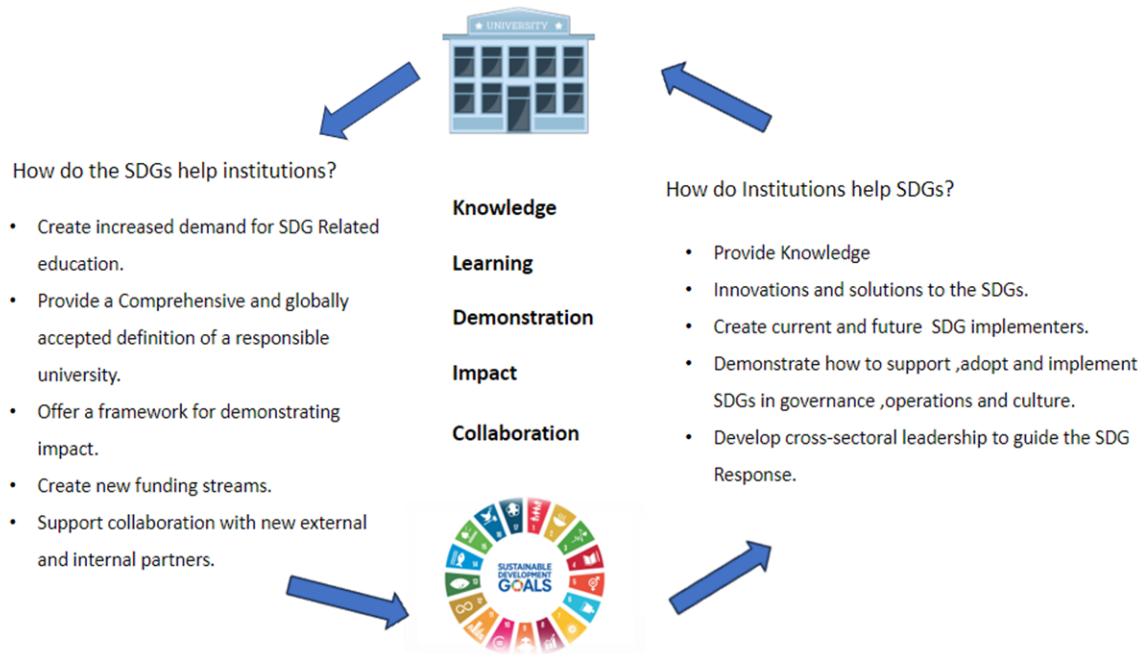


Figure 5. Relationship between Education Institution VS SDGs (adapted from EAUC –The Alliance of Sustainability Leadership in Education, n.d.).

According to a report by EAUC (n.d.), the relationship between the Sustainable Development Goals (SDGs) and institutions is reciprocal. Also, as this figure above states SDGs could help institutions in different ways such as, SDGs offer a framework for universities to define what it means to be a responsible institution. This framework can help universities to make decisions about their operations, research, and teaching that are aligned with the SDGs. Furthermore, SDGs provide a framework for institutions to measure their progress in achieving the goals. This reason can help institutions to track their progress and identify areas where they can improve.

On the other hand, Universities or the higher educational institutions could help to achieving the SDGs as institutions have the expertise, resources, and reach to address the complex challenges that the SDGs address, such as climate change, poverty, and inequality. By working together, institutions can develop and implement innovative solutions that can make a real impact on the world.

So, as SeAMK aspires to achieve recognition in the prestigious THE Impact Rankings, the interplay between SDGs and higher Education becomes pivotal. The 17 interconnected SDGs serve as a guiding framework for institutions like SeAMK, fostering a sense of responsibility and providing a roadmap to integrate sustainability into their core missions. This

reciprocal relationship, as illustrated in Figure 5, highlights how institutions can leverage their expertise and resources to contribute meaningfully to the SDGs, while simultaneously utilizing the SDGs as a benchmark to measure and enhance their societal impact. By actively engaging with the SDGs, SeAMK and other higher education institutions play a vital role in shaping a more sustainable, fair, and impactful future, not only within their campuses but also in the broader landscape of global Education and societal transformation.

Table 1 illustrates the General university practices which are aligning with SDGs.

Table 2. General University Practices and SDGs.

University Practices	Sustainable Development Goals (SDGs)
Not smoking policies.	SDG 3 ,SDG 12,SDG 13
Recycling procedures	SDG 12, SDG 13,SDG 14,SDG 15
None Discrimination policies	SDG 5, SDG 10
Diversity and inclusion policies	SDG 4,SDG 5,SDG 10,SDG 16
Community engagement initiatives	SDG 1,SDG3,SDG 4,SDG 11,SDG 17
Sustainable transportation options	SDG 3,SDG 11,SDG 13,SDG 15
Solar or Eolic Energy, renewable energy production	SDG 17, SDG 11, SDG 13

As this demonstrates the significance it is for universities to encourage sustainability and address global issues, there are numerous common procedures at universities that have a strong connection to the Sustainable Development Goals (SDGs). For instance, recycling programs are widely embraced activities that, through promoting resource efficiency and reducing waste output, relate with SDG 12 (Responsible Consumption and Production). Additionally, by encouraging healthier circumstances and reducing the adverse impacts of tobacco consumption on the environment and human well-being, prevention of smoking policies aligns with SDG 3 (Good Health and Well-Being), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). Developing equitable learning environments and encouraging a culture of dignity and respect constitute two prevalent aspects of diversity and inclusion policies, which address SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 16 (Peace, Justice, and Strong Institutions). In combination, these university initiatives demonstrate how education may influence society

and advance sustainability, supporting broader global efforts toward achieving the Sustainable Development Goals (SDGs).

So, Universities that implement these practices not only serve the environment and society instantly, but they also significantly contribute to the advancement of the Sustainable Development Goals (SDGs). Also, Higher education institutions' adoption of the Sustainable Development Goals (SDGs) demonstrates a core commitment to tackling global issues and promoting a sustainable future. Educational institutions actively contribute to the progress of certain SDGs by matching standard university practices, such recycling programs, no-smoking rules, and diversity and inclusion efforts, with the objectives. In addition to fostering a culture of responsibility and sustainability within university communities, this involvement gives students the values, knowledge, and abilities they need to become catalysts for change in a world that continues to shift rapidly. So, it is really clear that educational institutions are vital for promoting the achievement of the SDGs and the development of a more resilient, equitable, and sustainable society through their cooperative efforts and collaborations. Future generations can anticipate a better and more sustainable future as long as academic sustainability remains a top priority.

2.5 Competitive Advantage through Sustainable Development Goals

Universities can effectively adapt to Sustainable Development Goals (SDGs) by strategically utilizing their unique resources and capabilities. As the SDGs encompass a wide array of areas, universities can align their educational programs, research focus, and academic strengths with specific SDGs. This targeted alignment enables institutions to contribute meaningfully to sustainable development initiatives, leveraging their expertise in areas that align with the goals. In essence, a constructive approach involves identifying and optimizing the university's existing assets to address and contribute to specific SDGs. Competitive advantages can be both material and immaterial, ranging from factors such as wealth, academic quality, and efficiency to more immaterial advantages such as reputation, networks, status, or the ability to add value for stakeholders.

All these factors are, from a competitive advantage perspective, potential resources the organizations may exploit (Porter & Kramer, 2006). So, embracing a competitive advantage perspective, institutions focus on areas where they possess strengths and organizational

capacity, acknowledging the unequal nature of market-like settings. Competitive advantages, whether material or immaterial, such as wealth, academic quality, reputation, or stakeholder value, become potential resources to exploit. SDG adaptation is about evaluating a university's strengths and how they match specific SDGs (e.g., in relation to industry sectors, innovation and infrastructure, and clean energy), develop plans according to resources available, and specify outcomes accordingly (Stensaker & Hermansen, 2023). Table 2 illustrates about the adaptations to SDGs in a theoretical framework.

Table 3. Theoretical perspective of universities' adaptation to SDGs (adapted from the information by Stensaker & Hermansen, 2023).

	SDGs as images	SDG as a comparative advantage
Adaptation characterized by	(Imitation of) The global SDG vocabulary	Emphasis on institutional and academic identity and profile
Strategic plans characterized by	No priority of particular SDGs; All SDGs seen as important; unclear implementation and outcomes not specified for the achievements	Emphasis on SDGs that match the institutional academic profile; clear objectives and measures regarding implementation

According to Stensaker and Hermansen (2023), the perspective of viewing the Sustainable Development Goals (SDGs) as the above figure emphasizes that universities can utilize them as a global language to convey their values and commitments. Under this viewpoint, universities may incorporate the SDGs into their strategic plans and initiatives without necessarily prioritizing specific goals or establishing clear objectives and measures for implementation. On the other hand, the perspective of considering SDGs as a comparative advantage emphasizes that universities can use the goals as an opportunity to distinguish themselves from other institutions. In adopting this stance, universities may concentrate on SDGs that align with their strengths and institutional identity, and they may develop well-defined objectives and measures for implementation.

Examining the characteristics associated with each perspective provides further insight. Strategic plans rooted in the SDGs as images may exhibit a lack of prioritization for specific goals and may have unclear implementation strategies and outcomes. Conversely, strategic plans grounded in the SDGs as a comparative advantage may display a distinct focus on goals and incorporate clear objectives and measures for implementation. It is essential to acknowledge that these perspectives are just two among various theoretical viewpoints regarding how universities can align with the SDGs. There is no universally correct approach for universities to

address this issue, as the most suitable approach will depend on the specific institution and its unique context.

2.6 Sustainability University Rankings

For the sustainable future, there are various higher education institutions which are moving into a revolutionary movement in the era that is mostly influenced by the urgent need of environmental protection and sustainable growth. Sustainability is that key component which is more than just a catchphrase but it's a fundamental element by which organizations are evaluated (Muñoz et al., 2020). The Sustainability University Rankings, which is a significant framework which has included green measures and the groundbreaking The Impact Rankings are at the center of these evaluations. It is more significant than ever for universities in developing a responsible global citizen as society has been struggling with the effects of socio-economic inequality, depletion of resources and concerns rising due to climate change.

The sustainability University Ranking works as a significant compass that helps universities in moving forward being environmentally friendly and socially responsible for their endeavors. All the universities can be evaluated on the basis of their environmental impact that will include the waste management, the usage of energy and the use of green metric. Concurrently, THE, which is the Times Higher Education have been expanding to focus on analyzing how universities are corresponding with the SDGs goals of the United Nations that highlights the dedication to comprehensive sustainability (Burmam et al., 2021). With a thorough understanding of the investigation, numerous effects of these rankings in higher education will be assessed that will showcase the requirements of fostering environmental sustainability, people's knowledge of global advancement and enhancing social responsibility.

THE Impact Rankings - The "Times Higher Education (THE) Impact Ranking has been providing a more comprehensive approach by taking a wider range of sustainability factors into consideration and in contrast to the traditional green strategies. THE Impact Rankings works to evaluate universities as per how much they have made a contribution to the Sustainable Development Goals of the United Nation (Atici et al., 2021). Indicators of research excellence predominate in the Times Higher Education World University Rankings, which are intended for internationally recognized universities with a strong research focus. On the other hand, the Impact Rankings investigate the potential influence of a university,

particularly through examining issues related to poverty, inequality, environmental degradation, climate change, peace, and justice.

Importance of Sustainability University Rankings in Higher Education - University administrators can concentrate on sustainable development initiatives by using sustainability-related university rankings, which link sustainability practices with institutional goals. Institutions of higher learning are crucial to sustainability. They play a major role in educating the next generation of leaders who will successfully execute the Sustainable Development Goals (SDGs) of the UN (Marginson & Van der Wende, 2007). Although the SDGs' implementation is taking place in a widely diverse geographic area, it is evident that higher education Institutions have a significant role in fostering a mentality that makes the SDGs' principles easier to spread. This examines the effects of higher learning on sustainability as well as the difficulties and obstacles involved in the process. Goal 1 (end impoverishment in every aspect of life everywhere), Goal 3 (make sure good health and promote wellness for all at all ages), Goal 5 (sex equality), Goal 8 (acceptable work and growth in the economy), Goal 12 (dedicated consumption and production), Goal 13 (the environment change), and Goal 16 (peace, justice, and strong institutions) are among the SDGs that benefit most from higher education.

Higher education has a significant influence on students' habits and ability to contribute to a thriving society as a transformative force. But in order to bring about the necessary transformation in education, sustainability concepts must be central to higher education institutions' strategies (such as their curricula and modes of operation) and must be deeply ingrained in their organizational cultures (Lukman et. al., 2010). The only way to have an external influence on society is to lead by example. Some examples of this include adopting the SDGs' important features, such as gender equality, waste reduction, and energy usage. For sustainability to become a reality, different ways of connecting with students are needed (e.g., varying student academic levels). Nonetheless, there are still significant problems that need to be tackled within and outside of organizations, like putting sustainability ideas into practice, the state of politics, and stakeholder interests.

Global Reputation and Recognition - To evaluate the commitment of the university towards sustainable development, the Sustainability University Rankings works as a benchmark which provides global recognition and helps the university to enhance their reputation. A higher ranking highlights the dedication and commitment shown by the university to environmental stewardship and social responsibility and make sure to attract environmentally

conscious individuals, faculty and partnerships that have similar mindset and values (Muñoz et al., 2020).

Encouraging Sustainability Initiatives - Higher education institutions, or HEIs, are crucial to transforming society into one that is more sustainable in the long run. Through research, outreach, education, and the creation and dissemination of information, higher education institutions set the path for sustainable development. The purpose of this research is to review the literature in order to ascertain how HEIs help sustainable development (Veidemane, 2022). An examination of international declarations and the scientific literature on education for sustainable development indicates that discussions of development, education, research, and training should take precedence. This highlights the need for universities to take a more active role in encouraging sustainable development routes, expanding, and disseminating knowledge, building capacity through training, and supporting the resilience of local communities.

Fostering Responsible Graduates - As the primary means of communication and the basis for the “sustainability mindset,” education is the driving force behind the development of sustainability. The term refers to, “a thorough approach to learning, transcending technical knowledge and understanding the basic principles of an ecologically sound system and a thriving community.” The sustainable mentality emphasizes business ownership, studies of the environment, conceptualization of systems, self-awareness, and management ethics, which challenges us to go beyond traditional managerial disciplinary silos (Atici et al., 2021). Academic institutions possess immense potential to impact the shift towards a more sustainable society. Staff members at the university and students are constantly contributing to an environmentally friendly atmosphere by incorporating sustainability ideas into their courses and research projects. However, there are a number of issues that will need to be taken into account for high school graduates. For example, interdisciplinary research is required in the various domains of knowledge to appropriately execute and adopt the Sustainable Development Goals. Students’ ability to solve problems is enhanced by the integration of many disciplines, which opens their minds to come up with answers for a variety of problems.

In addition to developing the next generation of sustainability leaders, higher education institutions bear a major duty for contributing to the accomplishment of the challenging SDG targets. A university’s standing and reputation around the world are significantly impacted by sustainability. Higher education is considered one of the “changing agents” in sustainability

development since it shapes adult perceptions. However, there are distinctions between where mindset reform occurs and where higher education is accessible. In spite of this, it is evident that a number of factors are linked to higher levels of education. These include, on the one hand, excellent access to clean energy, women's involvement in college and university, or external trade; and, on the other, low pollution, low employment vulnerability, and the death incidence for children under five. Moreover, a college degree is necessary for high-paying employment.

Institutions of higher learning must take the initiative to shift cultural norms and offer sustainability-focused curricula. This starts on campus, where the attitudes of university staff have a significant impact on how alumni change. For this, appropriate and tailored communication for different audiences is needed. All things considered, education is essential to reaching the SDGs and is crucial in building a community ready to support several of the SDGs, including gender equality, global citizenship, and respect for human rights. Despite its crucial role in social transformation, higher education institutions face a variety of internal and external issues and limits, including diverse audiences, the political environment, and stakeholder interests. These issues must be addressed in order to actualize the society people aspire to. Among these are the curriculum and moral principles.

2.6.1 Green Metrics Ranking VS SeAMK University of Applied Sciences

Main features of the Sustainable University Ranking is the green indicators that help in measuring the impact universities have on the environment. It helps in evaluating the impacts of factors such as emission of greenhouse gases, waste management, energy efficiency and environmental development (De la Poza et al., 2021). The green metrics are significant for the universities as they help them in developing sustainable policies and help them check on their sustainability goals efficiently and effectively.

However, the Green Metric Ranking highlights the necessity of quantifying our progress towards sustainability and provides a solid platform for the integration of the sustainability principle inside HEIs. As a result, this approach needs to be made more robust and scientific to be used to plan sustainability policies in universities. Over the past few decades, the rankings have become generally accepted in HEIs and have become an international phenomenon (Baltaru et al., 2022). Many of these rankings assess research, scholarly standing, and

educational excellence. Environmental metrics predominate over research and academic ones in the UI Green Metric World University Ranking. It resembles a ranking of environmental sustainability.

In the realm of higher Education, university rankings and impact assessments are of utmost importance, serving as versatile tools that go beyond mere recognition. SeAMK was registered under the green metrics rankings 2021 in the position of 420 (Green Metrics Rankings, 2021). The UI Green Metric World University Ranking is a ranking on green campus and environmental sustainability initiated by Universitas Indonesia in 2010 (Green Metric Rankings, 2024). Through 39 indicators in six criteria, UI Green Metric World University Rankings prudently determined the rankings by universities' environmental commitment and initiatives. In the present evaluation framework, there are thirty-nine indicators distributed across six criteria, namely Setting and Infrastructure (SI), Energy and Climate Change (EC), Waste (WS), Water (WR), Transportation (TR), and Education (ED). These specified metrics are the key parameters considered in the Green Metrics assessment tool (Green Metric Rankings, 2024).

In the below Figure 5 it emphasizes the SeAMK positions in the Green Metric Rankings for the years, 2020, 2021 and 2022.



Overall Rankings 2020

Rank 2020	University	Country	Total Score	Setting & Infrastructure	Energy & Climate Change	Waste	Water	Transportation	Education & Research
605	Seinäjoki University of Applied Sciences	Finland	4500	725	625	1275	400	675	800

Showing 1 to 3 of 3 entries (filtered from 911 total entries)

Previous **1** Next



Detail Rankings 2021 - Seinäjoki University of Applied Sciences

Rank 2021	Country	Total Score	Setting & Infrastructure	Energy & Climate Change	Waste	Water	Transportation	Education & Research
420	Finland	5900	800	925	1200	550	1150	1275



Detail Rankings 2022 - Seinäjoki University of Applied Sciences

Rank 2022	Country	Total Score	Setting & Infrastructure	Energy & Climate Change	Waste	Water	Transportation	Education & Research
506	Finland	6005	830	950	1200	600	1100	1325

Figure 5. SeAMK Green Metrics 2020-2022 (Green Metrics Rankings, 2020–2022).

With the well-known Green Metrics ranking for colleges and higher educational institutions, it can have numerous advantages. First it has the power to offer a comprehensive analysis of the university’s commitment and dedication to environmental sustainability and it considers factors such as waste management, carbon footprint and efficiency of energy (Balali et al., 2020). This can be a significant concept that can be useful for such organizations to reduce their environmental impacts. Also, when these ratings recognize them as a sound and dedicated educational institution it can improve their rating in their international community and can help them enhance their brand value. It can attract more students and teachers from

across the globe who are into saving environmental sustainability and developing opportunities for them in promoting sustainability.

The Green Metrics Rankings do have other limitations as well. The evaluation standards may not always be adequately addressed for the small subtleties for university’s environmental programs which can lead to simplified and inaccurate data. Furthermore, the ranking may not always consider the various challenges that the universities face due to lack of resources which can significantly impact the accuracy and fairness of the evaluation process (McArthur & Reeves, 2022). Particularly talking about the SeAMK University of Applied Sciences, there are certain advantages they face. Being a unique institution SeAMK has the power to modify its sustainability initiatives in fitting to the situations and requirements which can foster communities to develop focused strategies. This can lead to beneficial and effective projects that can make improvements in the areas of the university. However, there are various challenges that SeAMK also could face when initiating these projects.

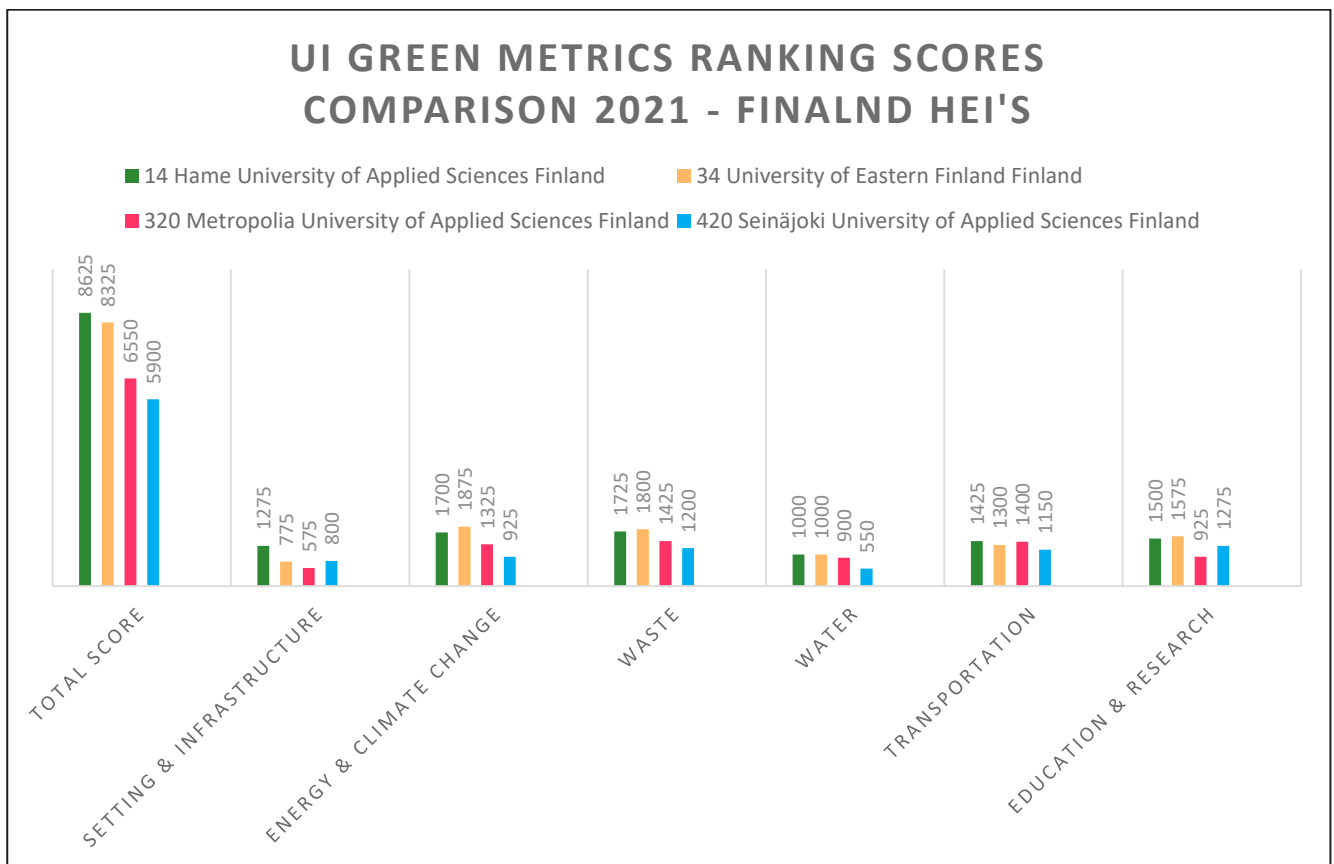


Figure 6. UI Green Metrics Ranking Scores Comparison 2021 – Finland HEIs (adapted from the data of UI Green Metric, 2021).

Figure 6 shows the achieved scores by the Finnish HEIs that participated in the UI Green Metrics Rankings in 2021. According to the graph, SeAMK has been ranked 420th in the ranking, and other HEIs represented in Finland are ahead of the ranking with a strong focus on committing towards environmental responsibility and sustainability across various categories. According to the data, SeAMK has a significant focus on education and research and gained the highest contribution to the score out of it. SeAMK has scored 1,275 points for the Education and Research sector and shows curriculum integration with sustainability education, fostering research on environmental challenges and encouraging its students towards sustainability projects (UI Green Metrics, 2021). Compared to that, Metropolia and Hame UASs have demonstrated comprehensive efforts across various categories. However, the University of Eastern Finland has demonstrated remarkable waste, energy, and climate change management efforts and practices. Even though SeAMK has participated in ranking, it needs more focus on every aspect to gain a prominent ranking in the UI Green Metrics in the future.

2.6.2 THE Impact Rankings vs SeAMK university of applied Sciences

The THE Impact Rankings stand as the exclusive worldwide performance assessments that measure universities' alignment with the United Nations' Sustainable Development Goals (SDGs) (Times Higher Education, 2023). These rankings carefully use calibrated indicators to provide a fair assessment across four key areas: research, stewardship, outreach, and teaching. In its fifth edition, the 2023 Impact Rankings comprehensively evaluate 1,705 universities across 115 countries and regions. (Times Higher Education, 2023). The Times Higher Education Impact Ranking (THE-IR) was launched in 2019 as the first global ranking at the institution level aimed at measuring the contribution of HEIs in each of the 17 SDGs. Torabian (2019) considers this impact ranking as a positive move that demonstrates HEIs (and the broader public) want to address SDGs.

In Figure 7, illustrates the participation of the THE impact rankings and the number of ranked universities in the past years starting from year 2020 to 2023.

2023 Participation

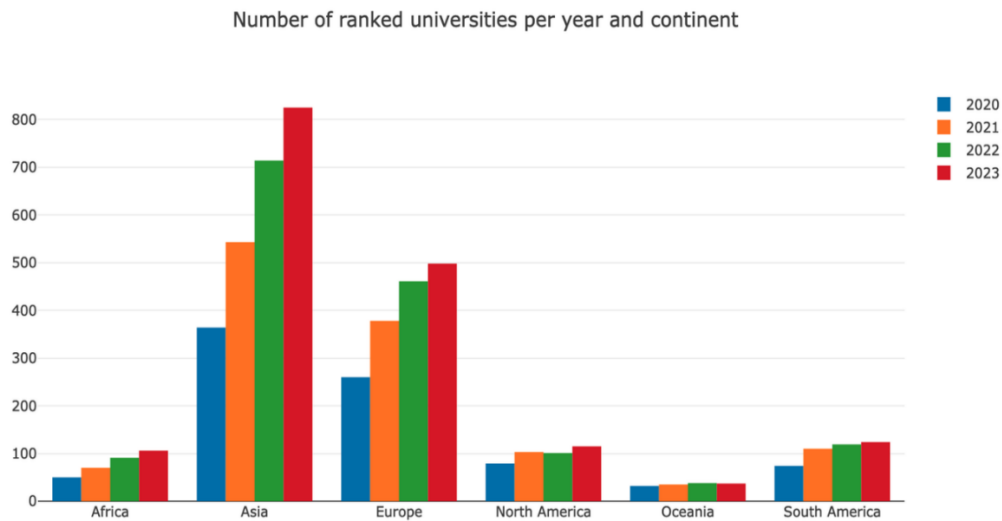


Figure 7. Number of Ranked Universities (THE Impact Rankings, 2023).

According to the impact rankings of Times Higher Education (2023), the number of ranked universities has been increasing steadily over the past four years. In 2020, there were just over 400 ranked universities. By 2023, this number had increased to over 700. As it emphasize in figure 8 it also shows that Europe has the most ranked universities, followed by Asia and North America. In 2023, there were over 300 ranked universities in Europe, compared to over 200 in Asia and over 100 in North America. Africa, Oceania, and South America have a much smaller number of ranked universities.

For our university, SeAMK, achieving a notable position in rankings like THE Impact Rankings signifies more than just institutional excellence; it opens doors to future opportunities. These rankings guide universities towards continuous improvement and global recognition. However, it's crucial to acknowledge the challenges they bring. Striving for such recognition requires thorough impact assessment, prompting universities to evaluate their contributions to sustainable development and societal progress. While this process is demanding, it's indispensable, providing universities with valuable insights to strengthen their commitment to global goals. Consequently, universities like SeAMK are not only addressing immediate challenges but also positioning themselves for a more influential and sustainable future in higher Education.

Moreover, especially in Finland, where only seven universities are currently ranked, this recognition holds extra importance. However, it's essential to recognize the challenges it entails. Pursuing this recognition means universities must carefully assess their impact on sustainable development and society.

In Figure 8 it emphasizes the universities in Finland, ranked in THE impact rankings for the year 2023.

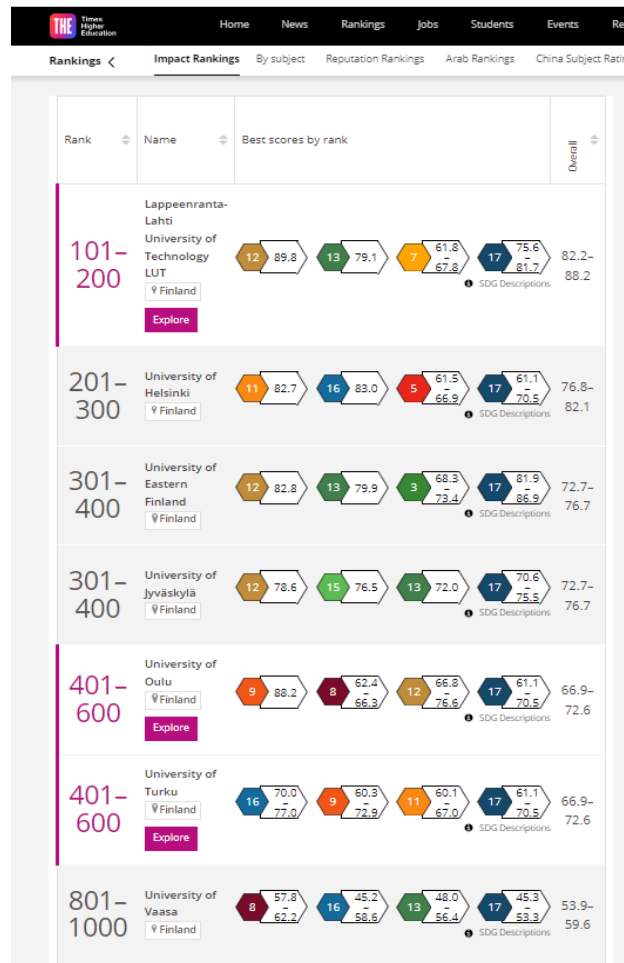


Figure 8. THE Impact ranking Universities in Finland (THE Impact Rankings, 2023).

Furthermore, seeking inclusion in THE Impact Rankings is a significant undertaking for SeAMK University of Applied Sciences. It represents a strategic commitment to aligning with the Sustainable Development Goals (SDGs) of the United Nations, not just a drive for a high position. This requires a thorough self-evaluation in the areas of outreach, stewardship, teaching, and research. By participating in this process, SeAMK pushes the institution to reimagine its role in tackling global concerns and goes above and beyond traditional measurements of academic performance. SeAMK's transformation into a worldwide force is

accelerated by the rankings, which promote cross-disciplinary cooperation and creativity. Through this transforming experience, SeAMK is positioned to play a significant role in influencing the story of responsible higher education and equip its graduates to deal with the complexity of a constantly changing global environment. In essence, the pursuit of recognition is a strategic move that propels SeAMK into a future where higher education actively contributes to sustainable development on a global scale.

2.6.3 Overview of Green Metrics Rankings

One of the most extensively adopted ranking systems in the contemporary world, the UI Green Metric ranking is a crucial initiative that was introduced by the University of Indonesia in 2010 (Boiocchi et al., 2023). This ranking system intends to facilitate the measurement and enhancement of the implementation of sustainability programs in the universities. The system follows top to bottom ranking and is availed by the HEIs. The Green Metric ranking system is used for the global assessment of the sustainability of universities. Under the ranking system, the participants are required to provide evidence for supporting their claims which are evaluated by the reviewers for assigning the scores. After counting, the scores are weighed for the final computation. The system encourages voluntary participation and the involvement of 780 universities from 85 nations has been evidenced in the recent ranking (Sustainability Tracking, Assessment & Rating System, 2022). The ranking system ensures free availability of scores. However, the underlying data is inaccessible to all participants.

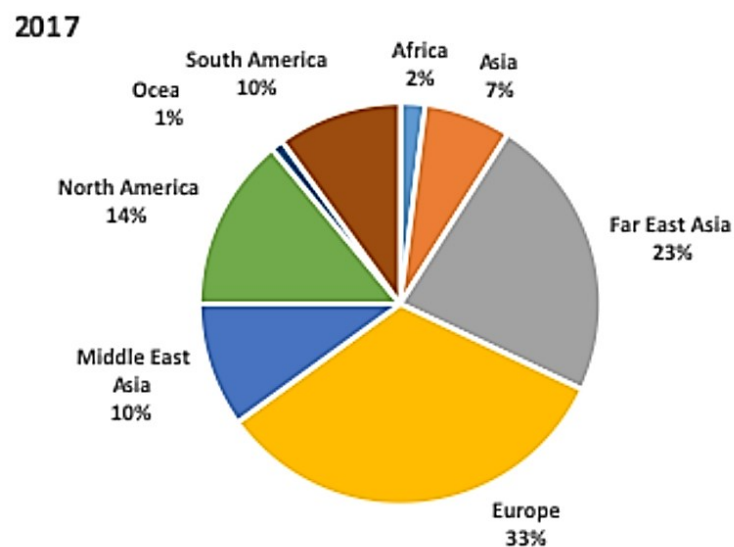


Figure 9. Proportion of Regions in Green Metric Ranking (Atici et al., 2021).

Under the ranking system, the evaluation of the performance of the institutions, under each category, is made on the basis of a series of metrics and indicators. The Green Metric ranking system currently comprises six major categories. The category of Setting & Infrastructure has a weightage percentage of 15%. The indicators of this category comprise the ratio of open space to total area, the campus area under forest cover, planted vegetation, and water absorbance levels, among others (Atici et al., 2021). The weighted percentage of the second category, Energy & Climate change has been computed to be 21%. The indicators for this category include implementation of smart building, the use of energy efficient appliances, the number of renewable energy sources, etc.

The third category, Waste (18%), can be determined by metrics such as the programs for reducing the generation of paper and plastic wastes, recycling programs for the university wastes, sewerage disposal, the handling of toxic wastes, treatment of organic and inorganic wastes, etc. The indicators for Water (10%) include the implementation of the water recycling programs, water conservation programs, the adoption of water efficient appliances, and such others. The indicators for transportation (18%) include the pedestrian path policies within the campus, transportation initiatives undertaken for reducing the number of private vehicles in the campus, etc. Education and Research comprises another important category which comprises 18% of the sub dimensions. This category is determined by factors such as the number of scholarly programs associated with ecology and sustainability, the scholarly publications on sustainability and environment and others (Atici et al., 2021).

However, the UI Green Metric ranking system undergoes constant renewal over the years due to which the system attracts both positive and negative reviews. Prior to 2012, the Green Metric Ranking system followed the old ranking system which lacked the category for “Education and Research”. Therefore, the new scoring system (Figure 10) brought about a significant change in terms of the introduction of categories. Remarkably, the “Energy and Climate” category was evidenced to produce the highest impact even in the old scoring system with a notable 28% (Maçin et al., 2020).

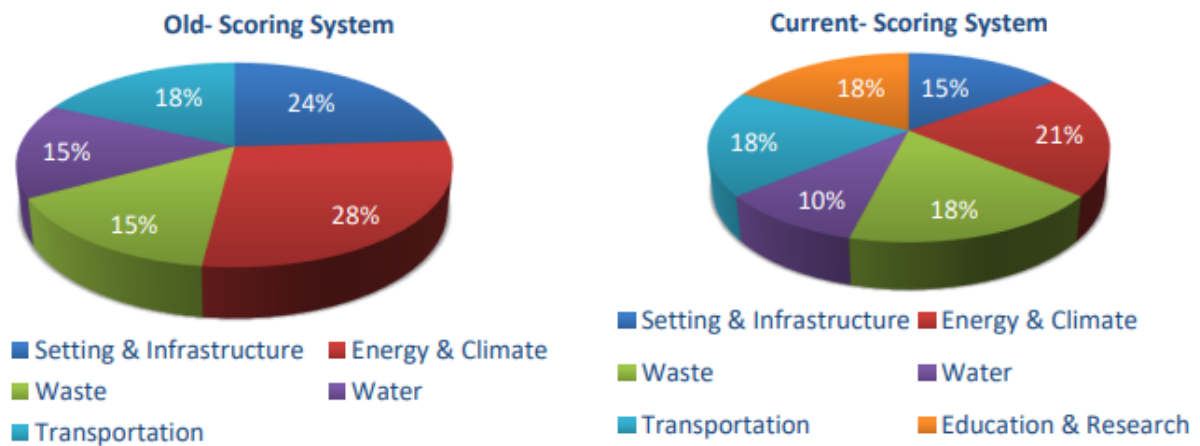


Figure 10. Old and Current scores of Categories in the UI Green Metrics (Green Metric Rankings, 2020).

As per the Green Metric system, higher educational institutions score higher by using a larger number of the different kinds of renewable energy sources. This is, however, considered to unnecessarily penalize the institutions which deploy only a few renewable energy sources. As such, the HEIs can simply add an energy source that is already in use irrespective of the overall power provided the source. In accordance with the Green Metric ranking system, the educational institutions which emit lower levels of greenhouse gases (GHGs), such as carbon dioxide, secure higher scores over the ones emitting higher amounts (Boiocchi et al., 2023).

Such measurement is based on the relevance of the CO₂ equivalent with the total population in the HEI. The inclusion of these criteria is also subject to contradiction as the guidelines merely serve as recommendation rather than a consistent procedure for all HEIs to follow. Hence, the institutions have the option to follow the recommendation or adopt another methodology for computation of carbon emissions. Nevertheless, this ranking system is often considered to be a “self-evaluative” assessment tool for assessing the sustainability of green campuses through the measurement of their sustainability efforts (Safarkhani & Örnek, 2022). While only 95 universities applied for ranking under the system during its first year, the number expanded tenfold within a decade reaching around 911 institutions (op. cit.).

2.6.4 Overview of THE Impact Rankings

The Times Higher Education offers a comprehensive ranking system for higher educational institutions through its Impact Ranking system. Besides the Impact Rankings, the Times Higher Education also administers different kinds of other higher education rankings. The

Impact ranking system may be used by higher educational institutions which are indulged in teaching at undergraduate or graduate postgraduate levels and the ones which have a good reputation. The methodology for the Impact Ranking System is developed by Times Higher Education in partnership with the Elsevier and Vertigo Ventures. Such methodology for this ranking system is developed in consultation with individual universities, sector groups and other academic bodies. The reputation of the institution is taken into consideration in the “THE Impact Rankings” (Marginson & Van der Wende, 2007).

The Impact Ranking was launched by the Times Higher Education in 2018-19. The ranking aimed at capturing the impact that universities have on society on the basis of their success in achieving the SDGs laid down by the United Nations (University of Galway, n.d.). The scope of the Impact rankings revolves around the 17 sustainable development goals, and they are, therefore, structured accordingly. The performance of the institutions on each sustainable development goal is assessed on the basis of a series of metrics that have been determined for each SDG. The aggregate ranking involves the university submitting data on the 17 SDGs and a minimum of three other SDGs. As such, the universities are obligated to provide data on 17 SDGs and a minimum of three other sustainable development goals which are to be included in the final ranking. Furthermore, Times Higher Education is also responsible for publishing rankings by each of the individual SDGs. The Impact Rankings are the only international performance assessment tools which draw a relation between universities around the globe and the United Nations’ SDGs. The third edition of the rankings was published in 2021 and covered 1118 universities spread across 94 nations and regions (Nogueiro & Saraiva, 2023, pp.297–310).

As such, the THE Impact Rankings 2021 could be perceived as international performance tables which analyze and assess universities in connection with the fulfilment of the 17 sustainable development goals. Under the system, the performance in each area is evaluated through a specific methodology which relies on the selected SDGs. Each of the SDG is further governed by a specific set of indicators. Such indicators are utilized in assessing the progress of the university towards a specific goal (Nogueiro & Saraiva, 2023, pp.297-310). The “THE Impact Rankings” follow a top to bottom approach to ranking. The THE Impact Ranking system encourages voluntary participation. In the recent rankings, 860 universities across 85 nations have been reported to have been engaged with the THE Impact Rankings out of which the overall ranking comprises 768 universities (Sustainability Tracking, Assessment

& Rating System, 2022). The participants enjoy free access to an online data collection portal with zero cost included in yearly rankings.

The Times Higher Education Impact Rankings have also been considered an innovative and a crucial way for ensuring that a higher number of young refugee men and women gain accessibility to higher education around the globe. Several systematic and practical impediments prevent the disadvantaged community students from partaking in higher education (Impact Rankings Methodology, 2023). The Impact rankings serve as a tool to overcome such issues. The THE Impact Rankings also ascertain the open availability of all scores to all the participating institutions. However, the data beneath may be accessible to all the participants for a certain amount of fee.

In terms of the timeframe for the process of THE Impact rankings, this ranking system requires the yearly reporting for a given period to be included within each year's ranking. The metrics are updated on a yearly basis. The participating institutions benefit from THE Impact rankings in several ways as they receive positive recognition for the public as top performers in achieving the 17 sustainable development goals along with overall sustainability. The THE Impact rankings also provide opportunities to the participants for benchmarking their scores and learning from the best approaches and practices employed by other institutions. Most importantly, the THE Impact rankings serve as a model for the compilation of information regarding the contribution of educational institutions to the SDGs. The Impact Rankings have been so designed that it enables the participation of as many higher educational institutions as may be possible (Impact Rankings Methodology, 2023). To that end, the Impact rankings, however, limit the measure of data that may be necessary for participation. As such, the Impact rankings encourage participation of the institutions which bear a low likelihood to partake in traditional rankings.

The 2023 Impact Rankings is the fifth edition, and the overall ranking includes 1,705 universities from 115 countries and regions. (Times Higher Education Impact Rankings, 2024) This ranking system uses carefully chosen indicators to provide fair and thorough comparisons in four main areas which are research, stewardship, outreach, and teaching. According to this ranking, it is intended to measure the contribution of universities against each of the 17 goals. This ranking evaluates universities at both undergraduate and postgraduate levels without imposing specific research criteria. According to Bautista-Puig et al. (2022) The methodology consists of a micro level (scores for each SDG) and a macro-level. Furthermore, Metrics for

each SDG are categorized into research, continuous, and evidence metrics, sourced from external databases (Scopus) and institutional data provided by universities. (Bautista-Puig et al., 2022)

According to Times Higher Education Impact Ranking Methodology (2023) A university's annual total score is computed by combining its score in SDG 17 with the best three results on the remaining 16 SDGs. SDG 17 contributes 22% to the total score, while the other SDGs each have a weight of 26%. (Bautista-Puig et al., 2022) Universities are assessed based on a unique set of SDGs, reflecting their specific focus. The overall ranking score is an average of the total scores from the last two years. To standardize scoring across SDGs, the score for each SDG is scaled, with the highest score set to 100 and the lowest to 0 in the overall calculation. This ensures fair treatment, considering minor differences in scoring ranges for each SDG. The scaled scores determine a university's strengths in specific SDGs, which may not necessarily align with the ones where the university holds the highest or unscaled scores.

So according to article by (Bautista-Puig et al., 2022), on a larger scale, the overall university score is based on four Sustainable Development Goals (SDGs). As it illustrates in Figure 11, SDG17 contributes 22% to the total score for all universities, while the other three SDGs are chosen based on each university's top three highest scores, each carrying a weight of 26%, with SDG17 excluded from this selection.



Figure 11. Calculation of the overall score (THE World University Rankings, 2021).

The THE Impact Rankings are a new methodology that assesses HEIs and is still changing according to the evolving aspects and global trends. As it matures, the metrics and the methodology will evolve with the future aspects related to sustainability and will strengthen its ability to adapt the capabilities of university contributions to sustainability. Apart from that, THE Impact rankings could stimulate sustainable practices in higher education worldwide for the greater good with the continuity of the United Nations' global trends and goals. Hence, universities that are involved in sustainability and social responsibility should evolve in these

rankings, and HEIs could use the results for the institutional progress benchmark and identify improvement areas. The initializing of the SDGs for achieving the targets of the HEIs would empower them to make a massive impact on the tactile difference in the world. With the persisting participation and relevance improvement of the SDGs, the THE Impact Rankings would have the probability of generating transformative change within the HEI sector and eventually achieve accelerating progress towards the determined goals listed in the United Nations' 2030 Agenda (United Nations, 2015).

2.7 Ranking Analysis and Comparison

According to the Green Metrics Ranking Methodology, there is a complete way to look at and compare how environmentally aware educational institutions around the world are. There are six main basic parts to this method. They are building the foundations for things like education, research, transportation, energy, climate change, waste management, and water conservation. Boiocchi says that each degree is given a weighted framework that shows how important and relevant it is to the total score framework (Boiocchi et al., 2024). So, the main goal is to make higher education better, make more people aware of environmental problems, and strengthen the ways things are done now. By taking a broad approach, they need to keep up with new ideas and work together in the academic community. This will make it possible for schools to support and encourage business ideas. The Green Metrics Ranking Methodology stresses the importance of using eco-friendly methods in all parts of college life. It could be a very useful tool for encouraging environmental responsibility in higher education.

Also, the Impact Ranking Methodology gives a structured way to evaluate and distinguish between companies' social and environmental impacts, mainly by looking at how they contribute to global issues and support the SDGs. There are four parts to this method: setting effect goals, picking key markers, collecting, and analyzing data, and finally sharing results. One of the main goals is to give businesses a constant and clear way to show and rate how they help reach bigger environmental and social goals. By using this method, establishments can show how they have helped others, find places where they can improve, and compare themselves to competitors. Reporters (2023) convey that using the Impact Ranking Methodology to make businesses more accountable and open might be a good way to get them to act in a way that helps the economy grow. The way this approach is put together not only changes how their results are judged, but it also makes it easier to make good decisions. This

encourages people to always get better and work together to solve world problems. In the following a detailed evaluation of these two methodologies and their prospective comparison with consideration of SeAMK is contextualized.

2.7.1 Green Metrics Ranking Methodology

The University of Indonesia has been in charge of the original UI Green Metric World University Ranking, which is also called the Green Metrics Ranking Methodology, since it began in 2010. This method is famous for focusing on checking the environmental policies and green initiatives of colleges and universities around the world (UI Green Metric, 2023). As a guideline, organizations that want to improve their impact on the environment and better fulfil their duty as responsible environmental conservators can use it. The Green Metrics Ranking Methodology is made up of several parts and is based on a framework that was carefully thought out. Each pillar was carefully made to include and rate different environmental actions taken by academic organizations.

A lot of different factors are used by the Green Metrics Ranking Methodology to judge the colleges that are taking part. There are six main parts that deal with a lot of important natural issues for life (Figure12). The different parts, like "Education & Research," "Waste," "Water," "Setting & Infrastructure," and "Energy & Climate Change," show how complicated university sustainability efforts could be (UI Green Metrics, 2023).

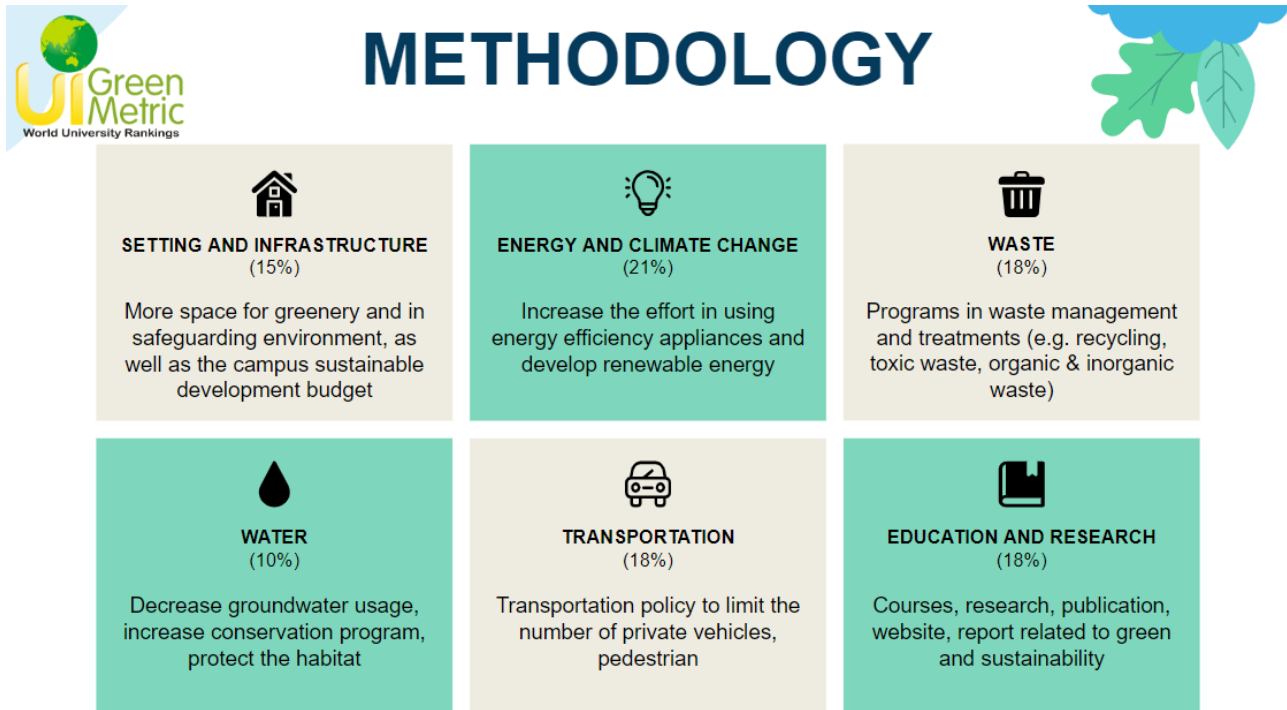


Figure 12. Green Metrics Ranking Methodology (UI Green Metric, 2023).

This method has several parts that work together to make sure that environmental laws and practices are also considered in the review. There are also studies and teaching activities that are looked into that help spread information about sustainability and new ideas.

The careful way of gathering data is an important part of the Green Metrics Ranking Methodology because it makes sure that the results are correct and reliable. Schools that want to take part must give a lot of information in each area. This gives the officials evaluating the school a fuller picture of its environmental wins in more areas. The process of collecting data is very important because it lets schools all over the world compare and analyze their sustainable efforts (Sinay Maritime data solution, 2021). This helps the business of higher education find the best ways to do things and the places where they can improve.

Furthermore, in Figure 13, the key indicators of the Green Metrics Rankings are shown, and further explanation about the ranking methodology will be provided.

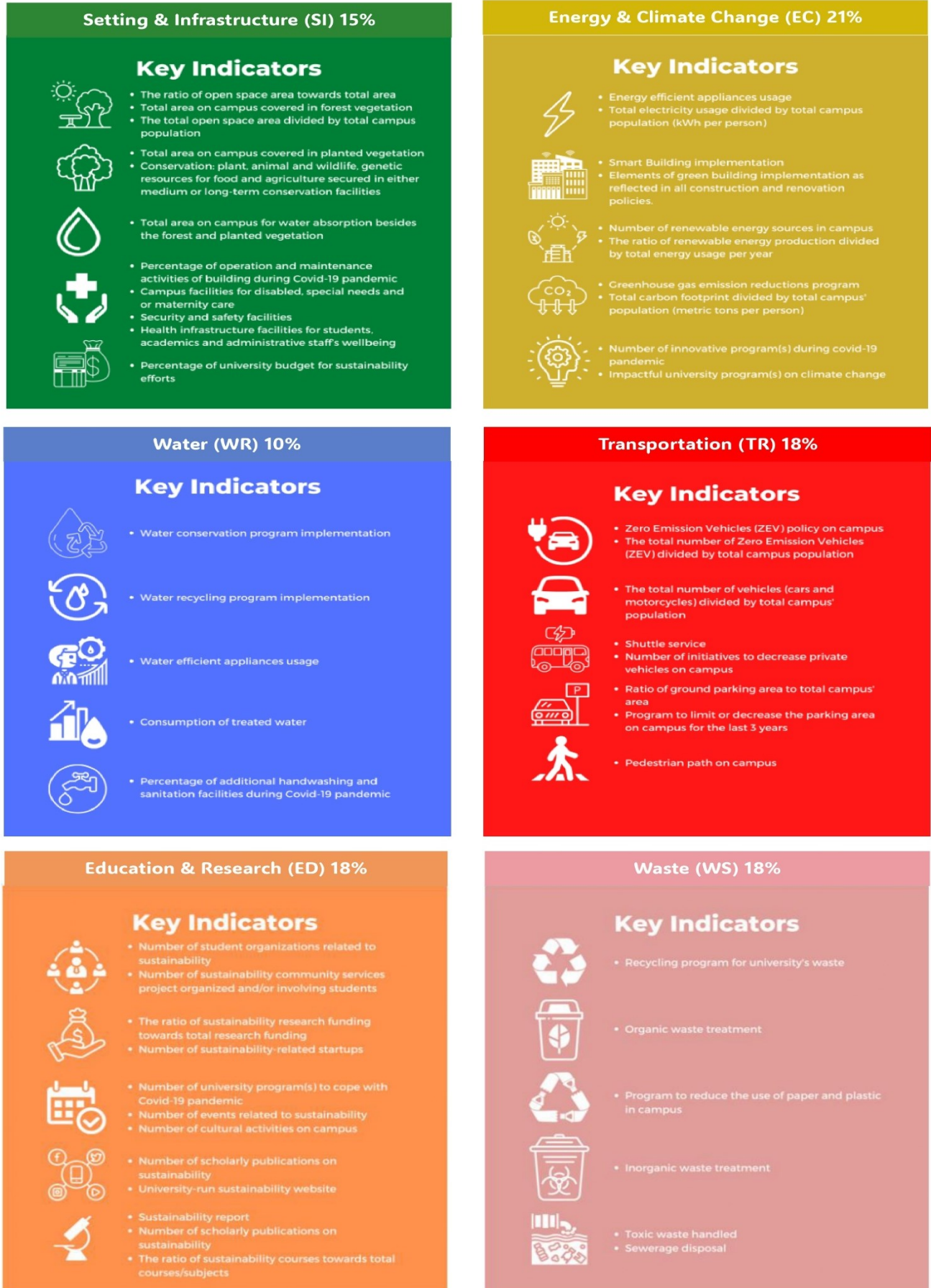


Figure 13. Green Metrics Ranking Methodology Key Indicators (UI Green Metrics, 2023).

A difficult formula is used by the Green Metrics Ranking Methodology to give weights and scores to the data that has been collected. The method makes sure that the general picture shows the different levels of impact that different aspects of sustainability have by giving each one a weight based on how important it is. After institutions submit their data and are given a weight, their performance is carefully looked at. This results in a full review that shows them what they can do better, what they're doing wrong, and how they can make progress in their sustainable programs (Nogueiro & Saraiva, 2023). Not only does the strict scoring process speed up the process of making rankings, but it also gives universities useful information about how they stack up against other institutions, which promotes ongoing improvement and new ways of being environmentally friendly.

2.7.2 THE Impact Ranking Methodology

According to the 2019 THE Impact scores, colleges and universities have done a lot for society. This makes them different from the usual ranks of schools. The SDGs of the United Nations are used to figure out impact scores. The SDGs are a big plan to deal with many problems around the world, such as poverty, climate change, food security, and schooling. The SDGs are the most important part of the grading process because they go beyond the usual academic standards and give scores of effects (Marginson & Van der Wende, 2007).

There are many parts to the Impact Rankings that measure how much different groups support sustainable development (Figure 14).



- **Engaging and involving** staff, students, alumni and external partners in the SDGs
- **Research for sustainable development:** linking our key research programmes to the SDGs
- **SDGs in teaching, learning and the student experience:** Stellify, UCIL, graduate attributes
- **SDGs in University operations**
- **Scholarships and bursaries in Global South** linked to SDGs – Equity and Merit programme
- **Global alumni volunteering** linked to SDGs
- **Performing well:** 1st in UK (2/2 years) in THE SDG Impact Rank

Figure 14. THE Impact Ranking Methodology (THE Impact Rankings, 2023).

The above signs show a lot of different things that academic groups do and want to do, like how they work with the community, the results of their study, and their plans for helping to reach the Sustainable Development Goals. These parts give a full picture of the social benefits universities have by looking at many parts of how universities exist and work. In addition to how well they do in school, students are also judged on how they might help solve world problems.

In order to make the Impact Rankings, the successes of academic schools are judged by certain standards. In traditional academic structures, standing and intellectual achievements are often given more weight. The Impact Rankings, on the other hand, look at how important different parts are in relation to the SDGs and how well they work to solve big social and economic problems (Bautista-Puig et al., 2022). Not only should schools be judged on their results, but also on how well and how practically they try to help reach sustainable development goals. This would be a more thorough and serious way to judge their social impact. The Impact Rankings also stress how important it is to be open and responsible during the whole review process. The Impact Rankings make things more open and accountable by demanding full details on the data collection methods and processes. This lets the groups that are taking part see how their work is judged, which motivates them to do even better next time. The Impact Rankings push people to be open and responsible. They not only show the pros and cons of colleges, but they also make people more determined to work towards sustainable development goals and positive social changes around the world.

2.7.3 Comparison Between Green Metrics Ranking Methodology and THE Impact Ranking Methodology

The Green Metrics Ranking Methodology was made by the University of Indonesia, and THE Impact Ranking Methodology was made by Times Higher Education. Two different methods are used to judge the social impact and environmental actions of colleges. Both methods want to be more environmentally friendly and help solve problems around the world, but they have very different goals, strategies, and standards. In the Green Metrics Evaluation Methodology, environmental sustainability is one of the things that are looked at when schools are graded (Times Higher Education Impact Rankings, 2024).

Plans to control waste, save water, and use energy more efficiently are all getting a lot of attention right now. These guidelines based on numbers have been made. On the other hand,

THE Impact Ranking Methodology uses a set of factors that are connected to the SDGs. These factors include many things that are important to society, such as school success, community service, help with government programs, working together on projects, and more. The sustainable development goals can be reached with the help of all of these things. These traits help give a fuller picture of universities' general impact because they include more types of efforts and projects meant to make society better. Third, each part of the two scores is given a different number of points and weights. The Green Metrics Ranking gives each factor a weight based on how important it is for figuring out how environmentally friendly a place is. Schools get grades based on how well they do in this particular subject. This method lets you look closely at how institutions protect the environment, showing you both their strengths and areas where they could improve. Instead, the Impact Ranking gives factors weights based on how well they fit with the SDGs and how they help solve world problems. Institutions are judged not only on how often they help reach sustainable development goals, but also on how well they do their job and how important they are seen to be in this complicated process (Times Higher Education Impact Rankings, 2024). Because of this, their impact on society is being looked at more closely.

The Green Metrics Ranking Methodology puts transparency first by giving a lot of details about the criteria, how the data is collected, and how the rankings are calculated. This information helps schools understand how their work is being graded. This awareness makes people more likely to adopt environmentally friendly habits and helps the company's overall efforts to be more environmentally friendly. The Impact Ranking Methodology is also open and easy to use because there is a lot of information about how the data was gathered. Both methods try to encourage people to be open and responsible so that things keep getting better and good social changes happen faster.

The Green Metrics Ranking Methodology looks closely at how well institutions take care of the environment, with a focus on long-term results. This method effectively brings attention to businesses that care about the environment, but it might miss other important social issues in the process. The Impact Ranking Methodology, on the other hand, looks at how schools help with a lot of different issues that the SDGs try to solve. Taking a more complete look at things like this makes it possible to find out more about how colleges affect society, such as how they work to address global issues and safeguard the environment (Impact Rankings Methodology, 2023).

The way that SeAMK's approach to sustainability is judged will vary depending on the score and how it is weighted. The weights of the Green Metrics Ranking criteria are based on how useful they are for judging environmental sustainability. SeAMK may be good at some things, but a close look could show that they are also good at other things and show them where they can improve their efforts to protect the earth. On the other hand, THE Impact Ranking is more complex. It gives more weight to measures based on how well they match the SDGs. This method considers the worth of both number and quality. The total number for SeAMK will be higher because it takes a fuller approach to social effect, which includes community involvement, study results, and institutional policies.

SeAMK puts a lot of effort into creating systems that make sure it is accountable and open at all levels it works in (Impact Rankings Methodology, 2023). The Green Metrics Ranking Methodology likes things to be clear. This helps SeAMK understand the standards that are used to judge its environmental success, which makes making the needed changes easier. By showing the factors used to judge SeAMK's social wins, THE Impact Ranking Methodology also promotes openness and responsibility. This creates an environment that is always good for growth and makes sure that SeAMK's actions are in line with world goals for sustainable development.

3 Methodology

In formulating the methodology for this thesis, we have opted for a mixed-method approach, integrating both qualitative and quantitative research techniques. The overarching objective is to conduct a rigorous and systematic evaluation of SeAMK's alignment with the SDGs and its pursuit of a prominent position in the THE Impact Rankings.

To commence, an exhaustive review of existing literature will be undertaken, encompassing in-depth analysis of academic articles, reports, and documents pertaining to SDGs, Higher Education, and university rankings. This literature review serves as the foundational step to comprehend the global context and discern prevailing best practices. Additionally, as we collaborate with SeAMK's Sustainability Committee, we will be using both qualitative methods, like interviews, and quantitative methods, surveys. The interviews and surveys help gather insights from key people within the university, while the quantitative side involves analyzing specific indicators related to sustainability and societal impact, including how SeAMK performs in relevant university rankings.

By combining both qualitative and quantitative methods, we aim to get a complete picture of SeAMK's sustainability efforts. This approach sheds light on the university's progress in both the Green Metrics and THE Impact Rankings, giving us a well-rounded view of its journey in sustainable practices and impact assessment.

3.1 Research Approach

In this thesis, we use a mixed-method approach, combining both qualitative and quantitative research methodologies. The qualitative aspect involves an in-depth exploration of SeAMK's sustainability principles, policies, practices, viewpoints, and insights from key individuals from the SeAMK sustainability committee, collected and processed initially. Simultaneously, the quantitative component comprises surveys distributed to a large sample, focusing on sustainability practices and relevant details related to the Sustainable Development Goals (SDGs) and other relevant variables. This mixed method approach is chosen to capture the richness of qualitative data, supplemented by the statistical analysis provided by quantitative data. This comprehensive strategy ensures a thorough examination of SeAMK's adherence to the SDGs and enhances the validity of our findings through diverse sources and methodologies.

3.2 Data Collection Method

For this thesis, we will use both primary and secondary data collection methods. Primary data will be gathered through semi-structured interviews and surveys, focusing on members of the Sustainability Committee, including the president, and individuals actively engaged in sustainability initiatives at SeAMK. These interviews aim to extract qualitative insights regarding challenges, opportunities, and strategies associated with the university's sustainability efforts, particularly emphasizing the impact of initiatives aligned with the SDGs. Additionally, surveys will be distributed among a diverse group within the university community to collect quantitative data on perceptions of SeAMK's sustainability initiatives, awareness of SDGs, and suggestions for improvement.

Secondary data will be derived from reputable sources like academic journals, industry reports, and established online databases. This secondary information will serve as a foundational knowledge base, offering insights into global trends, best practices in sustainable development, and relevant theoretical frameworks applicable to SeAMK's sustainability initiatives. The secondary data will be integral in supporting and framing the primary data collected, ensuring a thorough analysis of our thesis.

3.3 Data Analysis

The data analysis method consists of two key processes that examine how well information matches with the SDGs. The first key process is qualitative content analysis, which categorizes and evaluates material from interviews and document reviews. This research uses both deductive and inductive methodologies to determine which SDGs are prioritized by SeAMK and to assess its strengths and shortcomings regarding each objective. The deductive method is based on the four pillars of the holistic framework used to assess HEIs alignment with the SDGs, which are teaching, research, campus, and outreach. From the holistic point of view, the inductive technique focuses on detecting developed themes and patterns in the acquired data. The next process is to undertake a quantitative impact analysis. With the impact analysis, we could identify SeAMK's weaknesses and strengths, which can be used to determine processes to achieve SDGs.

4 Case Study of SeAMK

This case study will focus mainly on the SeAMK university of applied sciences sustainability initiatives and practices, and the main considerations related to Times Higher Education impact rankings. In this case study we will focus on how well SeAMK university of applied sciences are aligning with the United Nations sustainable development goals (SDGs).

In today's modern time, sustainability has become one of the prime factors that work as a significant concept for all types of institutions. Particularly, in the educational system it has become the significant indicator that assesses the influence and effectiveness of universities. There are various forms of rating systems that are developed and designed to contrast and evaluate the practical implications of sustainability and policies that these organizations put into place for continuous improvement (Muñoz et al., 2020). This is a segment that will look at the SeAMK University of Applied sciences as a particular case study which will explore the localized sustainability activities as well their global rankings like the Green Metrics Ranking. From the university of Indonesia, the Green Metrics Ranking has been developed and it is significantly known as a global assessment tool or technique that helps the educational institutions to analyze their sustainability initiatives all over the world (Green Metrics Rankings, 2021). It considers various factors such as the element of waste management, minimization of waste, efficiency of energy, environmental impacts and it tries to offer a comprehensive analysis and understanding of the sustainability efforts made by the university.

As one of Finland's main Universities of applied sciences, SeAMK actively works towards achieving environmental sustainability standards. The university has been internationally accredited for using global rankings like the Green Metrics (Ali & Anufriev, 2020). However, these rankings help SeAMK the baseline that enables it to compare it with other counterparts of the world and draws international student's attention about environmentally conscious people and encourages them to cooperate with other prominent sustainability HEIs.

It has been already studied that Global Rankings have various advantages and disadvantages as well. Even though they have been trying to provide consistent means of analysis. Positively, these are the rankings that have been offering a comprehensive and concise overview of the initiatives developed by the university. This helps in enhancing the international standing of the university and makes comparisons across various significant locations. However, these disadvantages would include the significant possibility of oversimplifying the

intricate sustainability programs that fail in considering the geographical factors or various challenges faced by certain organizations (Green Metrics Rankings, 2024). Contrary to this, the sustainability initiatives developed by SeAMK is firmly rooted in the context of local development in relation to that of global rankings.

The university adjusts its processes in meeting the unique requirements and challenges encountered by the community of Finland at a larger context. With the help of local stakeholders, such significant strategies help and enable SeAMK in carrying out focused and relatable initiatives of sustainability. The localized sustainability initiatives of SeAMK have been offering various opportunities like there are some of the activities that include direct influence within the neighborhood (Atici et al., 2021). The university tries to strengthen the reputation it has, and it acts as a responsive and accountable institution in tackling the various regional problems they face. These are the programs that may not be internationally well-known or recognized but can be featured in the international rankings which can have a significant effect on the university's side on developing exposure and attractiveness to a wider range of people.

SeAMK is highly dedicated and committed to sustainability initiatives, and it can be seen in various areas like how it deals with its waste management, its energy efficiency and how it develops its curriculum. In reducing the carbon footprint, the university has made significant investments where they make the use of renewable energy sources extensively such as solar panels (Shi & Lai, 2013). The university actively fosters recycling and waste reduction in the vicinity of its campus, and it adds on to the university's accomplishments of making a huge contribution to sustainability development (Mohamed, Noor & Sing, 2020). To make sure that the students receive the right instructions and appropriate training on the issues of environmental impacts and sustainability initiatives the university tries to include sustainability processes into its academic planning. This helps to encompass a significant and comprehensive strategy which remains consistent with the goals of SeAMK which makes its students not just graduate with a degree but allow them to have a comprehensive understanding about their environmental standards and make them an environmentally conscious and responsible citizen of the world.

4.1 SeAMK's Engagement with SDGs

SeAMK has started an ambitious participation in the UN SDGs as an integration to cover the university's central strategic planning. The SeAMK emits renewable willingness to bring about the transition to environmentally friendly and responsible business in the planet's process, by applying circular economy principles in teaching, research, and operations. The organization has established a goal to work towards achieving the global sustainable development goals. The SeAMK will utilize the tactic of strategic planning, implementation of concrete actions as well as regular monitoring and follow-up of progress so as to have a meaningful contribution towards a sustainable future. The leading aspect of SeAMK sustainability campaign is an ambition of reaching "zero CO₂ emission" by the latest 2030 (SeAMK, 2024). This objective, which serves as a pivotal point of the institution's program, clearly indicates its commitment to decrease the amount of pollution it causes and improve the use and conservation of natural resources.

In order to transform our goal into an actual transition, SeAMK has put to implementation an array of undertakings that are focused on lowering CO₂ emission levels and instilling the culture of environmental conservationism throughout our society. A very important task for SeAMK is carbon foot printing, which gives unbiased information of the organization's damage to the environment because of their activities. By applying data about the use of energy, transport and producing exercise, the working group for sustainability of the university knows the carbon emissions profile of its issues and points where the improvement is possible. This data-driven approach facilitates the campus in determining the milestones which need to be attained and the metrics by which they can be measured in pursuit of the goal of carbon neutrality.

Along with the organization of its carbon footprint, SeAMK is going to combine its lecturing on the green topics with studying sustainable development academically, that is through the foreseeing introduction of a special study courses on sustainable development. These courses, developed for every SeAMK student, give a possibility for raising awareness and ultimately leading to the improvement of sustainability within the university campus. SeAMK is raising students with the practical knowledge and skills for sustainable development, and as a result, it lays the ground for leaders of tomorrow who'll be in the position to create positive things. SeAMK has practiced a suite of tools engulfing CO₂ emission from journeys to campus, trips, real estate activities, food services and supply chain operations. These measures

include the examination of new transport choices, electricity vehicles and cycling, the organization of distance meetings instead of flight traveling and the embrace of sustainable purchases of used stuff.

The SeAMK targets to do this by minimizing its environmental impact and, furthermore, encourages its consumers to be accountable by using resources efficiently. Two crucial pillars of SeAMK's sustainability strategy are the unprecedented potential of Digitalization to make services more accessible, inclusive, and driven towards achieving sustainable development goals. SeAMK is able to automate bureaucratic processes and save paper by using different online platforms and electronic data processing systems (SeAMK, 2024). In addition, it provides a possibility of virtual mobility for students and staff. The digital technology adoption significantly raises the productivity of operations and hence assists the campus to conform to a more environmentally sustainable campus.

4.2 Identification of Key SDGs

The university agrees with the strategy set by the UN in terms of developing a sustainable planet and will do its best in the field of sustainability through the identification of single areas of interest. The primary SDGs that embrace the global environmental integrity, social equity and economic progression are the key SDGs which show the SeAMK's willingness to perform the environmental stewardship, social inclusion, and economic prosperity in a sustainable manner. Such that SeAMK creates a strategic linkage between its priorities and the SDG, the higher objectives of equality, resilience and sustainability can be reached in the long term.

SDG 3: Well-being and Excellent Health - SeAMK is aware that good health is the cornerstone of a flourishing society, not only the absence of illness. In order to promote students' and employees' overall well-being, university invest in accessible facilities and give mental health assistance top priority in our community, which is where its commitment to SDG 3 begins. In order to promote innovation in nursing practices and guarantee access to high-quality, equitable healthcare, SeAMK has actively engaged in partnerships with healthcare institutions in the area and beyond. Important insights are produced by SeAMK's committed health promotion research initiatives, particularly when concentrating on inclusive solutions that improve the health and wellbeing of our varied community.

SDG 5: Gender Equality - SeAMK's vision for a just world demands unwavering dedication to gender equality. We refuse to treat it as a side project; instead, equality is woven into the fabric of our campus. From tailored alumni events fostering women's leadership to educational programs that challenge harmful stereotypes, we create spaces for collaboration, respect, and equal opportunity for all genders. SeAMK's commitment is not just words. It is reflected in supportive internal policies that build a safe and inclusive environment within the community. We believe that advancing gender equality is essential for progress in every aspect of sustainable development efforts.

SDG 8: Economic Growth and Decent Work - SeAMK is aware that, in order to achieve sustainable economic growth in line with SDG 8, creativity, moral behavior, and an emphasis on inclusion are also necessary. SeAMK understands its responsibilities as information producers and advocates for the entrepreneurial spirit. The university demonstrates this by funding studies on social issues and sustainable technology, as well as by encouraging multidisciplinary cooperation to generate novel concepts. SeAMK dedication does not stop at its doors; via industry partnerships, it has firmly positioned inside the economic ecosystem, guaranteeing that society as a whole, not just a select few, benefits from our efforts. As advocates for fair labour, tenacity, and consistent development, SeAMK contributes to creating a future in which all people can prosper.

SDG 9: Industry, Innovating, and Infrastructure - SeAMK acknowledges the fact that job creation, novelty, and installation of supporting facilities are key factors in improving the quality of life and economic growth in Finland. SeAMK is pursuing a multi-vector approach as the knowledge creation and innovation enabler, one of its goals is to promote the spirit of entrepreneurship, creativity, and technology development (Zamora-Polo et al., 2019). SeAMK will achieve this goal through sustainable infrastructure development investments, as well as industry alliances created for the creation of innovation and improvement of social economy problem solutions.

Key actions in support of SDG 9

- Supporting operations and mechanisms, like research and development programs, dealing with sustainable technology and infrastructure solutions.
- Encouraging interdisciplinary cooperation and knowledge sharing in order to emphasize innovation and entrepreneurship.

- Through the establishment of internationally recognized facilities and the allocation of research resources towards teaching and innovation (Pálsdóttir & Jóhannsdóttir, 2021).
- Seeking input from and working together with industry accomplices, legislators, and the community people in order to identify new challenges and emerging opportunities which help sustainable development.
- By concentrating on business, creativity, and infrastructure, SeAMK aspires to add to the development of robust, inclusive, and steady societies which can cope easily with such complex challenges that are inevitable with globalization.

SDG 12: Sustainable Consumption and Production - SeAMK understands the need to provide a platform for decreasing the level that people consume and produce. Constructing sustainable consumption behaviors and decreasing the amount of waste being generated, SeAMK strives to give minimal environmental impacts and resource efficiency all throughout its operation processes.

Key actions in support of SDG 12

- Implementing waste reduction and the reuse of waste on campus through purposely utilizing compost, which in turn will reduce the production of solid waste.
- Introducing green procurement as one of the purchasers' key principles together with environmentally friendly products and materials (Žalėnienė & Pereira, 2021).
- Training students, staff, and the community on the core principles of responsible consumerism and producing practice.
- The promotion of the principles of a circular economy as a way of achieving maximum utilization of resources and minimal waste production will be the focus area.

SDG 13: Climate Action - SeAMK understands that addressing climate change, preventing its effect on environment, people, and the society becomes crucial to be done. Consequently, SeAMK is determined to perform the measures necessary to minimize their carbon footprint, face up to the climate change consequences, and stimulate the adaptation to climate change situations within its operations.

Key actions in support of SDG 13

- Establishing a strategic goal to curb greenhouse gasses emissions and be neutral from carbon by 2030 (Ilieva, 2021).
- Reduce gaseous input through introduction of energy efficiency measures and inculcating renewable energy utilization in order to lessen the carbon emissions.
- Linking climate change adaptation plans with campus development agendas and construction programs as a means of raising resilience (Ylönen & Salmivaara, 2021).
- Educating the students, staff, and the community on the relevance of climate actions and strengthening resilience measures.

The SeAMK slogan is the evidence of their firm stand in defense of the planet: They commit to climate action and are determined to share their contribution to the global efforts of limiting global warming and building a more secure and resilient future for everyone.

SDG 17: Partnerships are put in place for the Goals - SeAMK understands that accomplishing SDGs is possible only through interactions between the governing bodies at the level of the local, the national and the global. Consequently, SeAMK will be the champions of teamwork with different kinds of reputable foundations including the governments, civil society and academic organizations and industries among others with an aim to achieve the goals of environmental protection.

Key actions in support of SDG 17

- Multi-stakeholder collaborations and partnerships will be the most suitable platform to deal with sustainable development challenges.
- Facilitating the diffusion of knowledge, capacity building, and inter-sectoral sectors learning.
- Campaigning for policy reviews and reforms as well as institutional arrangements to create healthy sustainable development surroundings.
- Enforcing programs that inculcate social cohesion, equality, and fairness in the university beyond the student community (Järvinen, 2020).

By the idea of collaborations for the Millennium goals, SeAMK hopes to gain value from the networking, collaboration, and interaction of experts to get maximized sustainability gain and global contribution.

When assessing SeAMK in relation to the United Nations SDGs which specifically aim at influencing the impact ranking, the importance of a thorough analysis of the factors that place SeAMK commitment to sustainability and the contributions to the global development objectives is inevitable.

Integration into operations - The belief of SeAMK is that the sustainable development concept or theory is deeper than just doing daily work with little attention to sustainability principles. For example, there are programs to lessen energy usage, promote public transport (but not the use of private automobiles), manage waste and compost efficiently, as well as the application of buying environmentally friendly goods and services. Through the utilization of power-saving technologies and improvements to facility systems as well as by making renewables part of the energy mix SeAMK will reduce the negative factors that affect its environment and environmental impacts (Izadi et al., 2022). The SeAMK waste management strategies intend on trimming the amount of waste produced, promoting reusing and composing as well as reducing the use of one time only plastics in their campuses. Along with that, the university is always focused on implementing sustainable procurement by using eco-friendly products, dealing with local producers, and taking into account the environment and all of its aspects in their purchasing decisions.

Education and research - SeAMK is aimed at integrating sustainability into the educational programs, scientific research, as well as various activities of the Forming partnerships with municipal partners. The entity provides training and certification courses on the issues of sustainable development, environmental management, renewable energy, and circular economy basics. The purpose of these educational initiatives is to ensure that students gain the needed knowledge, skills and competencies that will allow them to deal with the dynamic sustainability challenges in their careers as well as be main drivers of positive change in their workplaces (Välimäki, 2019). SEAMK research work is involved in multipurpose studies that look for innovative solutions in environmental, social, and economical problems. Through the cooperation with business enterprises themselves, governmental authorities, and the non-governmental organizations, SeAMK tries to place the acquired knowledge and the power at

their service to design purposeful and evidence-based projects and support the sustainable development targets at the various levels, including the local, national, and international.

Internationalization - SeAMK prioritizes development of sustainable practices through a mobilization program. The University provides several mobility choices, ranging from virtual mobility, blended mobility assisted by mass transit and other means. These alternatives cut the carbon footprint from individual or community journeys to the university or within. SeAMK plans to initiate the shift in the students and staff's choice of sustainable modes of transportation, such as biking, walking, or using public transportation, so that business trips can be conducted with low CO2 emissions. As part of its sustainable development effort, SeAMK is intensive in preaching its principles of responsibility to the partners and stakeholders among international circles (Huhtaluhta, & Huhta, 2021). The University's objective of global sustainability is achieved through networking and knowledge sharing as relevant global sustainability challenges are brought to light, different cultural backgrounds are appreciated, and capacity for sustainable development is established in diverse economic and social settings.

Partnerships and collaboration - SeAMK acknowledges that cooperation and partnership in the process of developing sustainability is called a key and significant element in order to grow and to have a relevant impact. Being an institution united by education and research, the university responds to external partners, stakeholders, and sustainability networks to increase the strengths of its endeavors and gain collective knowledge and resources. Through engaging in strategic partnerships with the government institutions, industries' associations, research institutions and communities' associations, SeAMK is committed to create this innovative climate, drive forward policy reform as well as solve sustainability problems among you by uniting our strengths (Meriläinen et al., 2022). In doing so, SeAMK takes an active part in national and international sustainability networks and platforms where it shares best practices and inspires other organizations therefore, advocating for environmentally friendly development policies and practices.

4.3 Analysis of SeAMK Impact Rankings

As previously highlighted in the case study of the SeAMK University, our focus in this session is on examining the selected Sustainable Development Goals (SDGs) for THE Impact Rankings 2024. According to the methodology of THE Impact Rankings, a university's overall

score is determined by amalgamating its performance in SDG 17 with the top three scores from the remaining 16 SDGs. SDG 17 holds a 22 percent weight in the overall score, while each of the other SDGs carries a 26 percent weight. Consequently, universities are assessed on specific sets of SDGs based on their areas of emphasis (THE Impact Ranking Methodology, 2022).

In alignment with this methodology, SeAMK University, in collaboration with the Sustainability Committee, has identified and finalized a set of SDGs (Figure 15) that align with our sustainability initiatives. The ranking methodology advises institutions to select the SDGs that resonate most with their commitment to sustainability. Following thorough discussions with the Sustainability Committee, SeAMK has determined the SDGs that we believe best represent our institution's noteworthy contributions to sustainability.

SDG	SDG Goals	Number of Finnish Universities Listed in THE 2021 (7 universities)	R&D Projects of SeAMK related to SDGs	Relatable with Green Metrics Rankings
1	No Poverty			
2	Zero Hunger		Responsible Food Production	
3	Good Health and Well being	1	Technology, Health Promotion & care	
4	Quality Education			Green Metrics
5	Gender Equality			Green Metrics
6	Clean Water and Sanitation			
7	Affordable and Clean Energy	1		Green Metrics
8	Decent work and Economic Growth	2	Entrepreneurship and Business Transfers	
9	Industry, Innovation, and Infrastructure	2	Future vehicle Technologies	
10	Reduced Inequality		Inclusive Society and working life	
11	Sustainable Communities	2		
12	Responsible consumption & Production	4	Responsible food Production, Future Vehicle Technology	
13	Climate Action	5	Responsible food Production, Future Vehicle Technology, Solar panels	Green Metrics
14	Life Below Water			
15	Life on Land	1		
16	Peace Justice and strong Institutions	3	Inclusive Society and working life	
17	Partnership for the Goals	7 MANDATORY		

Figure 15.SDG Evaluation for SeAMK

During the initial phase of SDG evaluation, collaborative efforts with the Sustainability Committee revealed that some SDG information is utilized for both the green metrics rankings and

overall sustainability assessment. Through this collaboration, the most crucial SDGs for our university were identified. SDG 17, being mandatory for THE Impact Rankings, was a primary selection. Additionally, we strategically chose SDGs that align closely with our university's priorities, including SDG 3 (Good Health and Wellbeing), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). This thoughtful selection reflects our commitment to addressing key sustainability challenges and making meaningful contributions aligned with the broader goals of the United Nations.

In choosing the SDGs for THE Impact Rankings, it's important to highlight why we selected those SDGs and at first as SDG 17, Partnerships for the Goals, this goal is mandatory, and understanding how SeAMK aligns with it according to THE ranking methodology is important.

Looking at THE ranking methodology, we can break down some key aspects that show SeAMK's connection to SDG 17:

Building Relationships to Support the Goals: SeAMK University actively participates in the Applied Sciences Universities committee for Sustainability, meeting several times a year. This information comes directly from Jussi Karenein, the President of SeAMK's Sustainability Committee. Moreover, SeAMK has its own sustainability committee, demonstrating a commitment to forming partnerships internally. Participating in these committees and establishing internal structures for sustainability highlights SeAMK's dedication to creating partnerships and collaborations. These efforts not only meet the criteria set by THE ranking methodology but also showcase SeAMK's commitment to SDG 17 in the context of the Impact Rankings.

Engagement in international collaborations for data gathering or measurement of SDGs: SeAMK University actively participates in international collaborations, particularly through its involvement in the Green Metric Rankings. Through these initiatives, the university collects and contributes relevant data related to sustainability metrics, emphasizing its commitment to global efforts in measuring progress towards Sustainable Development Goals (SDGs).

International Collaboration and Research: SeAMK prioritizes research, development, and innovation (RDI) with a practical focus, actively supporting teaching and collaborating with industrial small and medium enterprises (SME) and service production, particularly in the South

Ostrobothnia region. Annually, SeAMK executes over 100 externally funded projects, amounting to 4 million euros in external funding per year. Notably, around 25% of RDI projects secure international funding, and many projects involve collaborations with international partners. (SeAMK RDI, n.d.)

Education for the SDGs: SeAMK is committed to providing comprehensive education on sustainable development for all students. Offering an optional course titled "Sustainable Development" from October 2020, students can earn 3 ECTS credits while gaining essential knowledge and skills to tackle global sustainability challenges. (SeAMK Sustainability, n.d.) Additionally, SeAMK provides optional courses on topics like circular economy, ensuring relevant and applicable education across the university. These initiatives highlight SeAMK's dedication to integrating sustainability principles into the education experience, making it accessible and beneficial to all students.

Dedicated Outreach Educational Activities for wider community: SeAMK provides alumni, including graduates who have completed bachelor's or master's degrees, with a variety of resources and events tailored to their needs and interests (SeAMK Alumnitoiminta, n.d.) These initiatives encompass Alumni events, such as get-togethers and parties, as well as regular newsletters issued 2-4 times a year. Additionally, alumni benefit from exclusive discounts on SeAMK products and services and can participate in coffee events preceding each SeAMK Forum. Moreover, specialized events cater to Entrepreneur Alumni. Notably, SeAMK's open university studies are promoted through alumni newsletters and the SeAMK Regional University platform. While these initiatives are designed for alumni, they are open to everyone, including refugees and broader communities, reflecting SeAMK's commitment to inclusivity and lifelong learning.

So, these key considerations highlight SeAMK's commitment to sustainability and SDG initiatives, aligning with THE ranking methodology. The university's proactive approach towards SDG 17, as evidenced by its participation in sustainability committees, international collaborations, research endeavors, and dedicated educational activities, underscores its strong and positive actions in this area. These factors represent the main considerations finalized according to THE Impact ranking methodology, emphasizing SeAMK's dedication to addressing global challenges and contributing to sustainable development.

Furthermore, as we shift our focus to SDG 3, "Good Health and Well-being," we will delve deeper into how SeAMK University is fulfilling the requirements of this goal and the rationale behind selecting it.

Collaborations and health services: SeAMK is actively collaborates with local, national, and global health institutions to enhance health and well-being outcomes, aligning closely with SDG 3. According to SeAMK Research and Development (n.d.), Our research group, dedicated to health promotion and care, plays a pivotal role in this endeavor. Through evidence-based research and development initiatives, we generate valuable insights for the advancement of nursing practices and patient interventions, particularly for individuals suffering from acute and chronic illnesses. Additionally, our research explores the vital role of nutrition in overall well-being, underscoring the holistic approach we adopt towards health promotion. We are committed to addressing various aspects of health care, including preventive, curative, and palliative nursing, thereby contributing to improved health outcomes across different age groups.

Delivery of Outreach Programs and Projects to improve promote health and wellbeing: Based on the information from SeAMK Research and development (n.d.), The research group at SeAMK University is dedicated to exploring the concept of inclusion in its diverse forms and developing solutions to promote societal inclusion. With a focus on supporting and enhancing the quality of working life, the group seeks to improve overall well-being and satisfaction in workplace environments. By fostering a sense of well-being, happiness, dialogicity, self- and community control, as well as equality, the group aims to enact positive change through collaborative development initiatives involving citizens across various operating environments. Through these efforts, SeAMK University is committed to creating an inclusive society and fostering environments where individuals feel valued, empowered, and supported in their pursuit of meaningful participation and contribution.

Sharing of Sports Facilities: SeAMK collaborates with local venues like Seinäjoki Areena to offer a mix of charged and free access facilities to the community. From the Swimming Hall to Sports Areena, these spaces provide opportunities for residents, schools, and the public to stay active and engaged. By providing accessible amenities, SeAMK promotes inclusivity and supports the overall well-being of individuals in Seinäjoki and neighboring areas.

Apart from these our university's commitment to mental health extends beyond just providing support services. Through collaboration with Seinäjoen Työterveys, mental health programs are developed and implemented to address the diverse needs of the community. Additionally, SeAMK ensures access to birth control and sexual health services through the Finnish Student Health Service (FSHS), promoting overall well-being among its students. Moreover, the university prioritizes mental health within its own community by employing a study psychologist and providing staff access to occupational health services. These initiatives demonstrate SeAMK's holistic approach to mental health care, encompassing prevention, support, and accessibility for all members of its community.

Moreover, all facilities on campus are smoke-free, reflecting SeAMK's commitment to promoting physical well-being and reducing the harmful effects of tobacco smoke. For those who smoke, a designated area outside the campus is provided, ensuring that everyone can enjoy clean air while on university grounds. (Tobacco Act 549/2016) This smoke-free policy aligns with SeAMK's broader efforts to prioritize the health and well-being of its students, staff, and visitors, fostering a supportive and inclusive environment for all.

In our evaluation of relevant SDGs for our university, we have considered key factors such as mental health support, access to sexual health services, smoke-free policies, and collaboration with external health organizations. We believe that these facilities and initiatives contribute significantly to the well-being of our community and align with broader global efforts towards creating a sustainable world. As such, we have selected this SDG 3 Good health and wellbeing as one of the finalized goals for our university, confident that our efforts will not only enhance our rankings but also contribute meaningfully to the advancement of global sustainability objectives.

Furthermore, now we will delve into another SDG that we have chosen for THE Impact Rankings submission, which we believe strongly aligns with our university's contributions: SDG 5, Gender Equality. We will explore the reasons behind our selection in greater detail.

Policy for Women's Participation: SeAMK adheres to the principles outlined in section 6 of the Constitution of Finland (731/1999), (Ministry of the Environment, n.d.) ensuring equality before the law for all individuals. In line with this, gender holds no bearing in the university's application process. Each applicant is treated equally and fairly, without discrimination based on gender or any other personal characteristic outlined in the constitution. So, as a HEI

promoting Gender Equality plays a pivotal role towards achieving the targets which has been set for the world by UNDP.

Women's Access Schemes (Mentoring, scholarships, etc.): As previously stated also, as HEI we promote gender equality through tailored access programs supporting female students. These include mentoring and scholarship initiatives aimed at ensuring equal opportunities for all, regardless of gender. With most of female students, SeAMK is committed to empowering women in academic and professional fields. Additionally, the university's active participation in international projects, for instance the SEIL project visited by a multinational team on 17th May 2022, showcases its leadership in well-being technology research and development, reflecting its dedication to inclusivity and innovation (SeAMK, 2022).

So, SeAMK University's commitment to gender equality, shown through its initiatives and outcomes, aligns closely with SDG 5. By ensuring fair treatment in the application process and promoting tailored programs for female students, SeAMK fosters gender balance in academia. With over 60% of graduates being women, the university's efforts are clear. SeAMK's dedication not only contributes to SDG 5 but also creates an inclusive environment for all to thrive.

Continuing our analysis the next SDG, SDG 8, Decent Work and Economic Growth, stands as a pivotal goal for SeAMK University due to its significance in fostering sustainable development and prosperity. We have chosen this SDG because of our university's strong commitment to promoting decent work practices and contributing to economic growth. Moving forward, we will delve deeply into SDG 8 Decent work and Economic Growth and why SeAMK University has selected it as one of the key goals where we excel.

Policy on Workplace Discrimination: The university's adherence to national laws and integration practices, facilitated by dedicated personnel, underscores its commitment to inclusivity and diversity in the workplace. According to the information by Equality Act 1325/2014 the authorities must evaluate how its actions impact different population groups and ensure equality in its operations. It should then take appropriate and proportionate measures to promote equality, considering its operational environment, resources, and other relevant factors. As SeAMK promoting an environment where every individual, regardless of background or personal characteristics, is valued and included. Such practices not only contribute to

fostering a more equitable workplace but also support economic growth by harnessing the full potential of all employees.

Policy Commitment Against Forced Labor, Modern Slavery, Human Trafficking, and Child Labor: As previously stated, SeAMK University primarily adheres to national laws pertaining to policies concerning young workers and their well-being in the workplace. establishment underscores the importance of aligning with regulations established by national authorities to ensure the protection and welfare of individuals under the age of 18 engaged in employment or official relationships. By following these laws, SeAMK University upholds its responsibility as a Higher Education Institution to prioritize the safety and development of young workers. According to Act on Young Workers 738/2002, outlines specific provisions regarding the employment of individuals under the age of 18, including hiring conditions, working hours, rest periods, safety measures, and health checks. These regulations provide a comprehensive framework for employers to safeguard the rights and welfare of young employees, promoting a conducive and nurturing environment within the university while complying with legal requirements.

Furthermore, SeAMK University not only follows regulations for young workers but also upholds national laws on pay equality. This involves a strong commitment to measuring and closing gender pay gaps, as mandated by the law. By ensuring fair compensation for all employees, SeAMK promotes workplace fairness and equality, in line with SDG 8. These efforts support employee rights and create an inclusive environment for growth. Through its adherence to laws and policies, SeAMK contributes to sustainable development goals by fostering fairness and equity in the workplace.

Moving on to our next focus, SDG 9, Industry, Innovation, and Infrastructure, holds paramount importance for SeAMK University in its pursuit of sustainable development and advancement. We have chosen this SDG due to our university's notable efforts in promoting innovation, fostering industry partnerships, and enhancing infrastructure to drive economic growth and societal progress. We will explore in detail SDG 9 and why SeAMK University has identified it as a key area of excellence.

As THE Impact Rankings assess the university's contributions to SDG 9, Industry, Innovation, and Infrastructure, by examining its efforts in promoting sustainable industrialization, fostering innovation, and building resilient infrastructure. Key indicators include research income from

industry and commerce, the involvement of academic staff in research and development activities, and the university's collaboration with industry partners to drive innovation and economic growth.

So, when we consider SeAMK university demonstrates its commitment to SDG 9 by actively engaging in research and development activities that contribute to industrial innovation and infrastructure development. With a focus on STEM fields and interdisciplinary collaboration, SeAMK secures research income from industry and commerce, fueling innovation and driving economic growth. Its academic staff, comprising lecturers, researchers, and professors, are deeply involved in advancing knowledge and technology transfer, fostering a culture of entrepreneurship and innovation within the university community. So, this SDG 9, Industry, Innovation, and Infrastructure, perfectly aligns with SeAMK University's core strengths. With our focus on these fields and strong ties to industry partners, we contribute significantly to innovation and economic growth. By choosing SDG 9 for ranking evaluation, we highlight our commitment to addressing global challenges and promoting sustainable industrial development.

As we delve deeper into the Sustainable Development Goals, SDG 12: Responsible Consumption and Production emerges as a key focus area for SeAMK University. We have chosen to prioritize this goal due to our steadfast commitment to ethical sourcing practices and sustainable consumption patterns. At SeAMK, we recognize the importance of ensuring ethical sourcing of food and supplies, and our university restaurant diligently follows national instructions to uphold these standards. By promoting responsible consumption and production practices, we aim to minimize waste, conserve resources, and mitigate environmental impact. Through our adherence to ethical sourcing policies, SeAMK University contributes to the broader objectives of SDG 12, fostering a culture of sustainability and responsible stewardship of resources.

Furthermore, as we navigate through the realm of sustainable development, SDG 13: Climate Action emerges as a paramount focus area for SeAMK University. With a deep understanding of the urgent need to address climate change, we have chosen to prioritize this goal in our pursuit of a sustainable future.

So, when we consider about climate action, SeAMK University's dedication to achieving carbon neutrality by 2030, in alignment with fellow applied universities in Finland, is underscored

by a range of proactive measures aimed at measuring and reducing its carbon footprint. (SeAMK Sustainability, n.d.) One notable initiative involves comprehensive monitoring of the university's energy consumption, with a particular focus on quantifying the usage of low carbon energy sources across all campus facilities. By meticulously tracking energy usage patterns and embracing renewable energy alternatives wherever possible, SeAMK is actively working to minimize its environmental impact and promote sustainable practices. These efforts reflect the university's commitment to climate action and its proactive role in fostering a greener, more sustainable future for generations to come.

So, the selection of SDGs by SeAMK University for THE Impact Rankings 2024 reflects our strong commitment to sustainability. By focusing on SDGs such as Partnerships for the Goals (SDG 17) and others like health and well-being (SDG 3), gender equality (SDG 5), decent work and economic growth (SDG 8), industry innovation and infrastructure (SDG 9), responsible consumption and production (SDG 12), and climate action (SDG 13), we demonstrate our dedication to addressing global challenges. These SDGs are well-aligned with SeAMK's mission and vision for sustainability, embodying our commitment to creating a more equitable and environmentally responsible world. Through various initiatives and partnerships, SeAMK actively contributes to these goals, aiming to drive positive change and create a more sustainable future. Our steadfast commitment to these SDGs not only positions us well for recognition in THE Impact Rankings but also underscores our dedication to realizing our sustainability mission and vision.

4.4 Knowledge and Lessons Learned

In our journey towards participating in THE Impact Rankings 2024, SeAMK University has gained valuable insights and lessons that have contributed significantly to our understanding of sustainability within the higher education landscape. Throughout our research journey, we have gained deeper insights into sustainability and the ongoing sustainability initiatives at SeAMK University. As a result, we can now delve into several important lessons learned during this process.

Strategic Alignment of Institutional Goals with Global Sustainability Frameworks: A significant component of the information acquired relates to the complexities involved in harmonizing institutional goals with frameworks for global sustainability. We have learned

through thoughtful conversations with our Sustainability Committee how important it is to choose SDGs that align with our institution's values as well as our areas of influence and areas of strength. The importance of strategic alignment in fostering significant contributions toward sustainability goals has been highlighted by this process. Moreover, strategic alignment enables efficient resource allocation, ensuring that efforts and investments are directed towards initiatives that have the greatest potential for impact. By aligning our institutional goals with global sustainability frameworks, we can more effectively leverage our resources and expertise to address pressing environmental and social issues. This alignment also promotes collaboration both within our institution and with external partners, fostering a collective approach to sustainability that amplifies our impact. Furthermore, it provides a framework for measuring progress towards sustainability objectives, allowing us to track our contributions and adapt our strategies as needed. Through this process, we gain a clearer understanding of our role in addressing global challenges and strengthen our commitment to sustainable development.

Insights Learned from THE Impact Rankings Methodology and Assessment Criteria:

When we consider about our involvement with THE Impact Rankings methodology has given us important insights into the performance indicators and assessment criteria that are applied when evaluating sustainability efforts. Through comprehension of the weighting attributed to every Sustainable Development Goal (SDG) and the benchmarks established by the rankings, we have improved the quality of our strategies and efforts. Moreover, despite meeting the key criteria outlined in THE ranking methodology, we were able to identify the areas for improvement within our university. For example, our quantitative data revealed a significant lack of awareness among students regarding SDGs. As an HEI, it is imperative that we prioritize enhancing knowledge about SDGs among our student body. Additionally, this process has afforded us valuable insights into the key sustainability initiatives our university is undertaking to contribute to a more sustainable world.

Insights on SeAMK University's Contribution to SDGs: Our involvement in the THE Impact Rankings data submission process has given us important insights into how closely SeAMK University adheres to the SDGs. For instance, our programs have a clear relationship to SDGs 12 and 13. We demonstrate our commitment to tackling urgent environmental issues by promoting renewable energy, lowering carbon footprints, and encouraging circular economy practices. Furthermore, the greater proportion of first-generation female students

attests to our commitment to gender equality and highlights the advancements made in promoting inclusiveness and diversity within our academic community. Furthermore, we have uncovered various projects aimed at promoting good health and well-being within our university community. These initiatives include research endeavors focused on health promotion and care, as well as programs aimed at supporting the overall well-being and satisfaction of individuals in workplace environments. By addressing various aspects of health care, including preventive, curative, and palliative nursing, we contribute to improved health outcomes across different demographics.

4.5 Encountered Challenges

However, even though we made positive strides, our journey also presented us with several challenges. One significant obstacle was the recognition that our university needs to bolster the promotion of SDG studies and integrate more sustainability courses to meet the increasing demand from students. We discovered that while there is a willingness among students to engage in sustainability-related education, the availability of such courses was limited.

This lack of awareness about SDGs and sustainability initiatives among students highlighted the need for enhanced promotion and education efforts within the university community. Additionally, difficulties arose when gathering information pertaining to specific SDGs, such as data on gender equality initiatives and health and well-being projects. These challenges underscored the importance of streamlining data collection processes and improving access to relevant information. Furthermore, another hurdle we encountered was time constraints during data collection for THE Impact Rankings. Gathering and organizing information about our sustainability efforts demanded a lot of documentation and verification, which, along with our regular university tasks, made it challenging to meet deadlines. To tackle this, we needed to better manage our time and resources, making sure we allocate enough dedicated time to gather and submit data accurately and on time for future assessments.

Despite our proficiency in collecting data, we encountered challenges in gathering accurate information for specific SDGs. One notable example is the data collection process for energy consumption at our university. While we had access to relevant data, ensuring that the evidence and all details met the criteria outlined in THE Impact Rankings methodology was crucial. This required thorough documentation and verification to ensure compliance with the

assessment criteria. Therefore, while we had the necessary information, aligning it with the stringent requirements of the methodology proved to be a challenge that required careful attention and scrutiny.

Despite these hurdles, we maintain an optimistic outlook, believing that with each subsequent attempt, we will refine our approach and overcome these challenges more effectively.

4.6 Survey Results

To gain a better understanding of the knowledge and the awareness level of sustainability among the SeAMK students, an online survey questionnaire comprising 18 questions was conducted. The survey was created using two survey links through SurveyMonkey.com. One link was created in the English language, and the other one was in the Finnish language. The main motive was to get data for the International and Finnish students separately. The survey was distributed through the SeAMK intra page, the university's main information source and could be accessed by everyone on campus. Apart from the SeAMK intra, response collection was also done through e-mails. The main aims of the questionnaire are to gather information for reporting data to THE Impact Ranking 2024, to identify the familiarity of the students with SeAMK's sustainability efforts, to have a clear measurement of students' interest in participating in sustainability education and projects, to measure students' understanding about sustainability concepts like SDGs, UI Green Metric Rankings, THE Impact Rankings, and to apprehend student perspectives on the importance of implementing mandatory courses about sustainability in the campus. Collecting this data could help the SeAMK to understand the student's needs and interests related to sustainability initiatives and practices.

SurveyMonkey.com, the online survey tool, has been used to create questionnaires emphasizing easy accessibility for the respondents, collecting responses, and gathering streamlined data within the same platform. Data was gathered through the online survey tool and analyzed using Microsoft Excel and PSPP analysis tools.

The Online Survey received 83 responses, with 52 responses from international students and 31 responses from Finnish students. Survey responses were categorized according to the responses received from each survey link. Following the collected dataset, let's elaborate on some of the insights based on the responses. However, it's pertinent to mention that the

dataset is relatively small with regard to the target group. However, with the dataset, we could gain some insights about the topic discussed.

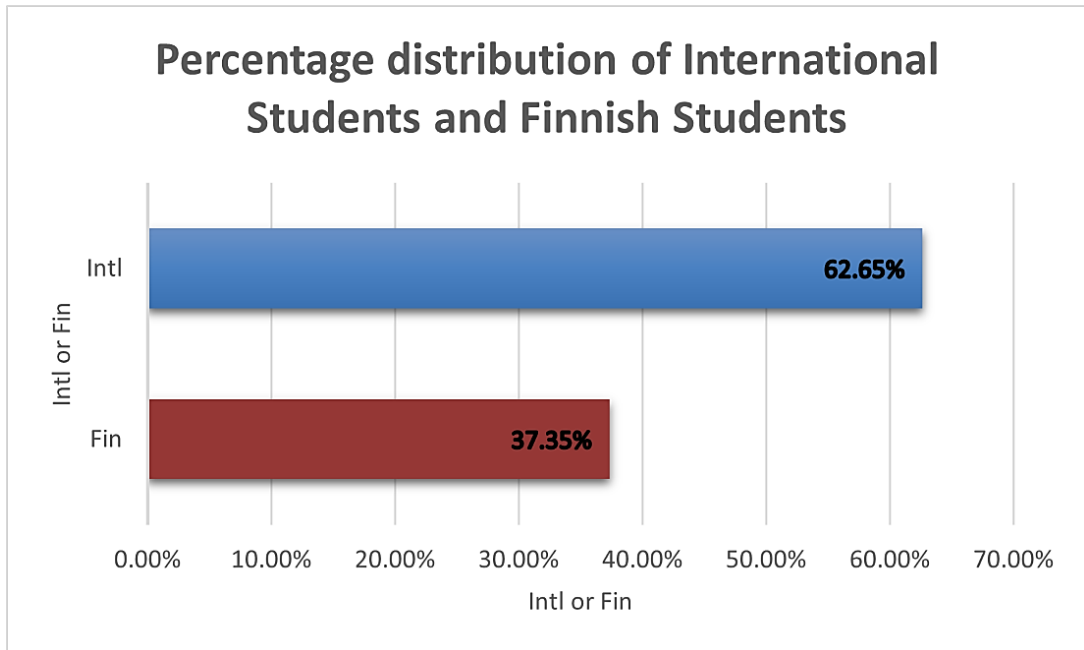


Figure 16. Percentage distribution of International Students and Finnish Students.

The first finding that we noticed was the participation divided through the International and the Finnish students. According to above figure (Figure 16) could be seen the high participation from international students. 62.65% among participants were from international background and could conclude that since the reach by the author's has influenced the respondents to make feedback. Participation from local students and the international students has given the survey an added leverage.

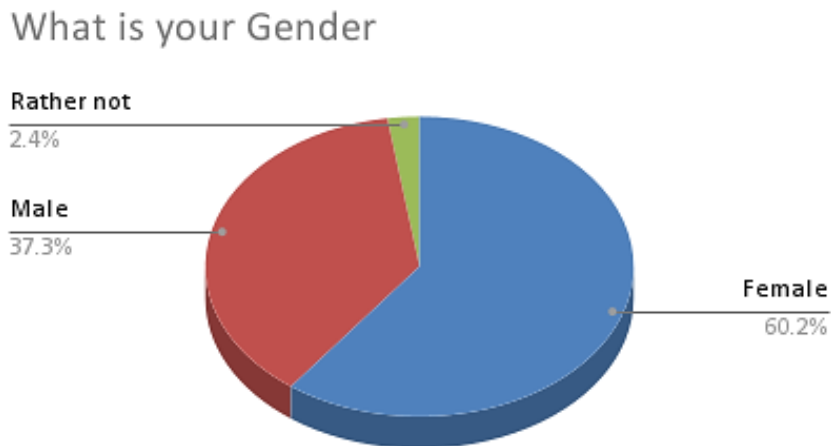


Figure 17. Participant's Gender

According to the dataset (Figure 17), 60.2% of the respondents were female, and the statistics proved that SeAMK has more female than male populations. Dheng et al. (2022) have suggested gender differences in environmental concern and behavior. Studies revealed that women are most likely to engage in sustainable actions such as recycling and have much more environmental awareness (Dhenge et al., 2022). However, those results varied depending on the specific case and the type of sustainability measured.

Which of the following best describes your current educational level?

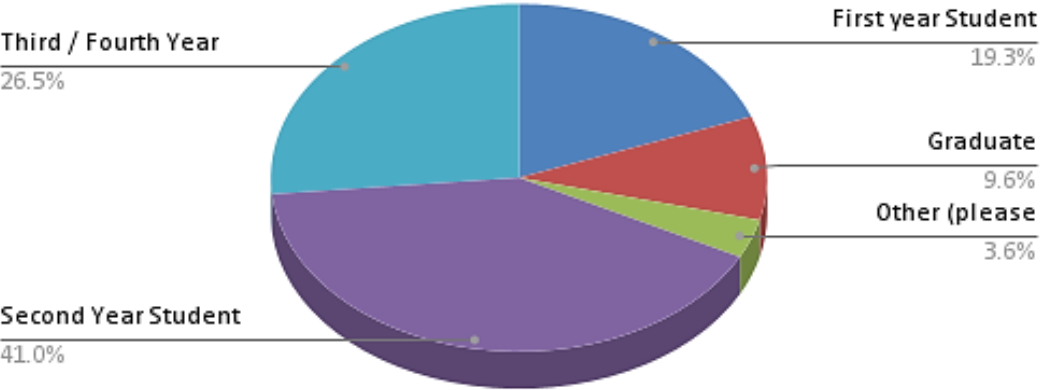


Figure 18. Which of the following best describes your current educational level?

Among the survey respondents, the majority were Second-year students, and 41% represented the same. Consecutively, Third/Fourth-year students represent 26.5%, first-year students represent 19.3%, Graduates represent 9.6%, and others represent 3.6%. Others represent the third/fourth-year students, as per the comments. The data received could assume that the attentiveness towards sustainability can be seen among the second-year students.

Are you the first person in your immediate family to attend college or university? (First-generation status)

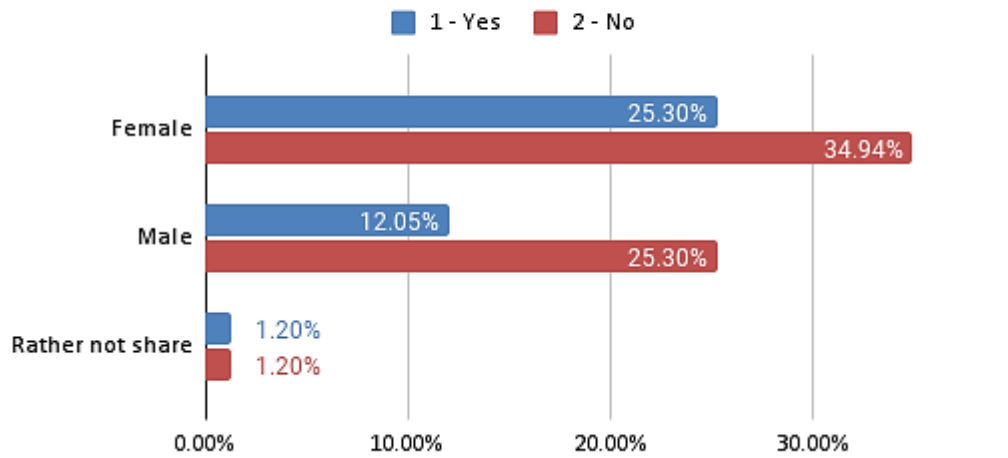


Figure 19. Are you the first person in your immediate family to attend college or university? (First-generation status)

The data gathered in Figure 19, was for a submission requirement to the THE Impact Ranking. These kinds of data could not be retrieved from the university database, and considering the responses received, 61.44% have conveyed that they are not the first family member to attend college or university. Indicates that most students come from families where at least one parent has a college/university degree.

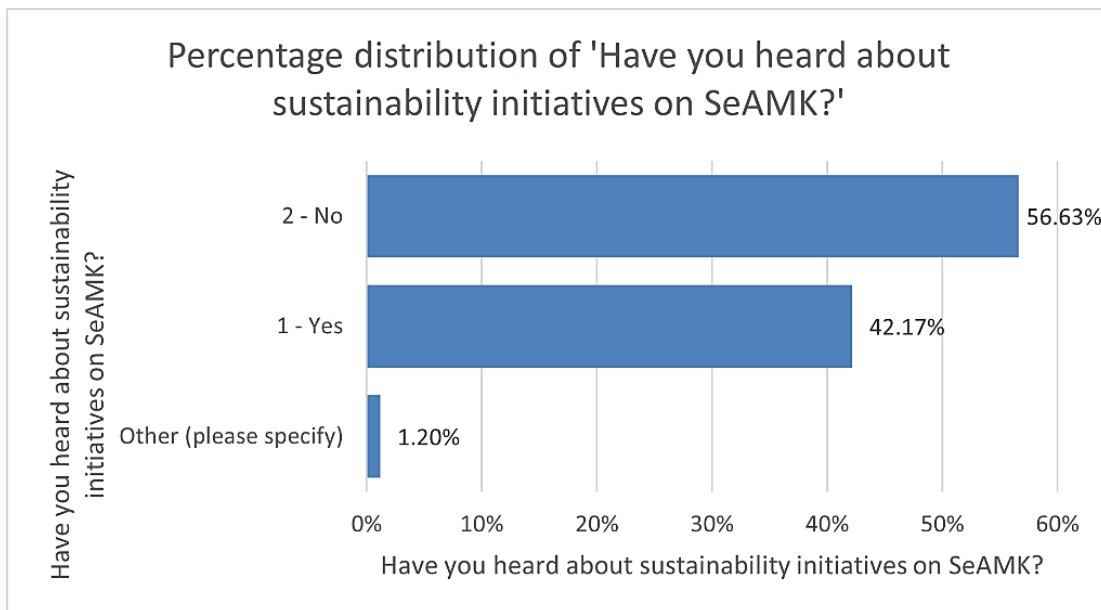


Figure 20. Percentage distribution of 'Have you heard about sustainability initiatives on SeAMK?'.

Q - Have you heard about sustainability initiatives on SeAMK? Vs Q - Would you like to participate in Sustainability projects in the University

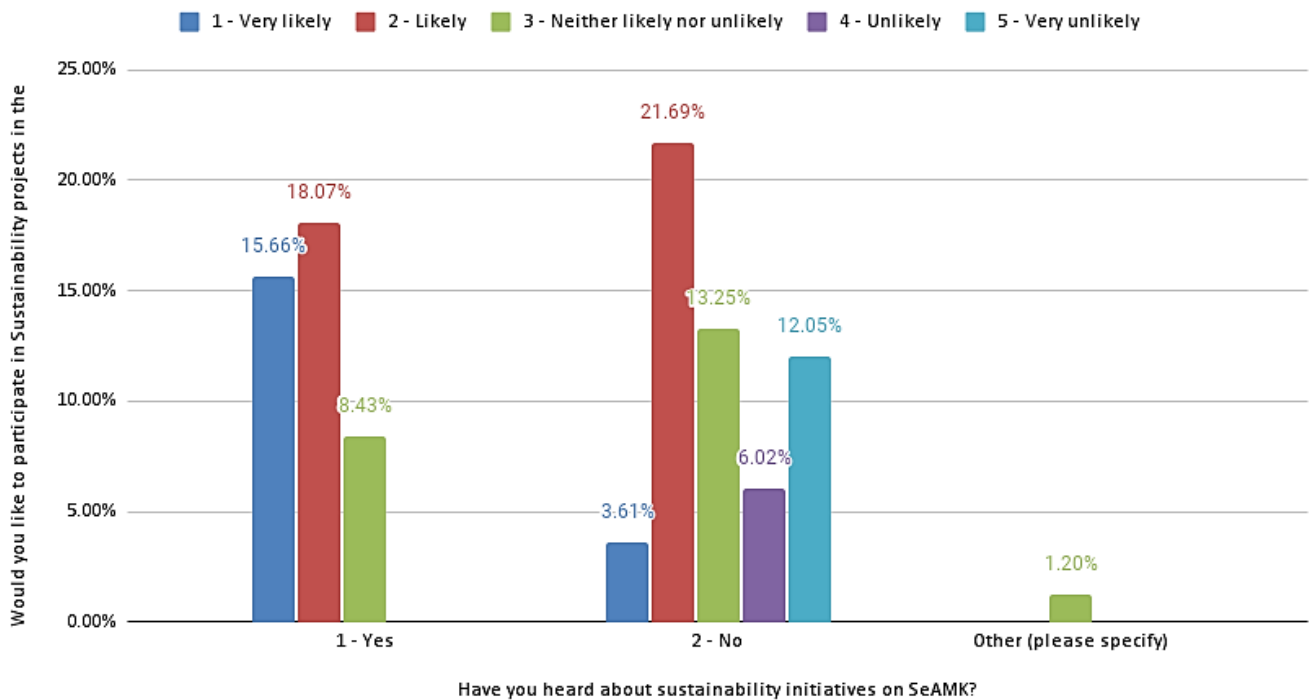


Figure 21. Q- Have you heard about sustainability initiatives on SeAMK? Vs Q- Would you like to participate in Sustainability projects in the University?

A significant portion of respondents are not aware of the sustainability initiatives on SeAMK. 56.63% replied with the answer 'No,' indicating the sustainability education requirement within the campus. It is elaborated in Figure 21 as well. Even though students were unaware of the sustainability initiatives at SeAMK, 21.3% were interested in participating in sustainability projects at the university. 22.88% are neutral about participating in sustainability projects; nevertheless, the preference is that they have heard about the sustainability initiatives at SeAMK. Although the students answered, 'Yes' or 'No' to the survey question 'have you heard about the sustainability initiatives on SeAMK?', 59.03% were either 'very likely' or 'likely' to participate in the sustainability projects on the campus. It has emphasized the importance and need for implementing more sustainable education in the university curriculum.

Please rate your level of knowledge about sustainability policies and practices on campus.

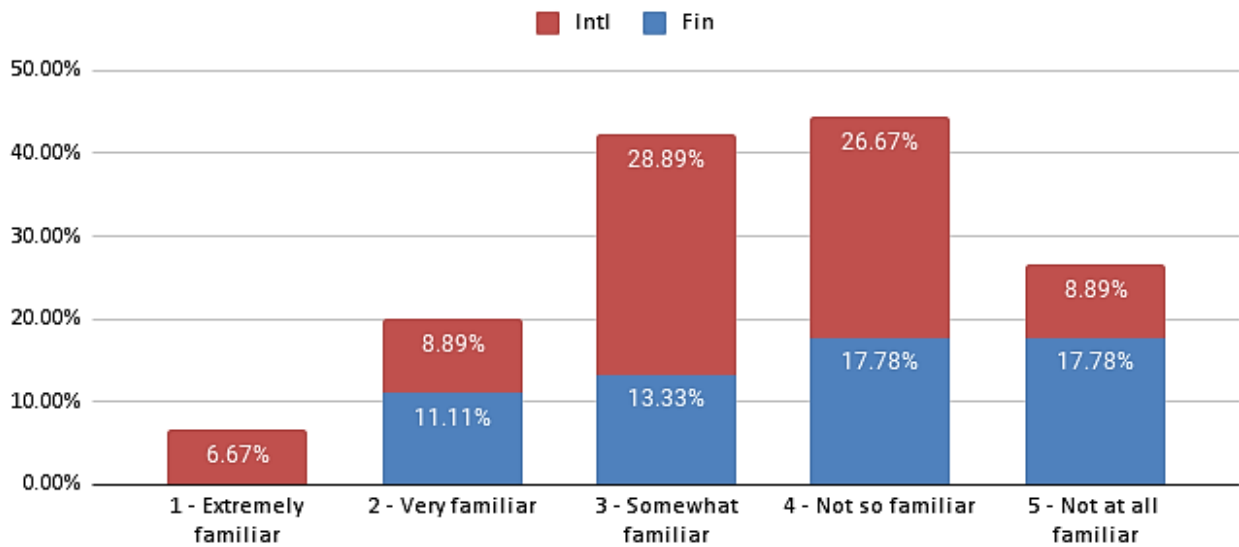


Figure 22. Please rate your level of knowledge about sustainability policies and practices on campus.

According to Figure 22, knowledge about sustainability policies and practices on campus is not commendable. A major portion of the respondents is in the category of 'Not so familiar' or 'Not at all familiar', which is 71.12%. Within that category, International and Finnish students contribute equally. Therefore, awareness of the campus sustainability curriculum has to be improved. The availability of sufficient sustainability education programs positively correlates with the knowledge about sustainability practices among the students. In addition, higher knowledge about sustainability practices among people can influence pro-environmental behavior (Latif et al., 2013).

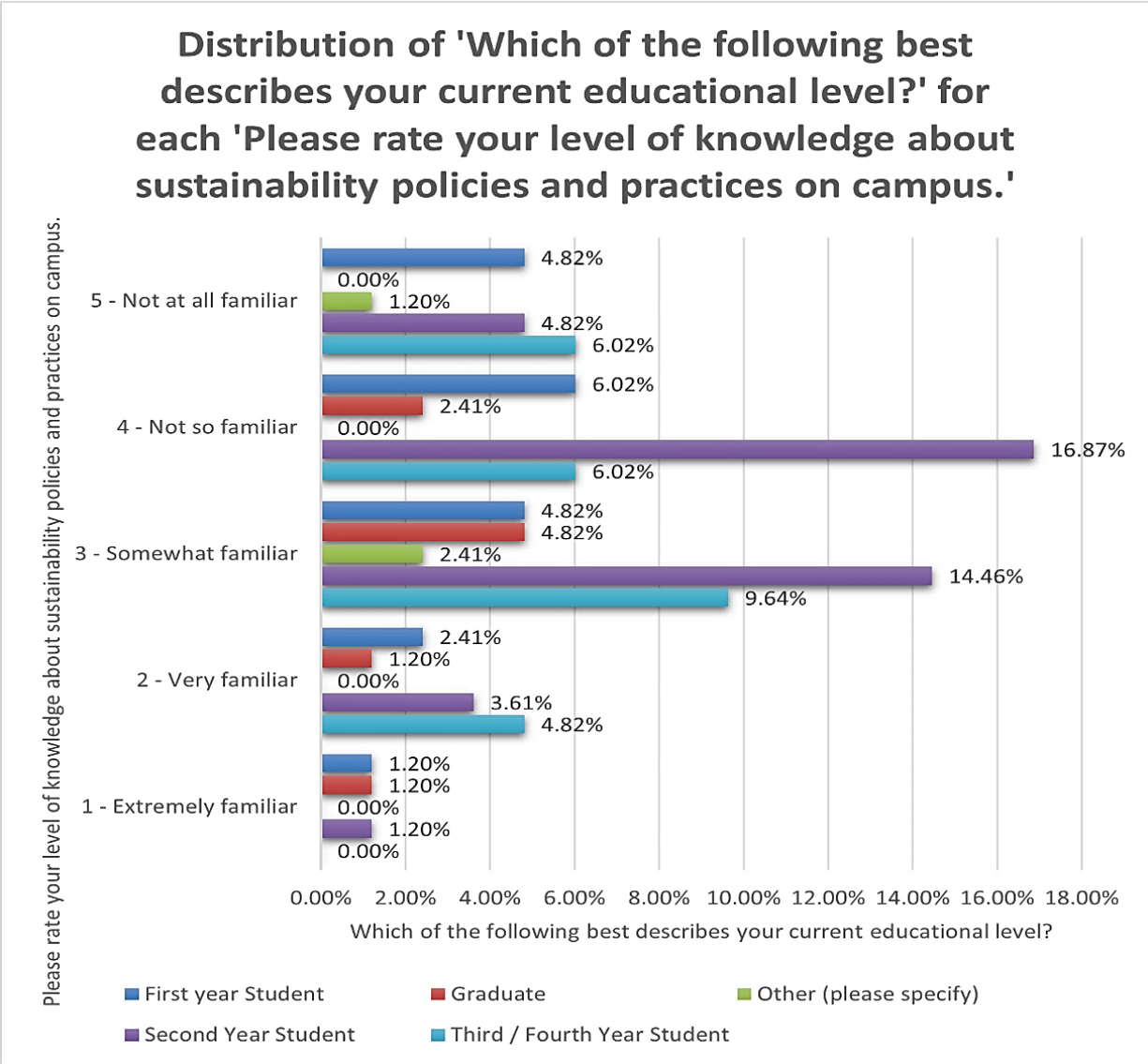


Figure 23. Distribution of 'Which of the following best describes your current educational level?' for each 'Please rate your level of knowledge about sustainability policies and practices on campus.'

With the above Figure 23, we can see the correlation between the educational level on the campus and the knowledge about sustainability policies and practices on campus. As explained in Figure 20, Others represent the third/fourth-year students. Hence, familiarizing oneself with campus sustainability policies and practices is equally interesting among second, third, and fourth-year students. Percentages divided 16.87% for third/fourth-year students and 19.27% for second-year students. The point that should be given primary attention is that the survey emphasizes the lack of awareness about sustainability regardless of the year of education.

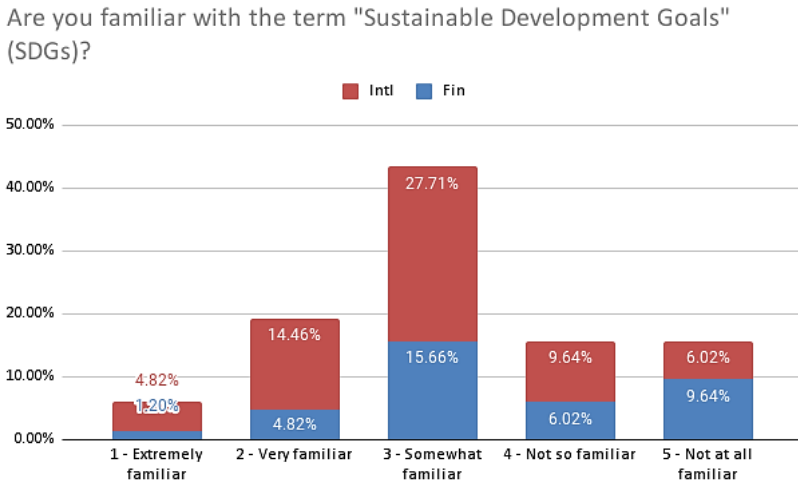


Figure 24. Are you familiar with the term "Sustainable Development Goals" (SDGs)?

The survey shows the level of cognizance within the students about the SDGs. According to the above Figure 24, some familiarizations could be seen; the majority, 68.67%, has either 'Extremely familiarization' or 'Very familiarization' or 'Somewhat familiarization' about the Sustainability Development Goals. Students with more excellent knowledge about the SDGs could generate future environmental leaders and use their expertise in the university (Leal Filho et al., 2019). According to Leal Filho et al. (2019), SDG awareness demonstrates the university's commitment to broader societal sustainability goals.

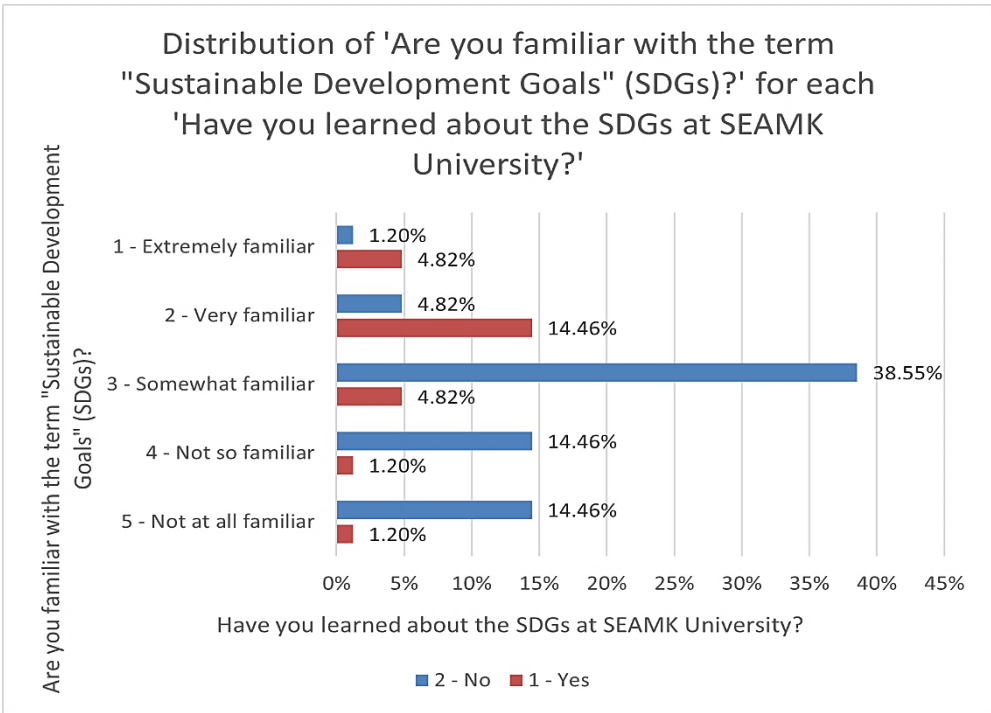


Figure 25. Distribution of 'Are you familiar with the term "Sustainable Development Goals" (SDGs)?' for each 'Have you learned about the SDGs at SEAMK University?'

We discussed the level of familiarization with SDGs among the SeAMK students in Figure 25. Accordingly, substantial awareness about the term 'SDG' exists among the students even though the ratio of those who have learned about SDG is low. It reflects the requirement for SDG-related studies at the university. The SDGs are essential for attaining a sustainable future because of their comprehensive framework that addresses linked social, economic, and environmental concerns (Albareda-Tiana et al., 2018). As per Figure 25, 24.1% of students have some education concerning SDGs. It is pertinent to mention that the development of teaching on SDGs is significant as SeAMK participates extensively in sustainability initiatives and will actively participate in the Impact rankings in the future.

Are you aware that SEAMK is ranked in the Green Metric Ranking for sustainable campuses?

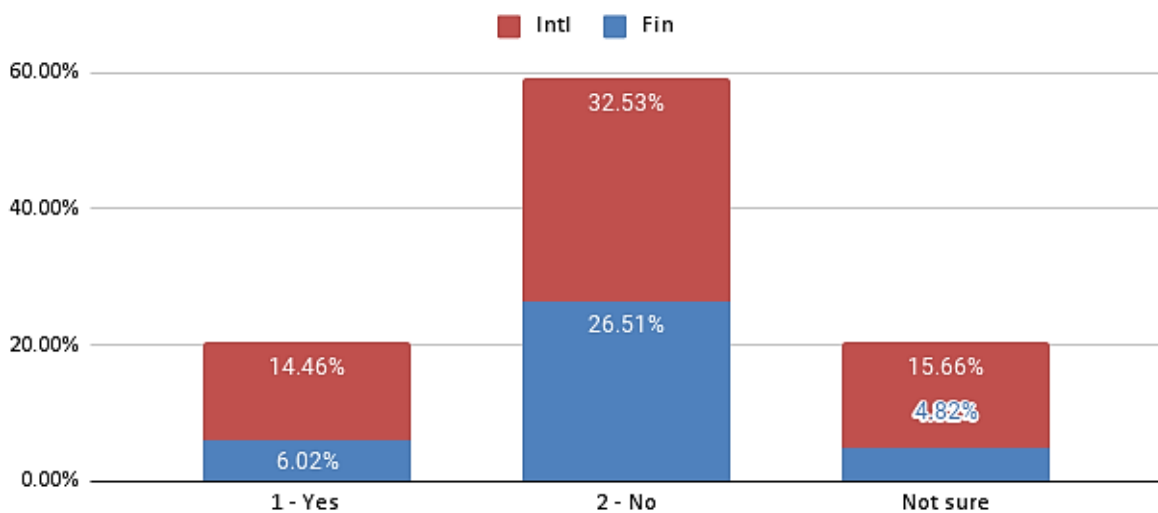


Figure 26. Are you aware that SEAMK is ranked in the Green Metric Ranking for campuses?

Students aware of their university's Green Metric Ranking comprehend that the institution is trying to become more sustainable. According to Leal Filho et al. (2019), this may suggest a broader interest in sustainability or a preference for HEIs that put these initiatives first. In previous figures, we discussed the students' knowledge of SDGs. The same awareness can be seen in Figure 26 as well. A higher percentage of students are not aware of the GM Rankings. Knowledge about Sustainable rankings is lower among students, and awareness has to be built by the university since they are stepping up towards a sustainable future.

please estimate SEAMK's ranking in the Green Metric Ranking
(There are around 25.000 universities in the world)

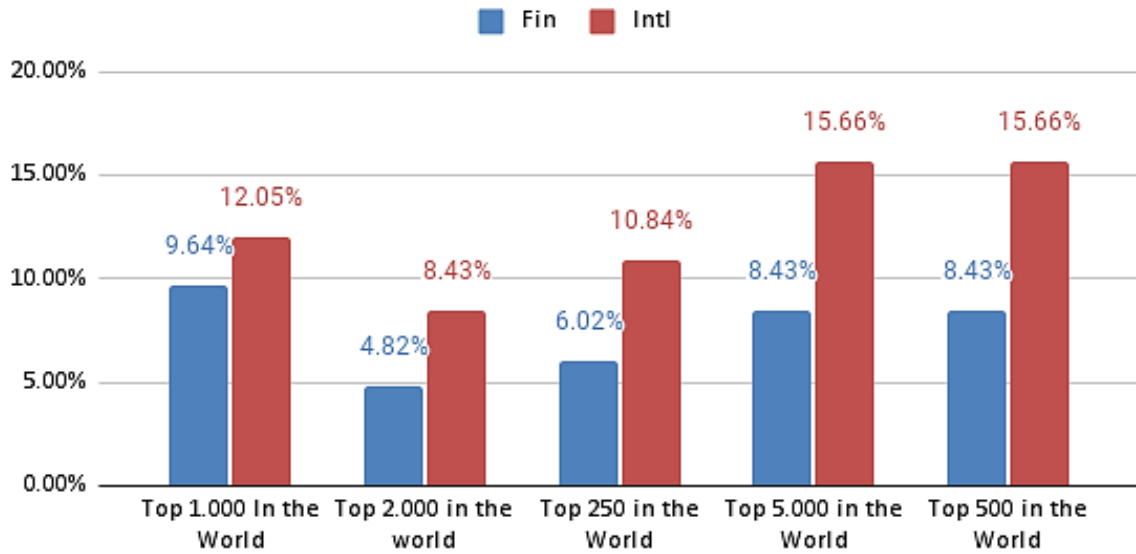


Figure 27. Please estimate SEAMK's ranking in the Green Metric Ranking (There are around 25.000 universities in the world)

CROSSTABS
/TABLES= SEAMK_ranking_GM BY SEAMKs_ranking_GM
/FORMAT=AVALUE TABLES PIVOT
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/CELLS=COUNT ROW COLUMN TOTAL.

Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SEAMK_ranking_GM × SEAMKs_ranking_GM	83	100.0%	0	.0%	83	100.0%

SEAMK_ranking_GM × SEAMKs_ranking_GM

		SEAMKs_ranking_GM					Total
		Top 1.000 In the World	Top 2.000 in the world	Top 250 in the World	Top 5.000 in the World	Top 500 in the World	
SEAMK_ranking_GM 1 - Yes	Count	3	0	4	4	6	17
	Row %	17.6%	.0%	23.5%	23.5%	35.3%	100.0%
	Column %	16.7%	.0%	28.6%	20.0%	30.0%	20.5%
	Total %	3.6%	.0%	4.8%	4.8%	7.2%	20.5%
2 - No	Count	10	9	8	10	12	49
	Row %	20.4%	18.4%	16.3%	20.4%	24.5%	100.0%
	Column %	55.6%	81.8%	57.1%	50.0%	60.0%	59.0%
	Total %	12.0%	10.8%	9.6%	12.0%	14.5%	59.0%
Not sure	Count	5	2	2	6	2	17
	Row %	29.4%	11.8%	11.8%	35.3%	11.8%	100.0%
	Column %	27.8%	18.2%	14.3%	30.0%	10.0%	20.5%
	Total %	6.0%	2.4%	2.4%	7.2%	2.4%	20.5%
Total	Count	18	11	14	20	20	83
	Row %	21.7%	13.3%	16.9%	24.1%	24.1%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total %	21.7%	13.3%	16.9%	24.1%	24.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	7.72	8	.461
Likelihood Ratio	9.86	8	.275
N of Valid Cases	83		

Figure 28. PSPP data for Knowledge about the position of SeAMK at GM Ranking vs Awareness that SeAMK listed in GM.

As per Figure 27, students of SeAMK have estimated the ranking in the Green Metrics ranking. 24.09% of respondents correctly estimated the ranking, which can also be found on the UI Green Metrics site (UI Green Metrics, 2021). These statistics also indicate the university's knowledge level and the level of education about sustainability measures and practices. As per Figure 28, although the students are unaware of the GM Rankings, 14.5% have correctly estimated the ranking. Although it has not been correlated with the knowledge of GM rankings, it shows the importance of teaching more about these sustainability terms.

A thorough grasp of GM ranking and the elements that influence it is essential for evaluating and enhancing sustainability initiatives on college campuses (Ramisio et al., 2019). Participants, students, and the authorities related to the university's sustainability may use this information to make well-informed decisions and take activities that support sustainability objectives on campus. Comprehending the ranking of Green Metrics indicators furnishes the university with the requisite data to assess and order sustainable behaviors on campus. Additionally, students' understanding of the ranking of green Metrics criteria helps promote openness and responsibility in sustainability programs initiated on campus.

Would you like to participate in Sustainability projects in the University

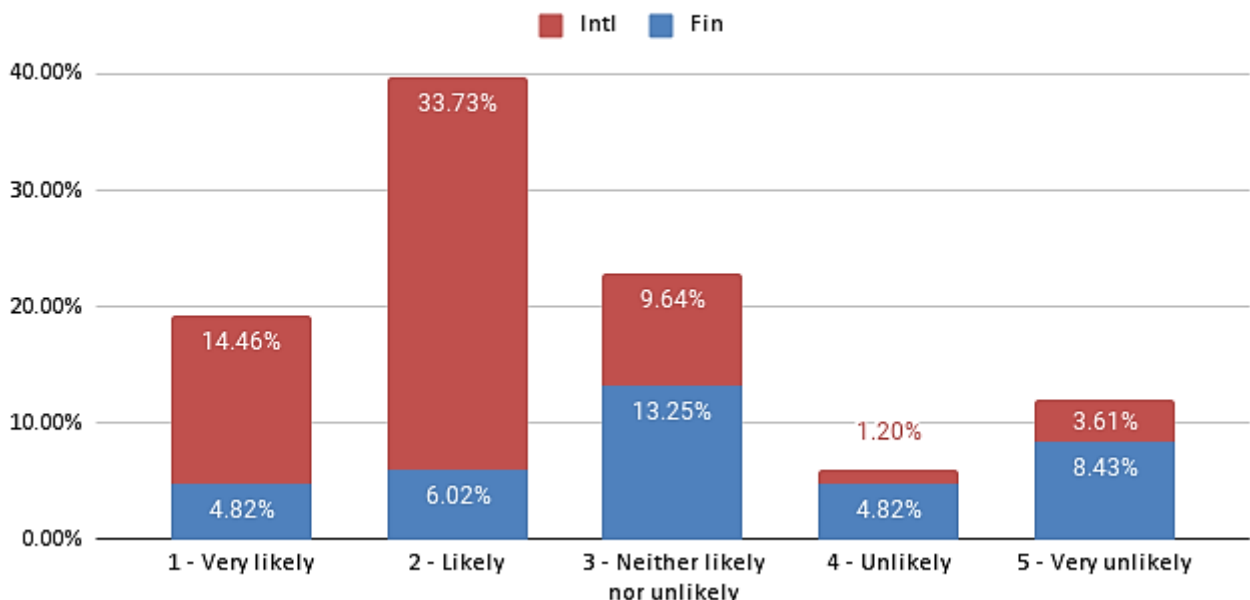


Figure 29. Would you like to participate in Sustainability projects at the University?

According to the survey results, participants are enthusiastic about sustainability, as seen from the above figure. Percentagewise, 59.03% of total respondents are 'Very likely' or

‘Likely’ to participate in sustainability projects at the university, which is a commendable percentage with enthusiasm for such projects and education. Sustainability is a subject that students have recently become more and more interested in learning and practicing. The learners’ enthusiasm is essential for sustainability education as it promotes accountability and direct involvement with environmental programs. It has the potential to bring about positive change and build better prospects ahead.

Furthermore, this new generation must be committed to environmental sustainability because they are raised on participation, education, and critical thinking. Some recent investigations show how experiences influenced student engagement in overseas studies or sustainability education. Participation in study abroad programs and sustainability courses often lead to greater levels of engagement than when compared with non-sustainable courses or campus activities (Tarrant et al., 2020).

How important do you consider is Sustainability Education (Courses, policies, research, others) for you

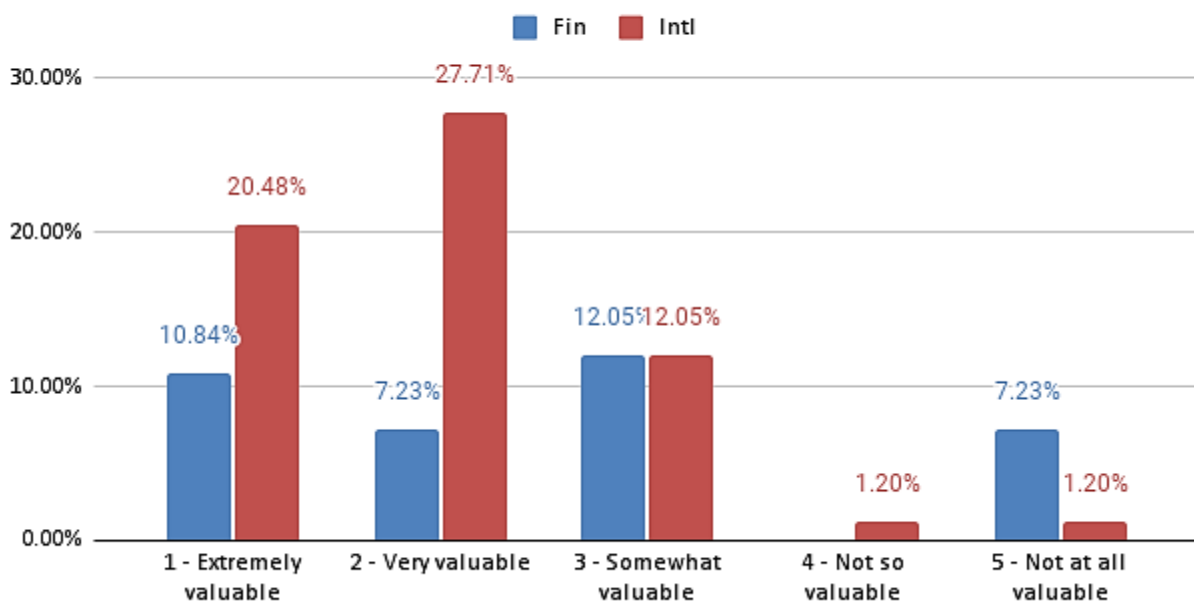


Figure 30. How important do you consider is Sustainability Education (Courses, policies, research, others) for you?

Most of the respondents conveyed the importance of sustainable education. As per the Figure 30, 90.36% of the respondents supported the statement, demonstrating the need for such education in the HEIs. Since that university has to be more focused on, As previously

discussed, students in HEIs are more enthusiastic about sustainability education. Since then, we have suggested that the university implement sustainability-focused coursework. It will strengthen SeAMK's sustainability initiatives, which will gain prominent standing in sustainability rankings in the future.

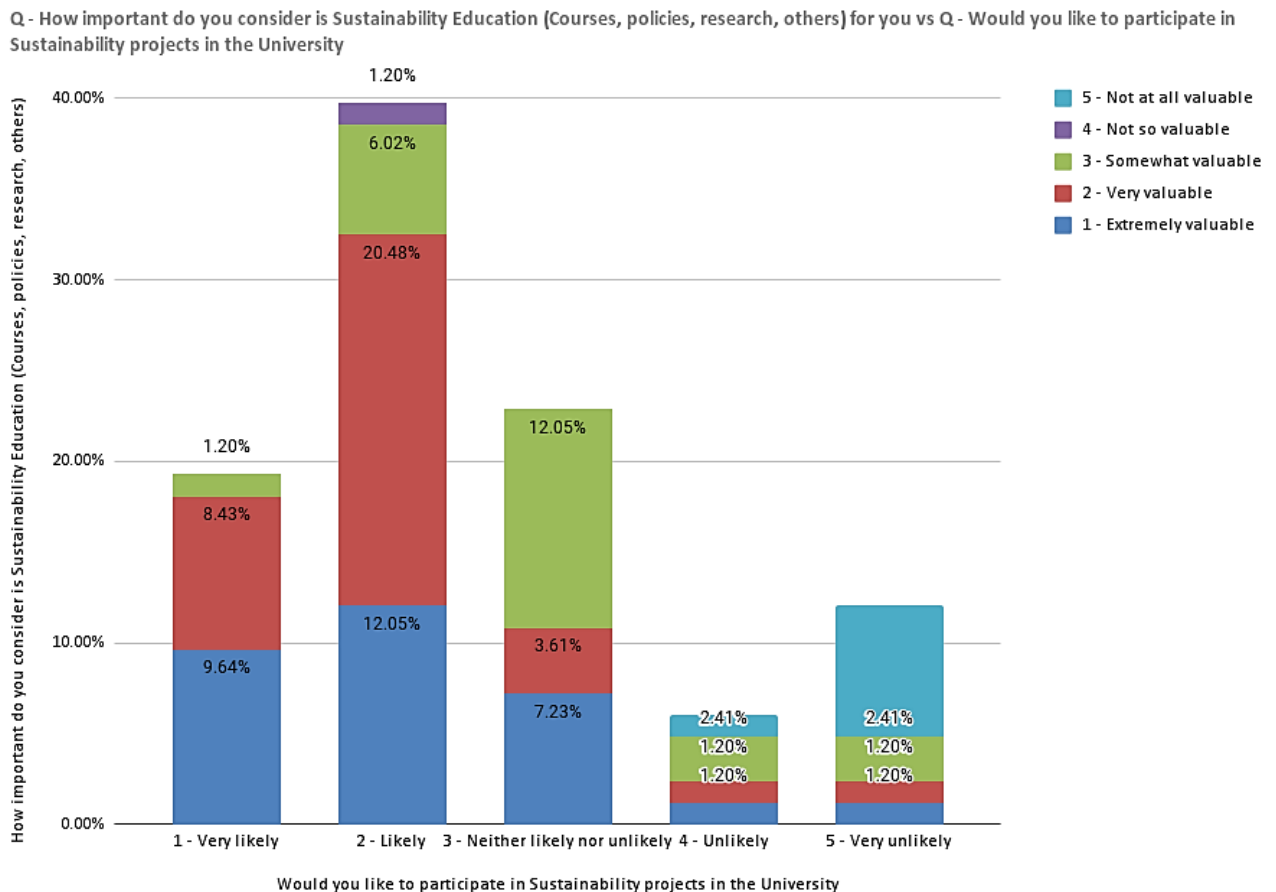


Figure 31.Q-How important do you consider is Sustainability Education (Courses, policies, research, others) for you vs Q-Would you like to participate in Sustainability projects in the University?

Figure 31 shows the positive correlation between respondents who conveyed the importance of sustainability education (Courses, policies, and research) and those who wanted to participate in Sustainability projects at the university. 59.02% of the respondents demonstrated a positive correlation between those variables, showcasing students' interest in studying sustainability. According to the survey Students, Sustainability and Study Choices (Times Higher Education, May 2021), the students are more interested in HEIs that promote sustainable development and prioritize environmental conversion, social responsibility, and ethical practices. The study further elaborates that the students' preferences may influence their decisions on where and what to study (Times Higher Education, 2021).

Should the University has mandatory sustainability courses in all the programs

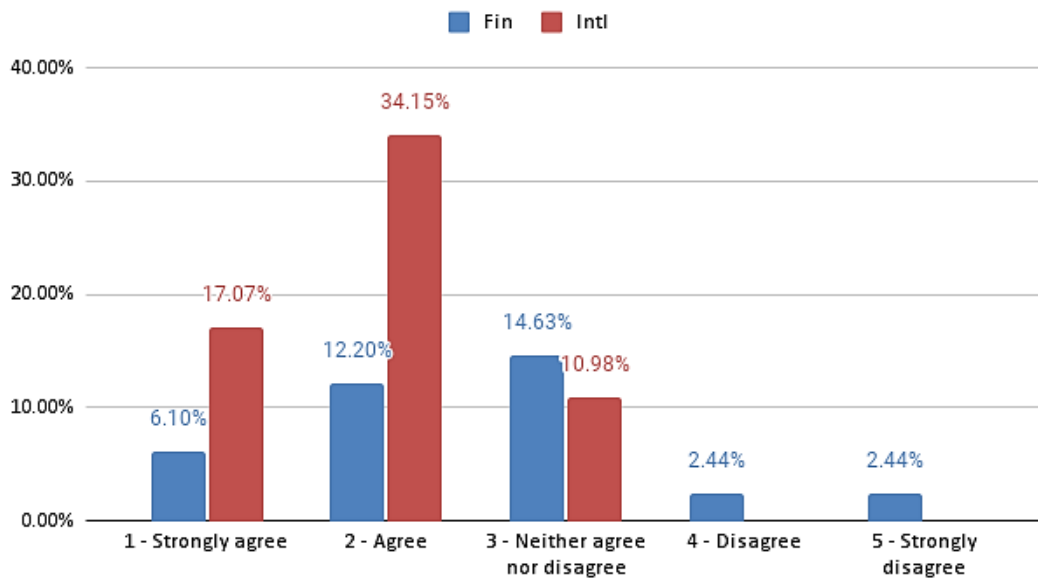


Figure 32. Should the University have mandatory sustainability courses in all the programs?

According to the above Figure 32, students have emphasized having sustainability courses in their curriculum. Among the respondents, 69.52% displayed enthusiasm for having sustainability courses in all programs by stating 'Strongly agree' or 'Agree' to the question. Most of the international students have conveyed their interest in having mandatory courses in their studies. An important thing to notice is that 4.88% of the Finnish respondents disagree with the question 'Disagree' or 'Strongly disagree.'

Researchers have discovered that students' sustainability proficiency growth depends on how they develop courses through HEIs. The development methods matter when enhancing students understanding of sustainability (Wang et al., 2022). Additionally, by using social media platforms to promote environmental awareness and facilitate communication and information sharing, teachers may draw students' attention to sustainability education. Students are more likely to be interested and motivated in sustainable activities inside and outside the classroom when a good and energetic learning environment is established.

Q - Should the University has mandatory sustainability courses in all the programs Vs Q - How important do you consider is Sustainability Education (Courses, policies, research, others) for you

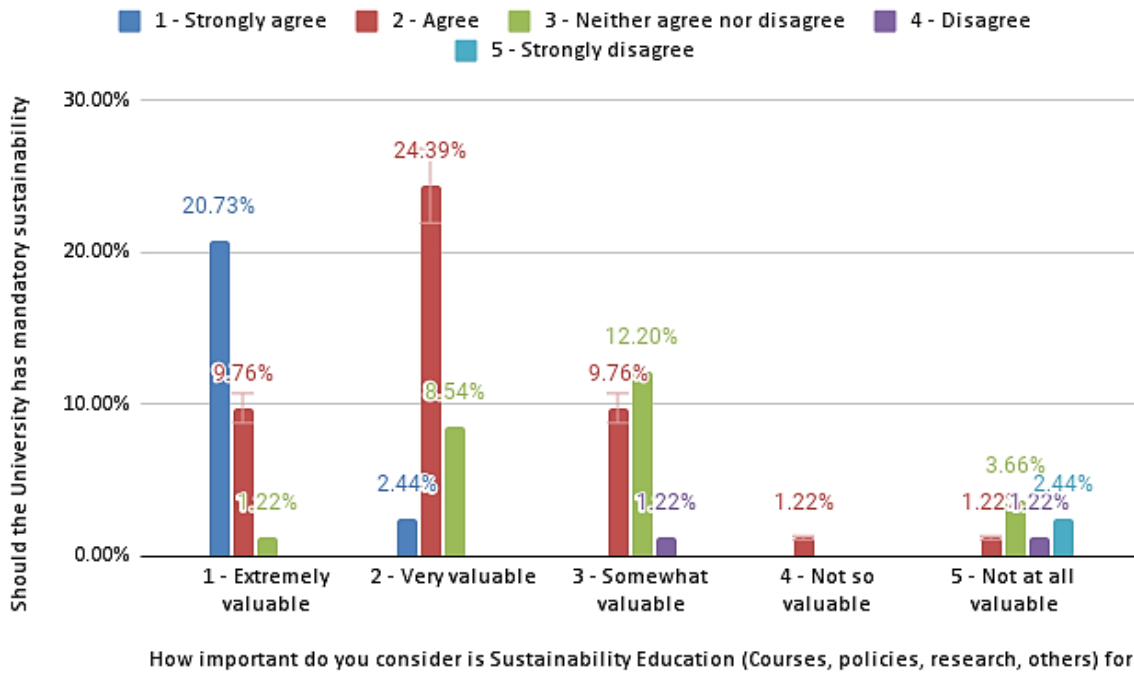


Figure 33.Q-Should the University has mandatory sustainability courses in all the programs Vs Q-How important do you consider is Sustainability Education (Courses, policies, research, others) for you?

Figure 33 shows the positive correlation between the University's mandatory sustainability courses and the importance of sustainability education for students. 90.26% of respondents emphasized the importance of sustainability education, while the importance to notice within the data was 1.22% disagreed with mandatory sustainability courses in university and agreed that having some sustainability education is somewhat valuable. 21.96% were neutral about having mandatory sustainability courses in university, and they emphasized the importance of sustainability education by stating that it is either 'Extremely Valuable,' 'Very valuable,' or 'Somewhat Valuable.'

According to the 2020 Survey Students, Sustainability, and Education (Students Organizing for Sustainability International, 2021), 92% of respondents think HEIs should actively embrace and encourage sustainable development principles, and 40% indicated that sustainability courses were not represented in their curriculum. The development of sustainability education considerably impacts HEIs' sustainability growth.

Q - Are you aware of SEAMKs sustainability plan and goals (Carbon neutrality, supplier policies, others) vs Have you actively participated in any sustainability-related projects, research, or volunteer activities at SEAMK University focused on SDGs ?

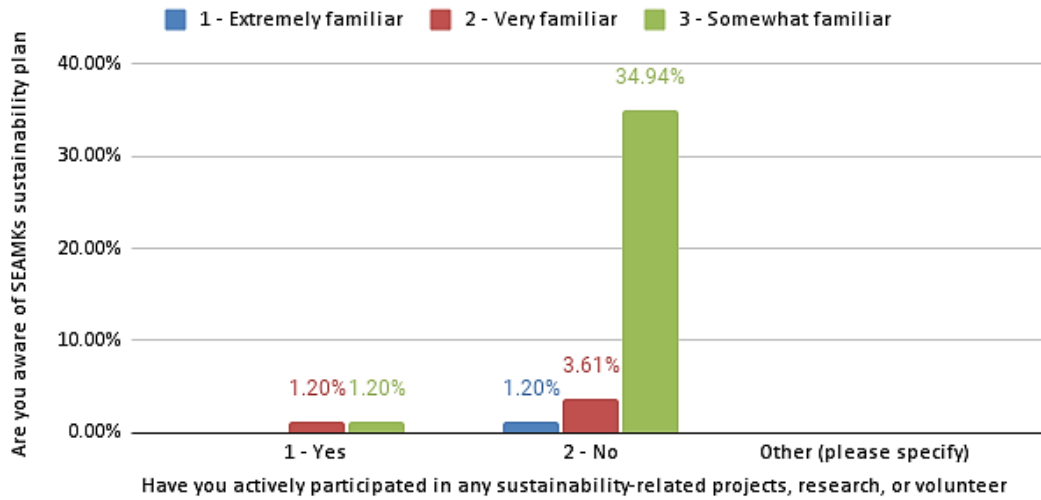


Figure 34. Q-Are you aware of SEAMKs sustainability plan and goals (Carbon neutrality, supplier policies, others) vs Have you actively participated in any sustainability-related projects, research, or volunteer activities at SEAMK University focused on SDGs?

According to the above Figure 34, respondents are unaware of the SeAMK Sustainability Plan. Although SeAMK has a sustainability plan according to the university's sustainability committee, it has not been communicated to the students. That indicates that communication about sustainability is low in the SeAMK. Since respondents have no communication about sustainability, they have no experience with the sustainability initiatives by the campus. Data signify the importance of sustainability education development and proper communication about sustainability.

Total number of Participants	Total score received	Average
83	5928	72.42169

Figure 35. Average of How sustainable do you think SEAMK university is?

Finally, in the data analysis, we collected the respondents' ideas about how sustainable SeAMK is, and the respondents gave an average figure of 72.4%. Although this Figure 35, does not represent the whole university, it can be seen that people think SeAMK has initiated sustainability initiatives. It is pertinent to mention that familiarity with SeAMK sustainability initiatives must be revealed to the community through proper communication.

5 The Role of University Rankings in Shaping SDG Efforts

University Rankings plays a significant role in shaping efforts towards achieving SDGs by providing a framework for evaluating and comparing the sustainability performance of HEIs globally. As the world increasingly recognizes the urgent need for sustainable development, universities are under growing pressure to demonstrate their commitment to addressing pressing social, economic, and environmental challenges. In this context, university rankings serve as powerful tools that not only assess and highlight the contributions of universities towards sustainable development but also influence institutional priorities, policies, and practices. By examining how universities are positioned within these rankings and the factors that contribute to their rankings, we can gain valuable insights into the role of higher education in advancing the SDGs and identify opportunities for enhancing sustainability efforts within academic institutions.

Furthermore, based on the information by Calderon (2023), sustainability rankings serve multiple purposes, including differentiating higher education institutions globally based on their sustainability efforts, providing an additional platform for institutions to enhance their global credentials, and encouraging participation from HEIs not included in traditional rankings due to various constraints. These rankings, such as Green Metric, THE-IR, QS-SR, and STARS, are instrumental in augmenting revenue streams for rankers through consultancy, analytics, marketing, and branding opportunities.

Calderon (2023) states that each ranking system employs distinct methodologies and focuses on different aspects of sustainability. For example, Green Metric assesses campus sustainability efforts based on environment, economy, and equity dimensions, while THE-IR measures universities' contributions to fulfilling the Sustainable Development Goals and QS-SR evaluates how institutions tackle environmental, social, and governance challenges. Additionally, STARS provides a self-reporting framework for HEIs to measure their sustainability performance across various impact areas. These rankings appeal to diverse audiences, with Green Metric targeting environmental sustainability and campus operations, and THE-IR and QS-SR aimed at promoting sustainability advocacy to funders, governments, and prospective students. In essence, sustainability rankings play a significant role in shaping HEIs' efforts towards advancing the SDGs by providing a platform for recognition, benchmarking, and improvement in sustainability performance on a global scale.

Furthermore, in our analysis of the case study, we have gained valuable insights into how Higher Education Institutions contribute to shaping Sustainable Development Goals. For instance, the approach of THE rankings, which evaluates HEIs based on their performance across all SDGs. The fact that there is no registration fee for THE rankings encourages HEIs to participate actively. Also, for new entrants to THE Impact Rankings, research is required, helping institutions identify their strengths and weaknesses regarding SDGs. This initial step is essential for HEIs as it sets the stage for their involvement in sustainability initiatives. Through active participation in such rankings, HEIs play a pivotal role in advancing SDGs and promoting sustainability efforts.

Moreover, Tercanli and Jongbloed (2022) state that despite their potential, universities often struggle to integrate sustainability across various domains. Here, university rankings can step in to make a difference in SDG efforts. By acknowledging and rewarding universities for their sustainability efforts, rankings can highlight the importance of SDGs in higher education. This encouragement can push universities to prioritize sustainability in their operations, teaching, and community engagements. Through clear evaluation criteria, rankings like THE IR can offer universities valuable insights into their sustainability performance, guiding them toward areas of improvement. Additionally, rankings promote collaboration among universities, fostering collective efforts toward achieving the SDGs globally. So, it is obvious that university rankings not only recognize the role of universities in sustainability but also empower them to drive meaningful change for a sustainable future.

Applying SECI Model for Enhancing the sustainability adoption at SeAMK University

The SECI Model is considered as the best conceptual framework for understanding knowledge management processes in organizations (Ocholla & Adesina, 2019). The SECI model, initiated by Ikujiro Nonaka and Hirotaka Takeuchi in 1995, revolutionized our understanding of information dynamics in organizations. It challenges the traditional notion that tacit knowledge is exclusively individual and unspoken, emphasizing instead its transformative potential and value in the business environment and Nonaka and Takeuchi's seminal work proposes that tacit knowledge can be externalized and articulated, forming the foundation of their knowledge conversion theory, encapsulated in the SECI model (op. cit.).

This SECI model defines a continuous and repeated process of knowledge transformation in four distinct areas, Socialization, Externalization, Internationalization and Combination.

Initially knowledge is shared and cultivated among individuals through socialization, transitioning tacit knowledge from one person to another. Later, this tacit knowledge is externalized translated into explicit form allowing it to be shared and disseminated widely within the organization.

The next phase of this model involves the combination of explicit knowledge where diverse sources of explicit knowledge are combined and synthesized to generate new insights. Finally, knowledge is internalized with explicit knowledge absorbed and applied by individuals, thereby enriching their tacit knowledge base. Basically, the SECI model illustrates a dynamic, spiral-like process in which information continuously moves and evolves within an organization. By understanding the interaction between tacit and tacit knowledge and using these methods of knowledge transformation, organizations can foster a culture of innovation and learning that propels them to competitive advantage and sustainable success. Furthermore, Figure 36 emphasizes we will delve deeper into all aspects of the SECI model and consider practical strategies for implementing it into practice as well as encouraging an innovative and knowledge-sharing culture within organizations.

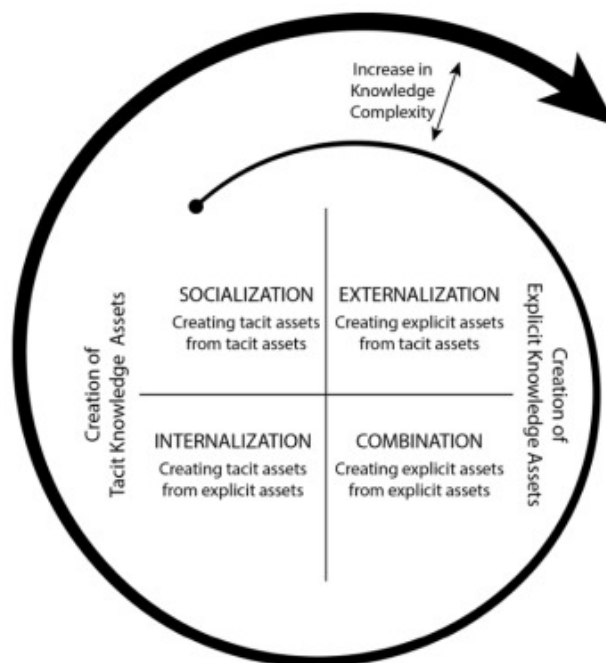


Figure 36. SECI Model (Nonaka, 1994).

Above Figure of the SECI model emphasizes the above-mentioned categorized sections. Furthermore, during our research process surrounding sustainability initiatives at SeAMK, we recognize the importance of enhancing our improvement process as we identified through

our survey and the analysis that as HEI, we will have to adapt some changes to overcome the challenges that we are dealing in our university. To end this, we are recommending the SECI model, which is a proven knowledge management approach that aligns with our goals. As a HEI an organization dedicated to promoting sustainable, we understand the significance of adopting unique approaches to achieve our university's sustainability goals. Using this SECI model provides us a structured framework through which we can effectively manage knowledge to drive sustainable practices forward. Moreover, by embracing the SECI model our aim is to foster an environment of continuous learning and innovation within our university community.

As explained earlier in SECI model through that four modes of knowledge conversion, Socialization, Externalization, Combination, and internalization we try to keep the harness of the collective wisdom and the expertise of our stake holders (Figure 37).

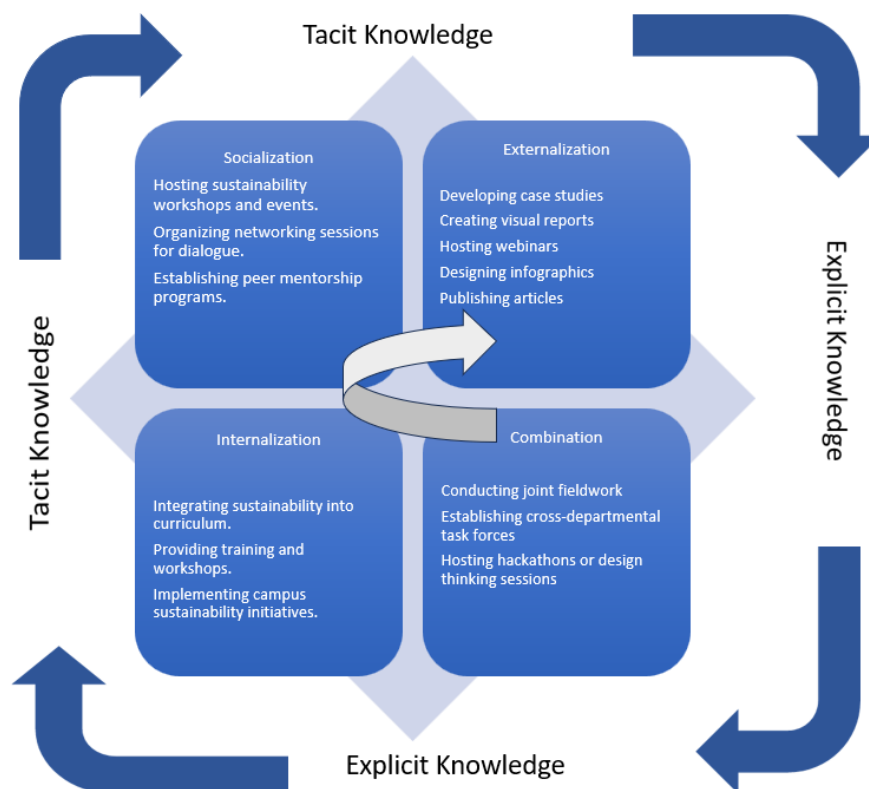


Figure 37. SECI Model Suggestion for SeAMK.

As we are proposing the SECI Model for our university, and above Figure 37, shows a few examples of suggestions we're making for SeAMK within the four SECI model modes. We will delve into how well SeAMK can align with these modes.

Socialization: Socialization involves the sharing of tacit knowledge through direct interaction and communication among individuals within the organization. In this case as, we are recommending some programs for our university such as, Hosting sustainability-themed workshops, seminars, and discussion sessions, organizing networking events to facilitate connections and dialogue among students, faculty, staff, and external stakeholders. Establishing peer mentorship programs where individuals can learn from each other's sustainability practices and initiatives. These are some of the recommendations that we could implement in regard to enhance the sustainability initiatives at SeAMK.

So, considering about the initial recommendation, Hosting sustainability-themed workshops, seminars, and discussion sessions, through the direct interaction and communication in informal settings such as sustainability themed workshops and discussion sessions, students, faculty, and staff have the opportunity to engage in meaningful discussions and exchange insights on sustainability related topics. These face-to-face interactions not only promote knowledge transfer but also cultivate a shared understanding of sustainability values and practices across the different departments and disciplines.

Furthermore, the next recommendation, organizing networking events to facilitate connections and dialogue among students, faculty, staff, and external stakeholders. Maybee (2023) also states that by fostering a culture of open dialogue and collaboration, SeAMK could empower its members, students, and other staff to collectively identify the challenges creation solutions and drive innovation in sustainability. Moreover, networking events provide a platform for our university to showcase its sustainability efforts and initiatives to external stakeholders and attracting the support for further sustainability agenda. Maybee also states that in the recent time there are so many sustainable events that promote sustainability, and these events can support to promote sustainability. Also, the author states that there is a demand for these trends in the recent era which helps organizations to be more sustainable.

So, by actively engaging with the broader community SeAMK has the ability to leverage external expertise, resources, and networks to amplify the impacts of its sustainability initiative and drive positive change beyond the university. So overall organizing networking events plays an important role in creating a collaborative and inclusive environment for advancing sustainability at SeAMK. By facilitating the connections and dialogue among stakeholders these events empower individuals to work together towards shared sustainability goals and making meaningful progress towards a more sustainable future.

As another recommendation, establishing peer mentorship programs where individuals can learn from each other's sustainability practices and initiatives at SeAMK can be a valuable strategy to promote our sustainability goals. Usanmaz (2023) also states that peer-to-peer mentoring is a further way of communication between the mentor-mentee pair. Transferring significant information and expertise has been rendered possible in a significant way by peer mentorship. So, by introducing these programs, individuals with experience and expertise in sustainability can serve as mentors to guide and support their peers in adopting sustainable behaviors and implementing environmentally friendly approaches. Furthermore, Peer mentorship programs provide a structured framework for sharing knowledge and best practices related to sustainability. Experienced mentors can impact their insights and expertise to mentees helping them understand the importance of sustainability and providing guidance on practical ways to incorporate sustainable practices into their academic and personal lives as well.

Additionally, peer mentorship programs can facilitate peer-to-peer learning and behavior change. Mentors can serve as role models for sustainable behavior, inspiring mentees to adopt similar practices and habits. Through ongoing support and encouragement from mentors, mentees can gradually integrate sustainability principles into their daily routines and contribute to a culture of sustainability within the university community. So, in this scenario, establishing peer mentorship programs at SeAMK University can serve as an effective strategy for fostering a culture of sustainability, promoting knowledge sharing and skill development, facilitating behavior change and adoption, building community and engagement, and creating long-term impacts for a more sustainable future.

Moreover, these recommendations for socialization mode explain some of the ways we propose to improve sustainability at SeAMK University. Setting up peer mentorship programs, conducting networking events, and encouraging socializing activities are just a few of the measures we feel will have a substantial influence on our sustainability efforts. However, we acknowledge that there are countless more pathways and chances to improve sustainability at our university. As we continue to explore and implement new ideas and activities, SeAMK remains committed to cultivating a sustainability culture that enables individuals to take action and effect positive change for a more sustainable future.

Externalization: As this focuses on transforming tacit knowledge into explicit forms that can be documented and shared, facilitating knowledge dissemination and organizational learning.

At SeAMK University, we propose various initiatives to externalize sustainability knowledge and experiences. This includes developing case studies, reports, hosting webinars, and publications that highlight our sustainability achievements and best practices.

As the first recommendation, developing case studies and success stories could help our university to enhance sustainability practices in different ways. Case studies and success stories are detailed descriptions of individual sustainability projects performed by SeAMK University. These case studies provide a detailed account of the challenges encountered during the project, the strategies designed and implemented to overcome those challenges, and the specific results achieved as a result. They provide valuable insights and lessons throughout the project and journey, highlighting both successes and failures. Furthermore, based on an article by Hudson (2018), it emphasizes the importance it is to build partnerships and share success stories in order to maintain efforts towards sustainability. Providing educators in higher education with examples of successful projects and activities, particularly those which are aimed at improving institutions' and students' comprehension of and engagement with sustainability, is a valuable asset for promoting future work in this field.

Moreover, these sources provide in-depth analyses of specific sustainability initiatives, highlighting both the obstacles and achievements that were faced. For instance, Virginia Tech's College of Natural Resources and Environment provides a wealth of sustainability case studies, covering topics such as water management, sustainable development, and environmental education (Torraca & Yauch, 2023). Developing case studies and success stories to promote our university's sustainability initiatives would be an impressive way to get insights from successful models, such as Virginia Tech's College of Natural Resources and Environment. When we consider SeAMK, for instance, a case study could focus on the efforts of SeAMK and reduce water consumption on campus.

It would detail the initial assessment of water use, the implementation of water conservation measures such as the installation of low-flow devices and the implementation of water reuse systems, as well as the resulting reduction in water use and the resulting cost savings. The case study could also discuss the challenges encountered during the implementation process, such as technical problems or resistance to change, and how these challenges can be resolved. Success stories, on the other hand, are targeted stories that highlight specific achievements or milestones SeAMK in the journey of sustainability. These stories show the positive impact of sustainability initiatives on the university community, the environment and

society as a whole. For example, a success story could highlight SeAMK 's transition to renewable energy sources for campus electricity and detail the environmental benefits of reducing carbon dioxide emissions and the financial savings achieved through energy efficiency measure.

Furthermore, both case studies and success stories are effective communication tools for SeAMK to share its sustainability achievements with internal and external stakeholders. Internally, they increase the pride and commitment of students, faculty, and staff, demonstrating the university's commitment to sustainability and its ability to bring about positive change. Externally, they raise awareness of SeAMK's sustainability efforts among partners, funders, policy makers and the wider community, enhancing the university's reputation as a leader in sustainable practices. In addition, case studies and success stories provide practical examples and inspiration for others wishing to undertake similar sustainability initiatives. They provide valuable information on effective strategies, best practices and lessons learned, enabling other organizations to replicate and adapt successful sustainability approaches in their own contexts. By sharing these stories widely through various channels such as the university website, social media, newsletters, and presentations, SeAMK can amplify the impact of its sustainability efforts and inspire collective action towards a more sustainable future.

As another recommendation, creating reports and publications can be proposed. As, reports and publications are comprehensive documents that provide detailed information on SeAMK's sustainability initiatives, strategies, and progress. These materials provide a centralized platform to summarize key sustainability projects, share research findings, and communicate the university's accountability goals. For example, A sustainability report, for example, may explain SeAMK's accomplishments in lowering carbon emissions, increasing the use of renewable energy, adopting waste-reduction measures, and supporting sustainable mobility on campus. By issuing reports and publications on sustainability concerns, SeAMK displays its commitment to openness and responsibility in its sustainable activities. These documents are concrete evidence of the University's efforts to promote environmental protection and social responsibility.

Moreover, they can demonstrate SeAMK's commitment to sustainability both within the university community and externally to stakeholders, partners, and the public. In addition, reports and publications are valuable resources for stakeholders, decision makers and the wider community. They promote the exchange of knowledge by sharing SeAMK insights,

lessons learned and best practices from the sustainability journey. These materials inform sustainable development decision-making processes at both local and global levels and provide evidence-based guidance to policymakers, businesses and other institutions seeking to strengthen their sustainable development efforts.

Furthermore, by sharing reports and publications widely through various channels such as university websites, social media, academic journals, and conferences, SeAMK can amplify the impact of its sustainability initiatives and inspire others to act for a more sustainable future. These encourage cooperation, information sharing, and collective action, which promotes positive change not just within the academic community but also in society as a whole. In general, the production of reports and publications plays a significant role in furthering the goals of sustainable development and fostering the culture of sustainable development both locally and internationally. Additionally, by adopting this practice, SeAMK could demonstrate its commitment to environmental protection and social responsibility while empowering people to contribute to positive change along with the community.

Another recommendation that we are proposing, Designing infographics. Designing infographics can be served as to externalize knowledge by translating complex sustainability information and concepts into visually appealing and easy-to-understand formats that can be shared with external stakeholders. For an example University of South Dakota (2023) has made some infographics related to sustainability which mainly showcases sustainable energy by connecting with the World Bank. So, by using infographics, SeAMK also can effectively communicate its sustainability achievements, goals, and initiatives to a wider audience, including external partners, decision makers, industry stakeholders and the wider community. By sharing infographics on social media, websites, newsletters, and presentations, SeAMK could take its knowledge and insights on sustainable development and makes them accessible and understandable to stakeholders outside the university community. In addition, infographics are a valuable educational resource that increases awareness and understanding of sustainability issues among external stakeholders. By publishing infographics that explain the ideas of sustainable development, highlight best practices, and underline the importance of sustainable behavior, SeAMK will be able to increase information exchange and enlighten decision-making processes connected to sustainability, both locally and worldwide.

Furthermore, infographics are visually appealing and easy to disseminate, making them an effective tool for involving the campus community in sustainability efforts. SeAMK Can

create pride and involvement among students, teachers, and staff by generating infographics that display success stories, highlight current sustainability initiatives, and celebrate successes, promoting a feeling of ownership and shared responsibility for sustainability efforts. Infographics may also be utilized as a call to action, encouraging individuals to take steps toward sustainable development to the infographics SeAMK can motivate stakeholders to participate in sustainability projects, adopt sustainable practices, and contribute to beneficial environmental and social consequences both on and off campus.

So, we believe that producing infographics is an effective communication approach that can promote the adoption of sustainability at SeAMK University by increasing awareness, educating stakeholders, engaging the community, sharing progress, and promoting activities.

Combination: Combination, in the context of increasing sustainability adoption at SeAMK University, represents the merging of multiple knowledge sources to stimulate creativity and problem-solving. It emphasizes the need for cooperation and cross-disciplinary interaction as key catalysts for moving sustainable practices and projects ahead. So, for this we could recommend, conducting joint field work, cross-departmental task forces and Hackathons or design sessions.

So, as the first recommendation we suggest that SeAMK should conduct joint fieldwork. As joint field work involves partnering with other departments or disciplines to collect data, conduct research, or execute sustainability initiatives in real-world situations. SeAMK can handle difficult sustainability concerns more effectively by bringing together specialists from other sectors to share their varied perspectives, expertise, and abilities. For example, interdisciplinary teams might collaborate to analyze the environmental effect of campus operations, research local ecosystems, or engage with community stakeholders to establish long-term solutions. This collaborative approach encourages innovation, creativity, and cross-pollination of ideas, resulting in fresh insights and long-term remedies that would not have been conceivable inside segregated disciplinary boundaries. Additionally, it is important to note that joint programs like the Joint Environment & Sustainability Program (JESP) at Georgetown University offer interdisciplinary learning experiences that prepare students for environmental changemaking and equip them with a diverse set of skills to address environmental issues (Georgetown University, 2023). Furthermore, adapting these programs can benefit Students, instructors, and staff greatly from joint fieldwork since it allows for multidisciplinary cooperation and hands-on learning experiences. Working together in real-world situations allows

participants to acquire practical insights into sustainability issues and generate new solutions via experiential learning.

One factor that makes collaborative fieldwork so effective is its capacity to bridge the gap between theory and practice. Participants can test hypotheses, validate research findings, and get a better grasp of the intricacies involved in tackling sustainability concerns by applying theoretical knowledge and approaches to real-world situations. Furthermore, joint fieldwork promotes collaboration outside the university campus by bringing together other stakeholders such as local communities, companies, government agencies, and non-profit organizations. By incorporating these stakeholders in fieldwork operations, SeAMK can ensure that sustainability initiatives are co-designed and implemented in collaboration with people who will be impacted by them. This participatory approach not only increases the relevance and effect of sustainability projects, but it also encourages community involvement and empowerment. For instance, as SeAMK is already engaged with some research and development programs such as Circular Economy Competence (SeAMK RD, n.d.) we believe that adapting this framework could enhance more the ability of SeAMK to promote sustainability.

The next recommendation under the Combination mode is that SeAMK could encourage Cross Departmental Task Forces in University. Cross-departmental task groups are dynamic forums for bringing together various parties with complementary knowledge and views to tackle difficult sustainability concerns. These task teams are often formed to address specific sustainability concerns or programs highlighted as priorities for the university. SeAMK could possibly similarly take advantage of interdisciplinary and cross-departmental efforts to design and implement enterprise sustainability solutions, taking inspiration from successful examples such as some universities that have established cross-departmental initiatives to promote sustainability, like Arizona State University's goal of Collaborative Action (Arizona State University, n.d.).

One important feature of cross-departmental task groups is their potential to promote multidisciplinary collaboration and knowledge exchange. SeAMK may harness a diverse set of experience, skills, and resources by bringing together members from various departments, academics, staff, and students to discover innovative solutions to sustainability concerns. Furthermore, cross-departmental task groups also play an important role in increasing stakeholder participation and ownership of sustainability efforts. By involving stakeholders in decision-making and empowering them to actively contribute to the development and

implementation of sustainability projects, task forces foster consensus, buy-in, and promote a culture of shared responsibility for sustainability in the university community. This participatory method not only improves the efficacy and impact of sustainability efforts, but it also develops connections and collaboration among stakeholders from all departments.

Overall, cross-departmental task groups can contribute significantly to SeAMK University's sustainability efforts by encouraging multidisciplinary collaboration, stakeholder involvement, and innovation. SeAMK can design and execute comprehensive and effective solutions to sustainability concerns by drawing on the combined skills and resources of its varied community, resulting in beneficial environmental, social, and economic consequences on campus and beyond.

Another way to enhance sustainability efforts at our university is to organize hackathons or design thinking sessions. Universities along with other higher education institutions have been increasingly involved in sustainability-related initiatives in recent years. According to Kingston University of London (2023), a notable project that addressed environmental issues is a series of collaborative workshops that were organized in association with BIG South London. Residents, businesspeople, academics, and stakeholders get together for these workshops to create creative ideas with the goal of improving energy efficiency and reducing carbon emissions. Through the implementation of design thinking approaches and multidisciplinary collaboration, assisted by the University's Hack center, participants were able to explore solutions to address supply chain difficulties and modify facilities in order to promote a more sustainable and environmentally friendly constructed environment.

Building upon the advantages of hackathons and design sessions outlined above, SeAMK University can further enhance its sustainability initiatives by implementing a structured approach to organizing these events. At SeAMK University, holding hackathons or design sessions has enormous potential for promoting sustainability initiatives and cultivating an innovative and collaborative culture. These events have several benefits, including for instance, hackathons and design sessions allow students, professors, staff, and external stakeholders to collaborate and address important sustainability issues confronting the university community. By leveraging the collective knowledge and creativity of various participants, SeAMK may develop new ideas and unique solutions that would not have been achievable using traditional methods. Secondly, these events encourage stakeholder participation and ownership

of sustainability projects. By integrating stakeholders in the problem-solving process, SeAMK builds participant ownership and commitment, resulting in enhanced buy-in and support for sustainability initiatives across the university community. Furthermore, hackathons and design workshops provide important learning opportunities for participants. Students, professors, and staff acquire hands-on experience in cooperation, problem solving, communication, and project management, all of which are necessary skills for resolving complex sustainability concerns in real-world situations. Furthermore, hackathons and design sessions create practical results, such as prototypes, concepts, or action plans, which may be developed and executed to help SeAMK enhance its sustainability efforts. These outcomes operate as change catalysts and give a road map for putting ideas into practice.

To maximize the benefits of hackathons and design sessions, SeAMK can take the following steps:

- Define specific objectives and sustainability concerns to be addressed during the event.
- Form varied teams composed of people from various departments, disciplines, and backgrounds to facilitate interdisciplinary cooperation.
- Give teams assistance and resources, such as mentoring, experience, and financing, to help them create and perfect their ideas.
- Create a friendly and inclusive workplace that fosters innovation, experimentation, and risk-taking.
- Facilitate follow-up initiatives, such as incubation programs, networking events, or partnerships with other groups, to foster connections and cooperation after the event.

By retaining sustainability hackathons and design sessions, SeAMK will be able to tap into its community's creative potential and stimulate new ideas that contribute to a more sustainable community and educational institution.

Internalization: Internalization, particularly as it involves SeAMK University's sustainability initiatives, is the process of integrating sustainability ideas and practices in the actions, viewpoints, and routines of individuals inside the company. It focuses on cultivating a culture of learning, empowerment, and shared responsibility, in which sustainability is integrated into the university's ethos and daily operations. Integrating sustainability into the curriculum is a

vital component of internalization. By incorporating sustainability ideas, principles, and challenges into academic programs across disciplines, SeAMK can ensure that students have the information, skills, and mindset required to tackle sustainability concerns in their future employment and personal lives. This might include creating new courses or modules focusing on sustainability, incorporating sustainability subjects into current courses, and offering chances for experiential learning, fieldwork, or research projects relevant to sustainability. Furthermore, developing new courses or modules can lead SeAMK to achieve sustainability adaptations for the betterment of the university. SeAMK could offer particular courses or modules centered on sustainability.

These courses may address a variety of themes, including environmental sustainability, equality in economic development, climate change, sustainable business practices, and more. By offering these specialist courses, SeAMK equips students with in-depth information and abilities for solving sustainability concerns in their chosen industries. According to our survey analysis we found that most of the students are willing to take part in more sustainability courses that university will provide so adapting this could be a better solution or a recommendation for our university to achieve its goals toward the sustainability. Furthermore, it is advisable to include sustainability concepts into current courses from other fields. This multidisciplinary approach guarantees that sustainability is integrated into all aspects of students' academic experiences, regardless of their major or field of study.

By utilizing these tactics, SeAMK ensures that sustainability education is more than just academic understanding; it constitutes a converting experience that enables students to navigate and engage in an ever-evolving world. SeAMK educates students with the information, skills, and mindset necessary to be effective leaders and innovators in sustainability, both professionally and personally, through a combination of innovative curriculum, practical learning, and multidisciplinary cooperation.

A further significant strategy for SeAMK is to provide training and workshops that assist staff internalize sustainability. SeAMK can empower faculty, staff, and students to deepen their understanding of issues related to sustainability, develop practical skills for implementing initiatives that promote sustainability, and become sustainability advocates in their respective roles and spheres of influence through offering training sessions, workshops, and professional development opportunities on sustainability topics. These training programs could cover a wide range of themes, such as sustainable practices, green technologies, mitigation

of climate change, sustainable development objectives, and corporate social responsibility. Moreover, SeAMK could offer personalized training programs for specific groups and topics of interest. For example, professors may benefit from seminars on integrating sustainability into curriculum design and teaching approaches, while campus operations personnel may require training on implementing sustainable practices in their particular departments.

Additionally, implementing university sustainability initiatives is a significant method for incorporating sustainability at SeAMK University. These initiatives involve taking real measures to promote sustainability, social responsibility, and financial sustainability throughout the university's activities and buildings. SeAMK reduces its environmental impact while simultaneously enlightening students, teachers, staff, and visitors about the importance of sustainable practices. For instance, SeAMK can implement waste reduction and recycling initiatives to reduce trash on campus while diverting recyclable items from landfills. This could entail establishing recycling bins and signs across campus, conducting educational campaigns to encourage trash reduction and recycling among students and staff, and establishing agreements with local recycling facilities that ensure appropriate disposal and processing of recyclable items.

Finally, according to the proposed recommendations, that are in line with the SECI model, offer the potential for advancing SeAMK University towards its objectives of sustainability. SeAMK could encourage collaboration as well as sharing of information as well as documenting and providing best practices, leading to a dynamic learning environment where sustainability becomes engrained in the university's culture. SeAMK empowers its community to bring about positive improvements while contributing to a more sustainable future by fostering multidisciplinary cooperation and integrating sustainability principles in individual behaviors and practices. By implementing these concepts into its SECI model, SeAMK has the potential to make significant strides toward sustainability adaptation and become an expert in sustainable practices within the higher education sector as well as beyond.

6 Challenges and Opportunities in Implementing SDGs in universities.

Implementing the Sustainable Development Goals within universities presents a unique blend of challenges and opportunities, reflecting the complex nature of integrating global sustainability principles into higher education institutions. Universities face challenges such as resource scarcity, curriculum alignment, and the need for effective assessment systems. However, they also have opportunities to encourage student participation, foster collaborative partnerships, and enhance institutional importance. Striking a balance between these factors is essential for universities to uphold their roles as frontrunners in advancing sustainability and driving positive transformations. Furthermore, Sedlacek (2013) also states that Under the SDG agenda, businesses, governments, and civil society actors are equally called upon to pursue a more sustainable path forward. In this context, universities can play a crucial role in bringing together a diverse group of societal stakeholders to take action and make an impact.

During our research on the SeAMK case study, we discovered several common challenges that higher education institutions encounter when implementing the Sustainable Development Goals. These challenges serve as crucial focal points for HEIs striving to achieve effective SDG implementation. By exploring these obstacles, we gain insight into the broader landscape of sustainability efforts in universities.

Now we will explore some key challenges commonly faced by HEIs in implementing the SDGs:

Resource Constraints: Many universities face financial limitations that hinder their ability to invest in sustainable initiatives required for SDG implementation. Infrastructure development, renewable energy projects, and sustainability-focused research require significant financial resources. Moreover, infrastructural limitations can also impede efforts to adopt sustainable practices, such as retrofitting buildings for energy efficiency or implementing waste reduction programs. Addressing resource constraints may involve seeking external funding sources, partnering with governmental agencies or private organizations, or reallocating existing budgets to prioritize sustainability initiatives. Additionally, universities can explore innovative financing mechanisms, such as public-private partnerships or green bonds, to overcome financial barriers and advance sustainability goals. Additionally, Hayworth and Owens (2022) highlight a growing trend in sustainable financing within higher education, which encompasses

various options like sustainability-linked financing, sustainability bonds, and public-private partnerships. The emphasis is placed on the significance of adhering to sustainable finance principles and how they align with capital projects undertaken by universities. Adapting to these emerging trends could assist universities in addressing the financial challenges they may encounter.

Curriculum Integration: Incorporating the Sustainable Development Goals into existing university curricula presents several challenges, including disciplinary boundaries and faculty resistance. Faculty members may lack familiarity with sustainability concepts or perceive them as unrelated to their specific field of study. However, addressing these challenges is essential to equip educators with the knowledge and skills needed to integrate sustainability principles effectively into their teaching. Faculty training programs and interdisciplinary collaboration can facilitate the integration of sustainability across academic programs, fostering a holistic understanding of sustainability among students.

Additionally, universities can leverage experiential learning opportunities, such as service-learning projects or internships, to enhance student engagement and understanding of sustainability issues. As emphasized by Avelar et al. (2023), ongoing research plays a pivotal role in informing best practices for curriculum integration. By staying informed about the latest research findings and scholarly insights, HEIs can continue to enhance their efforts to foster a comprehensive understanding of sustainability among students and prepare them to address global challenges effectively as future decision-makers.

Research Priorities: The shift from research programs to programs linked to the SDGs will require universities to re-evaluate current research programs and funding mechanisms. This may include encouraging researchers to undertake sustainability-focused projects through grant programs, research fellowships or degrees. Interdisciplinary research projects can promote collaboration between academic departments and research centers to address complex sustainability issues from a variety of perspectives. Universities can also establish institutes or research centers dedicated to sustainability, providing a platform for collaboration, knowledge exchange and innovation. In addition, by collaborating with industry stakeholders, government agencies and non-profit organizations, we can accelerate the translation of research findings into practical solutions, driving positive change and helping to achieve the SDGs. Additionally, based on the information provided by IISD (2022), it emphasizes the significance of forging partnerships across various sectors and disciplines, particularly in

science, technology, and innovation (STI), to devise novel strategies for SDG implementation. So, adopting these new strategies could help universities to overcome these challenges.

Measurement and Reporting: Standardized metrics and data collecting procedures are necessary for the establishment of strong monitoring and evaluation systems to evaluate progress towards the SDGs. Universities need to create frameworks for gathering, evaluating, and reporting sustainability data as well as defining pertinent indicators. This might entail putting in place mechanisms for reporting sustainability, carrying out routine audits or evaluations, and including outside parties in the assessment procedure. Building confidence and credibility in sustainability reporting requires accountability and transparency, which guarantees that universities appropriately convey their contributions to the SDGs. Universities may also increase their ability to gather, analyze, and visualize data by utilizing technology and data analytics tools. This will help them make better decisions and continuously improve their performance in sustainability. In addition, Universities could use STARS to assess the sustainability initiatives at universities.

Community Engagement: Successful communication and teamwork techniques are necessary to involve a variety of stakeholders in sustainability projects, including students, employees, local communities, and business partners. Universities may create task forces or committees dedicated to sustainability concerns, with members drawn from a range of stakeholder groups, to promote communication, collaboration, and decision-making. By including students in extracurricular activities, volunteer work, and student-led projects, you may empower them to make good changes both on and off campus and develop a feeling of ownership in sustainability programs. In order to address issues of shared sustainability like social injustice, environmental degradation, and climate change, colleges can also collaborate with local communities, governmental bodies, and non-profit groups. Community-based research projects, outreach programs, and sustainability-focused events are examples of collaborative activities that may improve mutual understanding, foster trust, and fortify alliances to take collective action towards the SDGs. So, making these changes universities could overcome from the challenge of Lacking the community engagement.

So, Higher education institutions need to take on these difficulties in a comprehensive way that includes many essential components. This entails exhibiting a strong commitment to sustainability at the leadership level, actively involving stakeholders at all levels, developing capacity through programs for training and development, and developing strategic plans that

are customized to the unique circumstances of each institution. HEIs may more effectively and efficiently manage the intricacies of fulfilling the Sustainable Development Goals by giving priority to these common problems and putting comprehensive policies into place. By working together and taking coordinated action, HEIs may significantly contribute to the advancement of sustainability objectives and constructive social change. This strategy not only guarantees the incorporation of sustainability concepts into institutional operations but also cultivates a campus-wide culture of sustainability. In the end, HEIs may fulfill their function as catalysts for sustainable development and turn into lights of innovation and advancement in the movement towards a more sustainable future by adopting an all-encompassing strategy.

Moreover, in a research article written by Agusdinata (2022), emphasizes utilizing the synergistic relationships between the SDGs and effectively engaging a broad range of societal stakeholders are essential to the successful implementation of solutions to achieve the UN SDGs. Based on the information by Agusdinata (2022) below we can see a working model (Figure 38) a process that universities could use for implementing SDGs.

As in Figure 38, we could notice there are 8 steps. So, the work model implemented in universities consists of eight main sub-processes that take place in three environments: academic, practical and community environments. These vary from loose coordination in an academic setting, to one-on-one interaction in a practice setting, to tight coordination in the community. They are brought together by shared learning and constant feedback. Two sub-processes take place in the academic environment: internal functioning of the university and support, where students and faculty develop sustainable solution ideas (1) in collaboration with interest groups (2). Students are placed in internships with stakeholders (3) to gain real-world experience and gain relevant knowledge. In a community setting, lead and partner universities test and modify a prototype solution (4) before implementing it in the community (5). After completion, the use and maintenance of the implemented solution will be transferred to local interest groups (6). An impact assessment is carried out during the process (7). These three settings are connected through joint learning and continuous improvement (8)

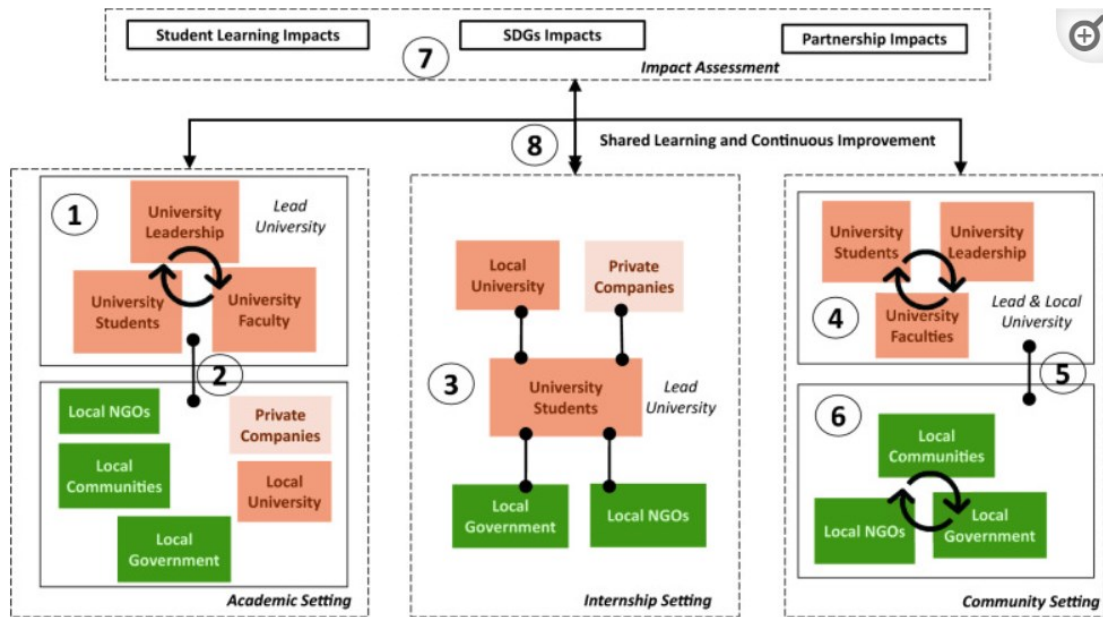


Figure 38. Working Model of University led HDC&SAL Process (Agusdinata, 2022).

So, achieving the SDGs and overcoming the challenges associated with them are paramount to creating a more sustainable and equitable future. HCD and SAL, as outlined in the described model, offer effective strategies for solving complex social problems. By encouraging collaboration, innovation, and continuous improvement in academic, practical and community settings, this approach empowers universities and stakeholders to develop and implement practical solutions that positively impact communities and contribute to the achievement of the SDGs. Embracing such methods not only increases our ability to respond to pressing global challenges, but also empowers individuals and institutions to bring about meaningful change both locally and globally.

Opportunities in implementing SDGs in Universities

Moreover, as we explore the obstacles that universities face in implementing SDGs, it is essential to identify the opportunities they could seize by achieving these goals. When considering these opportunities, they often mirror the challenges. Nonetheless, we can outline some key opportunities that are in alignment with universities.

According to the insights provided in an article by Grund (2020), we can distinguish several main opportunities as follows:

Advocacy and Global Contribution: This allows universities to show their commitment to making a positive impact globally. By speaking up for the SDGs in policy discussions, research, and public campaigns, universities can strengthen their reputation and attract talented individuals who share their values. This involvement also helps build partnerships with other organizations and drives innovation to find solutions for sustainability challenges. By including the SDGs in their education programs, universities prepare students to tackle real world issues and empower them to become change-makers in their communities (Grund, L, 2020) Overall, advocating for the SDGs presents universities with an opportunity to lead by example and contribute to a more sustainable future for everyone. Furthermore, by integrating the goals of sustainable development, universities fulfill their responsibility not only to local communities, but also to the wider global community.

Education and System Thinking: Incorporating the SDGs into the curriculum provides a significant opportunity for universities to improve the education they offer and prepare students for real challenges. Combining the goals of sustainable development, universities provide students with a holistic understanding of global problems and solutions that transcend traditional disciplinary boundaries. Furthermore, Grund (2020) states that this approach promotes systems thinking among students, allowing them to see the connections between different sustainability goals and their impacts. Through experiential learning opportunities such as internships, fieldwork and community engagement projects focused on sustainability goals, students can apply their knowledge in a practical environment, develop critical thinking and gain practical experience. This not only enriches their educational experience, but also gives them the opportunity to actively participate in the implementation of the Sustainable Development Goals. Thus, the inclusion of sustainability goals in the curriculum offers universities the opportunity to equip students with the skills and knowledge needed to solve complex sustainability issues and shape a meaningful society.

Accountability and Recognition: Participation in rankings and reporting mechanisms such as the THE Impact Rankings and the STARS provides a valuable opportunity for universities to demonstrate their commitment to sustainability and responsibility. By submitting and evaluating voluntary information, universities show openness and willingness to take responsibility for their actions related to initiatives aimed at the Goals of Sustainable Development. Achieving a high ranking or certification in the field of sustainable development not only increases the number of universities and reputation as an industry leader, but also attracts students,

faculty and funding opportunities that align with their values. This recognition is a powerful tool for universities to differentiate themselves in a competitive environment, strengthen their brand and create partnerships with like-minded organizations. Finally, participation in rankings and reporting mechanisms not only promotes a culture of continuous improvement in universities, but also strengthens their role as drivers of positive change in society.

Research and Teaching integration: Integrating research and teaching related to the SDGs provides an important opportunity for universities to bring about positive change and increase their impact. By aligning research with sustainability issues, universities advance the global knowledge of sustainability, promote innovations and practical solutions to pressing challenges. This not only strengthens universities and reputation as centers of expertise, but also attracts funding and collaboration opportunities from government agencies, non-governmental organizations, and industry partners. In addition, integrating SDG-related content into courses enhances students' educational experience and equips them with the knowledge and skills needed to address complex social issues. It prepares graduates to become leaders and change makers in their fields, further enhancing the reputation and impact of the University. Through interdisciplinary collaboration and partnerships with external stakeholders, universities can enhance the impact of their research and teaching, fostering a culture of innovation and collaboration that extends beyond campus boundaries. In short, the integration of research and teaching related to SDGs offers universities a unique opportunity to demonstrate their commitment to sustainability, promote innovation and make a significant contribution to responding to global challenges.

Institutional Sustainable Planning: Institutional sustainable development planning offers universities a significant opportunity to demonstrate sustainable development leadership and create lasting positive impacts. By incorporating sustainability into institutional planning processes, universities prioritize activities consistent with the SDGs and integrate sustainability goals into their overall mission and activities. The creation of responsible offices and the development of comprehensive sustainability plans demonstrate a proactive commitment to sustainability that improves the image and attractiveness of the university to stakeholders who value sustainability. Setting measurable goals provides a clear road map for actions that will move the university toward tangible success and accountability. In addition, the presence of stakeholders from different parts of the university community promotes a sense of ownership and shared responsibility to achieve sustainability goals, promoting collaboration and

innovation. By implementing institutional sustainability planning, universities can strengthen their position as sustainability leaders, attract fellows and funding opportunities, and create a more sustainable future for all.

So, overall embracing the SDGs provides a unique opportunity for universities to align their operations with global sustainability goals, engage stakeholders, and make a significant contribution to a more equitable and sustainable society. By using their academic knowledge, institutional resources, and collaborative networks, universities may function as catalysts for good change and inspire future generations of leaders dedicated to a world that addresses the most pressing issues.

7 Conclusion

7.1 General overview of the key findings and main considerations

Universities are being underneath a growing obligation to show their dedication to sustainability, social impact, and responsible research in the rapidly evolving educational landscape of recent years. Being a university, SeAMK understood the importance of these demands and has always been committed to incorporating sustainability into its academic programs, fundamental principles, and community involvement initiatives.

The research for this thesis focused on tactics that SeAMK could employ to do effectively in the 2024 THE Impact Rankings, with a particular focus on the dynamics of Higher University Ranking systems. It served as an outline for the organization to effectively navigate the challenges of integrating sustainability and gain worldwide recognition for its efforts to contribute to positive change. The research identified the institution's strengths and areas for development through in-depth analysis and cooperation with SeAMK's sustainability department. But the research process also revealed significant findings from a survey distributed to SeAMK students, highlighting out areas which needed to be improved in order to improve sustainability knowledge and involvement within the university Community.

Furthermore, to address these findings, the thesis adopted a comprehensive strategy. Beginning with a thorough analysis of Higher University Ranking systems offered insightful information on the standards and procedures applied to assess sustainability initiatives. SeAMK could improve its ability to collaborate its activities to fulfill the standards set by organizations like THE Impact Rankings by possessing a deeper knowledge of these frameworks. Secondly, the survey conducted among SeAMK students played a pivotal role in identifying gaps in sustainability awareness and engagement. By analyzing survey responses, we aimed to provide actionable recommendations for enhancing communication and educational initiatives within the university community. It is not a secret that throughout our research process, particularly in collecting data for the THE Impact Ranking system, we recognized several areas where SeAMK excels in relevant Sustainable Development Goals (SDGs) and promotes circular economy practices. However, despite our efforts towards promoting sustainability and circular economy practices, this lack of awareness among students signifies a critical

gap in communication and engagement within our university community regarding sustainability efforts.

Furthermore, based on our interview with the SeAMK sustainability committee, we uncovered insightful facts regarding sustainability initiatives at SeAMK. One key aspect that emerged from our discussions was the importance of continuing surveys to gain insights from students. These surveys serve as valuable tools for identifying areas where sustainability efforts may be lacking and for improving student awareness of sustainability initiatives at SeAMK. It became apparent that better communication methods are needed to address this gap, leading us to propose the socialization mode from SECI model in our thesis. Additionally, our interview revealed that all universities of applied sciences are in agreement about participating in the green metrics rankings. This underscores the significance of organizational collaboration in addressing sustainability, circular economy, and other related concerns. This collaboration not only fosters knowledge sharing but also strengthens collective efforts towards achieving sustainability goals across institutions.

So, by acknowledging these findings, we recognize the importance of enhancing communication and educational initiatives within our university community. In addition, it is essential to incorporate sustainability education into the curriculum to guarantee that students acquire the information and abilities needed to take the initiative and impact change. Global sustainability objectives may be significantly advanced, and students can be equipped to apply sustainable solutions in their fields of study by integrating sustainability ideas and practices into academic programs across disciplines offered by SeAMK.

7.2 Future Research

Based on our findings, there is a clear need to encourage and strengthen the process towards being listed in THE Impact Rankings. While our university has made progress in promoting sustainability initiatives, our research highlights areas where improvement is needed. Despite ongoing efforts, there is still untapped potential for enhancing sustainability initiatives within our institution. It is vital to acknowledge that being recognized in prestigious rankings like THE Impact Rankings is a significant accomplishment for an applied sciences university. This demonstrates our dedication to advancing sustainability in spite of the difficulties posed

by our instructional approach. It is imperative that this accomplishment be seen as going ahead as a starting point to further creativity and advancement in sustainability initiatives.

As we consider the future, it is essential for SeAMK to consider adopting at least a few of the recommended suggestions outlined in this thesis, for instance applying SECI Model, Conducting continuous surveys and so on. Implementing these suggestions can be made easier by collaborating with the sustainability committee and other relevant organizations. The integration of sustainability activities into numerous aspects of university operations and curriculum can be guaranteed by this collaborative approach.

Furthermore, future research endeavors should focus on advancing the research process within the university. Exploring new methodologies, expanding data collection efforts, and engaging with interdisciplinary perspectives can deepen the understanding of sustainability challenges and opportunities. This approach to research will enable the development of comprehensive strategies for enhancing sustainability initiatives and promoting meaningful change within the institution and beyond.

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APPENDICES

Appendix 1. Survey Questions

Appendix 2. Interview with Sustainability Committee SeAMK.

Appendix 1. Survey Questions

1. Which of the following best describes your current educational level?
 - First year Student
 - Second Year Student
 - Third / Fourth Year Student
 - Graduate
 - Other (please specify)
2. What is your Gender?
 - Male
 - Female
 - Rather not share.
3. Are you the first person in your immediate family to attend college or university? (First-generation status)
 - Yes
 - No
4. Have you heard about sustainability initiatives on SeAMK?
 - Yes
 - No
 - Other (Please Specify)
5. Please rate your level of knowledge about sustainability policies and practices on campus.

- Extremely familiar
 - Very familiar
 - Somewhat familiar
 - Not so familiar
 - Not at all familiar
6. Are you familiar with the term "Sustainable Development Goals" (SDGs)? (Single Choice)
- Extremely familiar
 - Very familiar
 - Somewhat familiar
 - Not so familiar
 - Not at all familiar
7. Have you learned about the SDGs at SEAMK University?
- Yes
 - No
8. Have you actively participated in any sustainability-related projects, research, or volunteer activities at SEAMK University focused on SDGs?
- Yes
 - No
 - Other (Please Specify)
9. If yes, please mention the projects or the activities.
- Activity 1:

- Activity 2:

- Activity 3:

10. Are you aware that SEAMK is ranked in the Green Metric Ranking for sustainable campuses?

- Yes

- No

- Not Sure

11. please estimate SEAMK's ranking in the Green Metric Ranking (There are around 25.000 universities in the world)

- Top 5.000 in the World

- Top 1.000 In the World

- Top 500 in the World

- Top 250 in the World

- Top 2.000 in the world

12. Do you know about this SEAMK policies?

- None Smoking

- None discrimination

- Maternity and Paternity

- Code of conduct

- Other

- Did not know any.

13. Would you like to participate in Sustainability projects in the University? (Single choice)

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

14. Are you aware of SEAMKs sustainability plan and goals (Carbon neutrality, supplier policies, others)? (Single Choice)

- Extremely familiar
- Very familiar
- Somewhat familiar
- Not so familiar
- Not at all familiar

15. How important do you consider is Sustainability Education (Courses, policies, research, others) for you? (Single Choice)

- Extremely valuable
- Very valuable
- Somewhat valuable
- Not so valuable
- Not at all valuable

16. Should the University have mandatory sustainability courses in all the programs? (Single Choice)

- Strongly agree

- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

17. How sustainable do you think is SEAMK university?

- Rating: 0-10

18. If you have any ideas, or comments about sustainability please share them.

- Enter your answer:

Appendix 2. Some of the Interview questions from the meeting with the SeAMK sustainability committee

- What are the main goals or objectives of SeAMK's sustainability committee, and how does the committee work towards achieving them?
- How does SeAMK prioritize sustainability within its overall goals and objectives?
- Can you highlight some key sustainability projects SeAMK has undertaken in the past year?
- In what ways does SeAMK integrate sustainability principles into its curriculum and educational programs?
- How does SeAMK involve students, faculty, and staff in raising awareness and promoting participation in sustainability efforts?
- Could you provide examples of organizations or entities SeAMK has partnered with to advance its sustainability initiatives?
- What challenges has the sustainability committee faced in implementing sustainability initiatives, and how were these addressed?
- What specific sustainability policies have SeAMK implemented to guide its operations and initiatives?
- How can student involvement contribute to SeAMK's sustainability efforts and improve its rankings in THE Impact Ranking and Green Metric Ranking?