



**CURRENT STATE ANALYSIS
AND BEST PRACTICES REPORT**

**Knowledge Alliance for
Business Opportunity
Recognition in SDGs**
SDG4BIZ report

CURRENT STATE ANALYSIS AND BEST PRACTICES REPORT

REPORT AS PART OF SDG4BIZ PROJECT (WP3)
621458-EPP-1-2020-1-FI-EPPKA2-KA

Knowledge Alliance for Business Opportunity Recognition in SDGs

Authors (Affiliation):

Helena FIDLEROVÁ (Slovak University of Technology in Bratislava, Slovakia);
Augustín STAREČEK (Slovak University of Technology in Bratislava, Slovakia);
Perttu POHJONEN (Metropolia University of Applied Sciences, Finland);
Annariikka ROSENTHAL (Haaga-Helia University of Applied Sciences, Finland);
Rainer SCHABEREITER (Brainplus, Austria); Burcu KIPER (Yasar University, Turkey);
Margherita MARETTO (Fondazione Fenice, Italy); Pili Alonso SUAREZ (TKNIKA,
Spain); Michael KEANEY (Metropolia, Finland).

Reviewers:

Hanna HARILAINEN,
Çağrı BULUT.



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Introduction

This document reports on the outcomes of a current state analysis in Finland, Slovakia, Austria, Turkey, Spain, and Italy, and examples of best practices in the implementation of sustainable development goals (SDGs) within the framework of the international project 621458-EPP-1-2020-1-FI-EPPKA2-KA: **Knowledge Alliance for Business Opportunity Recognition in SDGs (SDG4BIZ)**, Work Package 3.

The SDG4BIZ project aims to provide insights into research questions about sustainability awareness and opportunities recognition within three different groups of stakeholders. The first task was to determine the extent of knowledge (of academics, students and employees in companies) about sustainable development in general and the Sustainable Development Goals (SDGs) in particular. The SDGs are an urgent call for action by all countries—developed and developing—in a European and global partnership. They recognise that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth¹.

The SDGs set by the United Nations² are unlikely to be met by the target year 2030 unless companies recognise and utilise the business opportunities inherent in them. 380 million jobs would be created, and over €10 trillion in business opportunities would be unlocked if SDGs were realised by 2030³. At present, companies are not able to utilise this growth potential, and higher educational institutions (HEIs) do not adequately support the competence building of future managers and policymakers for solving the world's most urgent problems. SDGs' current training efforts focus on awareness building only, not business opportunity recognition and economic development related to SDGs.

An effective multidisciplinary curriculum and training materials on business opportunity recognition related to SDGs will be created within the SDG4Biz project based on the current state and best practices analysis. An innovative pedagogical solution will be designed targeting both European HEIs and companies and delivered via project partners' viable learning platform. The training addresses 60 of the most relevant business opportunities inherent in SDGs with 5 Modules: 1) shared value business opportunity recognition & specific opportunities in 2) food and agriculture, 3) cities, 4) energy and materials & 5) health and wellbeing.

Key findings of current state analysis of SDG4BIZ project:

- Identified evidence of a possible regional differences— gaps in knowledge and awareness (sustainable development, SDGs),
- Interest to learn more about sustainability content (students, academics, companies),
- Interest in sustainability-related curriculum content expressed by students, external partner institutions and academics.

The structure of this report, where the key findings of SDG4BIZ current state analysis are discussed in detail, is as follows:

The first chapter is the **SDG needs analysis** of the report. It focuses on opportunities recognition, market potential, and trends in the context of sustainable development. In addition, challenges regarding sustainable technologies and sustainable competences and modules for sustainable opportunities recognition are discussed. Gaps have been identified based on a literature review of papers, proceedings, and online materials. The literature review outlines the current state of

¹ <https://sdgs.un.org/goals>

² <https://sdgs.un.org/2030agenda>

³ report.businesscommission.org/report#major-market-opportunities-opened-up-by-delivering-the-global-goals

knowledge of the sustainable competences and entrepreneurship competences required to achieve the SDGs in the future.

The second chapter introduces the **best practices of companies** from different countries as examples of the implementation of SDGs as drivers of business opportunities for companies and part of their strategy (mission, vision) to increase their competitiveness.

The third chapter describes the **methodology** employed in the current state analysis, the workflow, and the stakeholders' characteristics.

The fourth chapter presents the **analysis of curricula** at partner universities in Finland (Metropolia University of Applied Sciences, Haaga-Helia University of Applied Sciences), Turkey (Yasar University) and Slovakia (Slovak University of Technology in Bratislava). The extent of knowledge and motivation for sustainability within study programs indicates a need to implement new educational materials, tools, and methods to increase the awareness and understanding of sustainability and sustainable development goals regarding entrepreneurship possibilities. In addition, regional differences, SDG learning challenges in multidisciplinary/interdisciplinary contexts, and other implementation challenges have been identified. Based on the findings of a review of existing SDG learning curricula, tools, subjects, and teaching contents at HEIs, the implications for curriculum design in accordance with SDG-aligned business opportunities have been identified.

The fifth chapter of the report deals with analysing **the current state of competences** in the context of sustainability and SDGs in academia (HEIs) and business. The stakeholders' group included tertiary education students (bachelor's, master's and doctoral), academics with different work positions and experience, and university managers. The results of a survey from HEIs and companies mapped the current state, gaps and future challenges in SDGs' opportunities recognition by highlighting the potential for collaboration between business and HEIs. Detailed information about key findings in gaps and regional differences, priorities and challenges for planned learning platform educational material has been identified. Data of the analyses were based on 858 respondents from six different nationalities (Finish, Slovak, Turkish, Italian, Spanish, Austrian) from HEIs and companies. The survey was administered in the six national languages of the participants, and the English version was also available. The survey has identified evidence of a possible regional difference in awareness within Europe, with tentative support provided by other studies (Zamora-Polo et al., 2019). It would be for future research to determine whether or not such a regional divide exists.

As a result, the current state and gaps were identified, and implications for designing the SDG learning material were identified, as were required modifications to the learning platform.

Conclusions of the Current State and Best Practices Report refer to best practices introduced so far, SDG competences and priorities identification by HEIs and companies, key research findings, and the required and recommended future actions in education in the context of sustainability and entrepreneurship.

Chapter 1: SDGs Needs analysis

Agenda 2030 presents 17 Sustainable Development Goals (SDGs), including 169 targets in total (Fig.1). It has identified the aims of all sustainable development spheres, including social, ecological, and economic aspects. The SDGs⁴ set by the United Nations are unlikely to be met by the target year 2030. Each country has its own unique political, historical, cultural, and ecological circumstances, which will affect the identification of SDG-compatible business opportunities.⁵ However, over and above location-specific challenges, in the future, it will be a universal challenge to recognize and utilize SDGs' business opportunities and be ready and willing for sustainable entrepreneurship.



Figure 1 Sustainable development goals (SDGs) of the Agenda 2030

In recent years, sustainable entrepreneurship has been the subject of much research; however, there is still a research gap in identifying enterprises' characteristic attitudes towards sustainable entrepreneurship.⁶ Addressing this gap, this report first focuses more on a theoretical approach towards sustainable entrepreneurship.^{7&8} Thereafter, the report aims at addressing whether enterprises that declare themselves sustainable reflect this belief in their goals, strategy, and activities because a better understanding and definition of the idea of sustainable entrepreneurship were vital.

The General Secretary of the International Trade Union Confederation, Sharan Burrow's, statement is significant: "to achieve these Global Goals; we need to rebuild trust. A new social contract for business where people, their environment and economic development are rebalanced can ensure that everybody's sons and daughters are respected with freedom of association, minimum living wages,

⁴ <https://en.unesco.org/sustainabledevelopmentgoals>

⁵ Ionescu, G. H., Firoiu, D., Tănăsie, A., Sorin, T., Pîrvu, R., & Manta, A. (2020). Assessing the Achievement of the SDG Targets for Health and Well-Being at EU Level by 2030. *Sustainability*, 12(14), 5829. <https://doi.org/10.3390/su12145829>

⁶ Bajdor, P., Pawełszek, I. and Fidlerova, H. (2021) 'Analysis and Assessment of Sustainable Entrepreneurship Practices in Polish Small and Medium Enterprises', *Sustainability*, 13(7), p. 3595. doi: 10.3390/su13073595

⁷ Kuckertz, A.; Wagner, M. The influence of sustainability orientation on entrepreneurial intentions: Investigation the role of business experience. *J. Bus. Ventur.* 2010, 25, 524–539.

⁸ Patzelt, H.; Shepherd, D.A. Recognizing opportunities for sustainable development. *Entrep. Theory Pract.* 2011, 35, 631–652

collective bargaining, and safe work are assured. Only a new business model based on old principles of human rights and social justice will support a sustainable future.”⁹

It is necessary to connect the SDGs to educational outcomes¹⁰ and the education system, including universities as higher education institutions (HEIs).¹¹ Universities can help facilitate this change toward a more equitable society and a better world by adopting the SDGs at a strategic level in pursuit of sustainability and as a means of connecting higher education with business, industry, healthcare, community partners and entrepreneurs¹² (Findler et al., 2019; Stephen 2008¹³). The role of universities as the engine of transformational sustainability toward delivering the SDGs has been explored by Purcell, Henriksen, & Spengler (2019).¹⁴ By providing know-how and best-practice examples to support implementation and integrating sustainability issues into their operations, the roles of HEIs are research, education, and science-society interactions.¹⁵ HEIs need to act as both accelerators and facilitators in order to reduce the distance between academics and practitioners/practice.¹⁶

At the moment, private sector organizations cannot utilize this growth potential on their own. Unfortunately, HEIs do not adequately support the competence building endeavors for future managers and policymakers to solve the world’s most urgent problems. Moreover, their current training efforts on the SDGs focus on awareness-building only, ignoring business opportunity recognition and economic development related to SDGs. Thus, designing an innovative and scalable curriculum and training material is a necessity that the SDG4BIZ project aims to fulfil.

According to Agenda 2030, it is fundamentally up to governments to implement the UN SDG agenda. However, the simple fact is that it will not be realized without the private sector and civil society. Private sector businesses are well-positioned to improve lives in the poorest areas of society. Especially in developing countries, businesses are responsible for the vast part of gross domestic product (GDP) and employment opportunities. This encourages a focus on the work done in and with companies in the private sector. By adopting sustainability principles, organizations can become more profitable and maintain their activities in the long run.¹⁷ The company in sustainable global competitiveness model is not as an isolated cell but interacts with the environment, aims for strategic opportunities and is ready for new challenges in the global environment.¹⁸

⁹ <http://businesscommission.org/news/release-sustainable-business-can-unlock-at-least-us-12-trillion-in-new-market-value-and-repair-economic-system>

¹⁰ Kioupi, V., & Voulvoulis, N. (2019). Education for Sustainable Development: A Systemic Framework for Connecting the SDGs to Educational Outcomes. *Sustainability*, 11(21), 6104. <https://doi.org/10.3390/su11216104>

¹¹ Lozano, R., Merrill, M., Sammalisto, K., Ceulemans, K., & Lozano, F. (2017). Connecting Competences and Pedagogical Approaches for Sustainable Development in Higher Education: A Literature Review and Framework Proposal. *Sustainability*, 9(10), 1889. <https://doi.org/10.3390/su9101889>

¹² Findler, F., Schönherr, N., Lozano, R., Reider, D. and Martinuzzi, A. (2019), The impacts of higher education institutions on sustainable development, *J. Sustain. Higher Educ.*, Vol. 20 No. 1, pp. 23-38

¹³ Stephens JC, Hernandez ME, Román M, Graham AC, Scholz RW 2008 Higher education as a change agent for sustainability in different cultures and contexts. *Int. J. Sustain. Higher Educ.* 9 317–338

¹⁴ Purcell, WM; Henriksen, H.; Spengler, JD (2019). Universities as the engine of transformational sustainability toward delivering the sustainable development goals: “Living labs” for sustainability. *J. Sustain. Higher Educ.* Vol. 20, Iss. 8

¹⁵ Körfgen, A.; Förster, K.; Glatz, I.; Maier, S.; Becsi, B.; Meyer, A.; Kromp-Kolb, H.; Stötter, J. 2018. It’s a Hit! Mapping Austrian Research Contributions to the Sustainable Development Goals *Sustainability* 10, no. 9: 3295. <https://doi.org/10.3390/su10093295>

¹⁶ Christ, K. L., & Burritt, R. L. 2019. Implementation of sustainable development goals: The role for business academics. *Australian Journal of Management*, 44(4), 571–593. <https://doi.org/10.1177/0312896219870575>

¹⁷ Stareček, A., Gyurák Babelová, Z., Makyšová, H., & Cagáňová, D. (2021). Sustainable human resource management and generations of employees in industrial enterprises. *Acta Logistica*, 8(1), 45–53. <https://doi.org/10.22306/al.v8i1.201>

¹⁸ Šnircová, J., Fidlerova, H. Božíková, L. (2016) ‘Sustainable Global Competitiveness Model as a New Strategic Opportunity for the Companies in Slovakia’, *TEM Journal*; Vol 5, No 2, 2016. ISSN 2217-8309. [doi: 10.18421/tem52-19](https://doi.org/10.18421/tem52-19)

As a part of the current state analysis and review, the project SDG4BIZ has compiled a versatile database of ongoing research work, literature and projects dealing with the SDGs, based on work done in Finland, Slovakia, Austria, Germany, Spain, Italy, and Turkey. This chapter briefly presents the ideas to note in content creation to contribute to the SDG4BIZ Project’s upcoming activities and reports by tackling the following three main challenges/problems.

IDENTIFICATION OF THREE MAIN PROBLEMS according to SDG4BIZ project:

Problem 1 Companies are not able to recognise and use the business growth potential in addressing SDG challenges. As a result, shared value benefits remain untapped, as achieving the SDGs could create 380 million jobs and unlock €10 trillion in business opportunities.

Problem 2 HEIs do not offer adequate training on using the SDGs' business growth potential. Thus, HEIs struggle to support the competence building of future managers to solve the world’s most urgent problems.

Problem 3 Current training efforts for both companies and HEIs focus on awareness building rather than business opportunity recognition related to SDGs.

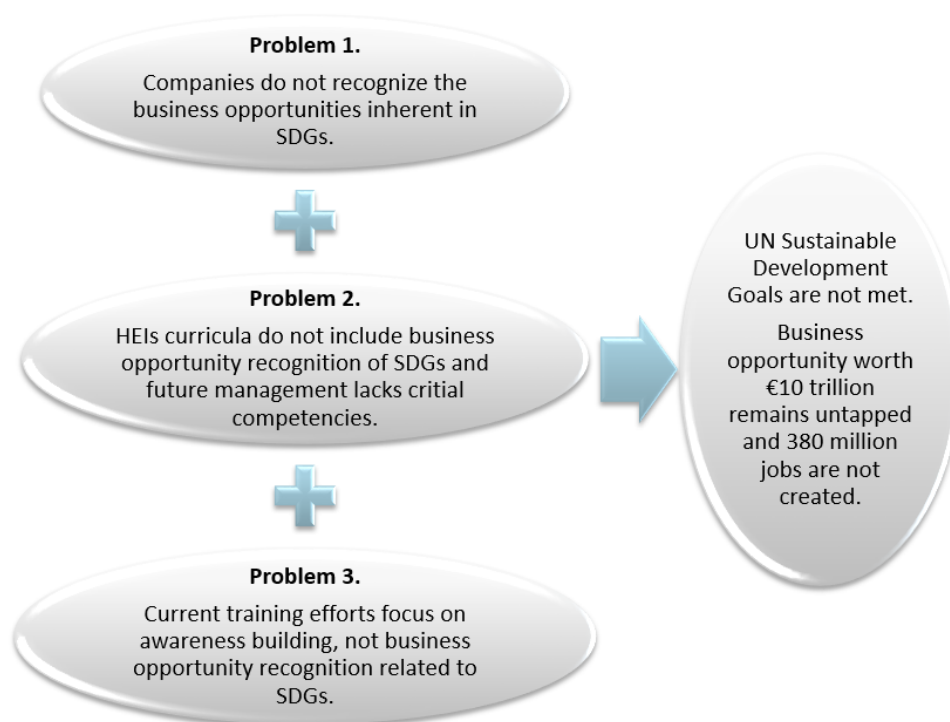


Figure 2 Problem definition regarding SDGs and business opportunities

As illustrated in Figure 2 above, failure to solve these problems will render the SDGs unfulfilled, but to find appropriate solutions requires careful analysis and implementation.

Agenda 2030 calls for multidimensional cooperation and partnerships between the different countries, actors and citizens, active exchange of information and experiences, policy coherence, and sharing the best practices.¹⁹ Multifaceted work fields call for a multilateral approach, yet the challenges and opportunities remain most certainly different in the distinct business areas. This is to be taken into account when proceeding with the design and implementation of educational material.

¹⁹ Final Report StartClim2018

In general, the SDGs will not become a reality without breakthrough innovation across various fields such as energy, construction, food, and mobility. Much of this development and innovation will stem from the ongoing creative processes and research and development conducted by companies and educational institutions.

Civil society has a critical task of monitoring and supporting the implementation of the global agenda for sustainable development by and within the EU and its Member States and leading the way with good examples.

The significance of civil society and business roles will undoubtedly impact educational targets and methods in content creation. Therefore, they need to be carefully considered. Harmaala and Harilainen (2020) identified critical elements for an effective training program on business opportunity recognition in SDGs, and they created a blueprint of such a program.²⁰

²⁰ Harmaala M., Harilainen H. (2020). Blueprint for a training program on business opportunity recognition in SDGs. Available online at: <https://uasjournal.fi/1-2020/business-opportunity-recognition-in-sdgs/>

60 biggest market opportunities related to delivering the Global Goals

	Food and Agriculture	Cities	Energy and Materials	Health and Well-Being
1	Reducing food waste in value chain	Affordable housing	Circular models - automotive	Risk pooling
2	Forest ecosystem services	Energy efficiency - buildings	Expansion of renewables	Remote patient monitoring
3	Low-income food markets	Electric and hybrid vehicles	Circular models - appliances	Telehealth
4	Reducing consumer food waste	Public transport in urban areas	Circular models - electronics	Advanced genomics
5	Product reformulation	Car sharing	Energy efficiency - non-energy intensive industries	Activity services
6	Technology in large-scale farms	Road safety equipment	Energy storage systems	Detection of counterfeit drugs
7	Dietary switch	Autonomous vehicles	Resource recovery	Tobacco control
8	Sustainable aquaculture	ICE vehicle fuel efficiency	End-use steel efficiency	Weight management programs
9	Technology in smallholder farms	Building resilient cities	Energy efficiency - energy intensive industries	Better disease management
10	Micro-irrigation	Municipal water leakage	Carbon capture and storage	Electronic medical records
11	Restoring degraded land	Cultural tourism	Energy access	Better maternal and child health
12	Reducing packaging waste	Smart metering	Green chemicals	Healthcare training
13	Cattle intensification	Water and sanitation infrastructure	Additive manufacturing	Low-cost surgery
14	Urban agriculture	Office sharing	Local content in extractives	
15		Timber buildings	Shared infrastructure	
16		Durable and modular buildings	Mine rehabilitation	
17			Grid interconnection	

Figure 3 The largest identified business opportunities in SDGs. Source: Business and Sustainable Development Commission, 2017, "Better business, better world".²¹

Research by the "Business and Sustainable Development Commission" shows that the Global Goals could open the 60 biggest markets' "hot spots" such that **business opportunities could be worth up to US\$12 trillion a year in savings and revenue in the four examined economic systems alone by 2030.** (Fig. 1). The total economic prize from implementing the Global Goals could be two or three times bigger, assuming that the benefits are captured across the whole economy and accompanied by much higher labour and resource productivity.²²

²¹ <https://sustainabledevelopment.un.org/content/documents/2399BetterBusinessBetterWorld.pdf>

²² Ministry of Agriculture and Forestry, Finland website Sustainable development

Opportunity recognition has become a key topic and has been studied by many authors in the recent entrepreneurship literature.^{23, 24}

The Knowledge Alliance for Business Opportunities in SDGs (SDG4BIZ) creates, tests, and disseminates a curriculum and training material on recognizing and realizing the business opportunities in SDGs. An innovative solution is created targeting both European Higher Education Institutions (HEIs) and companies and is delivered via project partners in international knowledge collaboration within six countries (Finland, Slovakia, Austria, Turkey, Spain, and Italy) through a viable learning platform. The training addresses the 60 most relevant business opportunities inherent in SDGs with five Modules.

- 1. General: on shared value business opportunity recognition, entrepreneurship & innovation**
- 2. Food & Agriculture**
- 3. Cities Module**
- 4. Energy & Materials**
- 5. Health & Wellbeing**

The SDG4BIZ project has identified and appointed four business and economy areas and one general to be called modules that comply with the classification used by the Business and Sustainable Development Commission above.

The findings of SDGs' needs analysis have been presented here on a general level. Despite the comprehensive and diverse nature of the collection of studies, works, and project description, it is not easy to pinpoint specific module-related characteristics. Subsequently, the module-specific examination is to be done when the project progresses to the content co-creation and design process.

One less often noticed view is that while sustainable development is a form of risk management, it also presents great opportunities. Renewable energy solutions, sustainable agriculture and forestry, responsible water supply services and advancing the position of women can also be a source of profitable business and productive investment activities. Several international studies support the view that both in the short and long term, investments that are in line with the principles of sustainable development are the only ones that can be genuinely profitable and sustainable choices, including investors.²⁵ This likely will also significantly influence the design of the content of respective educational materials.

Once the HEIs participating in the SDG4BIZ project design and deliver education packages to companies, applications of SDG principles will address current global needs and ambitions with appropriate business solutions. These solutions will enable companies to manage their risks better, meet demand, construct positions in markets, secure access to needed resources and strengthen their supply chains while moving the world towards delivering the SDGs.²⁶

The following section of the report introduces best practices from different modules and countries to inspire entrepreneurship opportunities with a win-win strategy.

²³ George, M. N. Parida, V., Lahti, T., & Wincent, J. (2016). A systematic literature review of entrepreneurial opportunity recognition: Insights on influencing factors. *International Entrepreneurship and Management Journal*, 12(2), 309–350

²⁴ Patzelt, H.; & Shepherd, D.A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice*, 35(4), 631–652

²⁵ Ministry of Agriculture and Forestry, Finland website Sustainable development

²⁶ <https://sdgessentials.org/index.html> (World Business Council for Sustainable Development)

Chapter 2: Best practices

BEST PRACTICE

ZOTTER Chocolate GmbH

Riegersburg, Austria

www.zotter.at

ABOUT THE COMPANY

Josef Zotter has re-invented chocolate: hand-scooped chocolates, all invented by Josef and his daughter Julia Zotter.

Zotter produces around 500 different flavours: the range includes the iconic Hand-scooped Chocolates, pure single-origin chocolates, drinking chocolates, pralines, couverture, and handmade organic bonbons. In addition, at a Mixing Bar, customers may create their chocolates. All chocolates are organic, fair trade and bean-to-bar.

The own Chocolate Theatre offers an exciting tasting tour. Visitors can experience first-hand how chocolate is made. At a transparent factory, visitors can see every step of the production process. (see: www.zotter.at)



COMPANY IDENTITY

Starting year: 1987

Annual turnover: 24 million EUR (2018/2019)

Market scale: Global

Sector: Food production

MISSION

ZOTTER CHOCOLATE - rely on VARIETY, QUALITY AND CREATIVITY

VISION

"100% ORGANIC + FAIR TRADE + BEAN-TO-BAR"

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

Zotter is not just a simple chocolate company; it does comprehensive branding in biological and ethical food production. The company supports international projects in fair and sustainable production and in fair trade.

ECONOMICS/ENVIRONMENT: The company buys raw materials which are entirely organic and fair traded. All buying, shipping, and manufacturing processes are directed to responsible consumption and production (SDG12) and decent work conditions (SDG8) in the respective producing countries of cacao and other raw materials. In all its activities, the Zotter company aims at mitigating negative impacts on the environment (SDG13).

Goals:

- 100% clean energy in all businesses
- Minimising the impact on the environment in all work steps

Key measures:

- Own photovoltaic generator
- Solar power for cooking
- Geothermal heat pump
- Electric vehicles
- Sailing ship for transportation
- West African island cacao from São Tomé and Zorzal cacao, grown and harvested in a bird sanctuary located in a nature reserve in the Dominican Republic.
- The “70% Nicaraguan” chocolate contains cacao grown in a conservation area.
- Particularly environmentally conscious is the cacao from Belize, which is delivered via sailboat or similar means.

MANAGEMENT/SOCIAL IMPACT: Zotter’s management philosophy is entirely focused on responsible consumption and production (SDG 12), and many social activities and international development projects focus on decent work and economic growth (SDG8).

Goals:

- Support people at risk in production countries in Africa and South America
- Implement fair trade structures.
- Avoid pollution in all parts of production and shipping.

Key activities (Selection):

- Peru Project: The projects have managed to raise a total of 67.000 EUR for the Kindernothilfe (charity for children in need).
- Charity chocolate “Chocolate Banana”: 50 cents out of every chocolate sold go towards the Caritas children’s charity project “Chocolate for School” in Uganda.

CERTIFICATES AND CERTIFICATIONS

Certifications:

Zotter is a FAIR – member of the World Fair Trade Organization (WFTO). Furthermore, the company holds the following certifications: ORGANIC and EMAS.

AWARDS AND RECOGNITIONS (SELECTION)

- 2016 Academy of Chocolate Award (2x Gold, 8x Silver, 5x Bronze)
- 2016 Brand Life Award
- 2018 Energy Globe Austria Award
- 2018 nominated for the European Business Award for the Environment (EBAE)
- 2018 Austria's Leading Companies (ALC) – Category for integrating disabled people
- 2019 Tavoletta d'Oro
- 2019 European Candy Kettle Award
- 2019 Walter Scheel Medal
- 2020 Best Employer in Styria
- 2020 Styrian Panther of Tourism

ZOTTER AND SUSTAINABILITY

Zotter chocolate is one of the “light-house companies” in Austria regarding sustainability, social innovation, and social inclusion. All activities and work steps from producing raw materials, shipping, further processing, transportation, and final selling are precisely focused on ensuring fair work conditions for all employees and avoiding harmful environmental impacts. Zotter buys cacao directly from the growers and pays well above the global market rates for a high-quality product.

All projects and activities are socially relevant and focusing on awareness-raising on green production, green energy, fair trade, and social innovation. Zotter is a member of WFTO – the World Fair Trade Organization, which is the umbrella organization for global fair trade. The WFTO monitors business compliance with the ten principles of fair trade like, among others, transparency, respect for the environment, the payment of fair prices and no use of child labor.

Impact of the implementation of sustainable solutions:

- Awareness-raising for fair trade and sustainable production and shipping.
- To increase customer satisfaction by creating new flavours.
- Influencing other companies to implement social projects in production countries

SOURCE: WWW.ZOTTER.AT

“Innovative”

BEST PRACTICE

Yaşar Group

İzmir, Turkey

<https://yasar.com.tr/en/>

COMPANY IDENTITY

Starting year: 1927

Annual turnover: 4.7 billion TRY

Market scale: National

Sector: Food and beverages, agriculture and livestock, energy, cleaning products, tourism

ABOUT COMPANY

Yaşar Group is operating in various industries such as food, agriculture and livestock, energy, cleaning products and tourism. It has 21 companies, four of which rank in Turkey’s largest 500 companies. The group is one of the leading economic players in Turkey.

The Group invests heavily in R&D and has introduced new and innovative products in various sectors. Recent examples include organic milk, prebiotic milk, probiotic-prebiotic yoghurt in the food sector, as well as hybrid products and the integration of nanotechnology in the paint sector.

MISSION

“To add value to the lives of consumers by providing high quality products and services, with our trusted brands.”

VALUES

- Our Consumers and Customers Come First!
- Our Operational Excellence
- Our People
- Our Ethical Stance
- Our Environmental and Social Responsibility

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The Sustainable Development Policy of the company has been developed in line with international principles, trends and the company mission and goals. The policy includes 6 objectives. These are:

1. To invest in education, culture, and art to contribute to the development of new generations,
2. To offer a fair working environment to employees in which they can be provided with self-development opportunities,
3. To support and protect local products by creating quality products and services,
4. To contribute to the societal progress through various collaborative actions,
5. To measure environmental impact, work to improve environment and contribute to the protection of natural resources,
6. To follow international developments and serve SDGs in all its business areas.

In line with these objectives, **the Sustainable Development Strategy** of the group focuses on five thematic areas covering ***economic, social, and environmental impact***.

CARING FOR BUSINESS

Goal: To promote an ethical, accountable, and honest management approach that contributes to the sustainability of the business and the development of all its stakeholders, in line with the Sustainable Development Goals.

Targeted SDGs: SDG 5, SDG8, SDG12

Sustainability Tools/Initiatives:

- Information Policy in place to promote transparency
- The Yaşar Group Business Ethics Code of Conduct in place
- Stakeholder mapping studies and stakeholder management policy in place
- The Corporate Governance Principles implemented

CARING FOR EMPLOYEES

Goals: Keeping the development and happiness of employees at the forefront

Targeted SDGs: SDG4, SDG5, SDG8

Sustainability Tools/Initiatives:

- UN CEO Statement of Support for the Women’s Empowerment Principles (adopted in 2012)
- The e-learning platform “*Yaşar Academy*” providing training for staff members
- Yaşar Talent Management Program in place to meet the career expectations and development needs of managers and employees as well as ensuring the continuity of the organization
- Involved in “Equality at Work Platform” put forward by the World Economic Forum

CARING FOR SOCIETY

Goals: Being sensitive to the needs and expectations of the society, contributing to social development

Targeted SDGs: SDG1, SDG2, SDG3, SDG4, SDG5, SDG9, SDG11, SDG12

Sustainability Tools/Initiatives:

- Science-based and quality-oriented business approach
- Social investment projects implemented in parallel with the needs of the region group companies operate
- Management Systems and Product/Service Compliance Certificates in place to ensure consumer/customer health and safety
- R&D practices to create added value for people, society, and the environment
- Consumer/customer information activities and ethical marketing practices in place

- Good Agricultural Practices (GAP) implemented

CARING FOR BUSINESS PARTNERS

Goals: Developing business partners within the framework of responsible procurement approach

Targeted SDGs: SDG8, SDG9, SDG12, SDG13

Sustainability Tools/Initiatives:

- “Yaşar Supplier Management System Survey” conducted for the establishment of a sustainable supply chain structure and the development of supplier relations
- Plans to support suppliers to integrate “decent work” approach
- Supplier Principles Guide developed

CARING FOR THE ENVIRONMENT

Goals: Observing the ecological balance by being aware of the footprint left on the environment

Targeted SDGs: SDG6, SDG7, SDG9, SDG12, SDG13, SDG14

Sustainability Tools/Initiatives:

- Environment Management System and Environment Management Policy in place to implement environmentally friendly practices and environmentally friendly investments
- Group companies adopt best practice, measurement, and evaluation methods of UN Global Compact and Carbon Disclosure Project (CDP).
- the Business Plastic Initiative created in cooperation with TÜSİAD-Global Compact and BCSD signed

CERTIFICATES AND CERTIFICATIONS

Group companies have various certifications in Management Systems and Product/Service Compliance such as ISO 9001, ISO 27001, FSSC 22000, ISO 22000, ISO 14001, ISO 45001, ISO 17025, ISO 10002, ISO 50001 to name a few.

AWARDS AND RECOGNITIONS

- At the Human Resources Summit organized under the main sponsorship of Kariyer.net, Yaşar Holding was nominated to receive the Respect for People Award for the ninth time.
- the Campus Friendly Company of the Year award at the Boğaziçi Business World Awards
- Named one of the “Most Admired Companies of the Business World” in the research by Capital Magazine
- Repman Turkey Reputation League success award
- 2019 Gulfood Innovation Award and Satisfaction Success Award by Tatilbudur.com.

ACHIEVEMENTS

- 21.4-tons table salt reduction in cheese category
- 18-tons reduction in plastic usage and 30-tons reduction in paper usage
- 5% reduction in industrial energy consumption
- 10,800-kg reduction in the use of plastic and 40,000 kg in the use of paper packaging.
- A reduction of 1,185,802 tons of CO2 emissions by changing the placement of product boxes on pallets and further CO2 emission reduction of 128.6 tons as a result of savings made in plastic and paper usage.
- Wastewater was reduction d by 19% and 16% in two facilities due to automation in the production lines
- 22% reduction in seal water consumption with the switch from soft to mechanical seals in daily deinking processes.

YAŞAR GROUP AND SUSTAINABILITY

The group fully supports and adopts economic, social, and environmental sustainability as a focus of its activities. Yaşar Group's sustainability experience started with the signing of the United Nations Global Compact. The Sustainable Development Policy, strategy and targets of the group is determined, managed, and coordinated by the Board of Directors, Senior Management, and the Sustainable Development Committee. With this collaborative approach, the group demonstrates institutional ownership for sustainability issues.

Impact of the implementation of sustainable solutions:

- Increased corporate governance ratings of group companies
- Achievements directly influence the competitiveness of group companies
- Increased customer satisfaction
- Raising awareness of responsible consumption and production
- Influence of the company on other companies in the supply chain
- Contribution and added value to society with social investment activities

BEST PRACTICE

ARÇELİK A.Ş.

Istanbul, Turkey

<https://www.arcelikglobal.com/en/>

ABOUT COMPANY

Arçelik A.Ş. is a multinational company active in Consumer electronics, home appliances sectors. The company is operating in more than 100 countries through different international subsidiaries and owns 15 production plants in Turkey, Romania, Russia, China, South Africa, and Thailand.

Company was founded by the Koç Holding, Turkey’s largest industrial and services group and thus a market leader in appliances sector with different brands.

“Carbon-neutral”

COMPANY IDENTITY

Starting year: 1955

Annual turnover: 26,9 billion TRY

Market scale: International

Sector: Consumer electronics, home appliances

VISION:

Respecting the world, respected worldwide

MISSION:

To be a reliable solution partner of digitized households and companies by renewing ourselves and improving our industry

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

Sustainability approach is fully integrated in the company’s main business operations in line with its vision and mission statements. The company determined the aspects of its sustainability in **economic, environmental, and social dimensions**.

In terms of its sustainability approach, the following focus areas were chosen with sub-focus areas included:

- **In Touch with Business**
- **In Touch with Our Planet**
- **In Touch with Human Needs**

IN TOUCH WITH BUSINESS

Sub-focus Areas:

- Responsible Supply Chain
- Decent Work and Diversity
- Talent Acquisition and Development
- Occupational Health and Safety

Approach: The company works closely with the sectoral stakeholders. It aims to invest in the development of its supply chain and dealers through know-how and experience sharing with the general objective of offering the best to its customers.

Targeted SDGs: SDG 5, SDG 8, SDG 9, SDG 12, SDG 17

Targets for 2030:

- Talent Acquisition and Development (*Increased average training hours for employees, transition to online learning environments, establishing a corporate volunteering program*)
- Responsible Supply Chain (*Increased Sustainability Supplier Index Response Rate, encouraging global suppliers to obtain the ISO 50001 certificate*)
- Decent Work and Diversity (*Increased corporate gender equality via more female employees in management positions especially STEM areas*)
- Occupational Health and Safety (*Organization of awareness raising activities with students*)

Sustainability Tools/Initiatives:

- Arçelik Garage, as Turkey's largest open innovation platform, it provides R&D and mentoring support to startups participating
- Next Big Story Program develops innovative product concepts in special product categories based on customer needs.
- ATÖLYE 4.0 in line with the company's digital transformation vision, through Atölye 4.0 employees have opportunities to improve their skills and develop projects with triple helix cooperation.
- Arçelik Retail Academy provides opportunities to dealers and sale points on modern retail approaches through face-to-face and remote trainings
- Joint R&D studies are carried out with suppliers in the Supplier Innovation Program.

IN TOUCH WITH OUR PLANET

Sub-focus Areas:

- Climate Crisis
- Waste Management
- Plastic Crisis
- Water Management
- Green Chemistry

Approach: The company aims to protect natural resources through innovation and operation improvements. Sustainability principle is integrated in the product development and value chain for coming up with solutions to the global environmental challenges.

Targeted SDGs: SDG6, SDG7, SDG12, SDG13

Targets for 2030:

- Climate Crisis (*Establishing renewable energy systems, choosing to purchase 100% green, electricity, reduced energy consumption, introducing a new business area in solar roof business model*)

- Waste Management (**Increased waste rate**)
- Plastics (**Increased recycled plastic and bio-based material content in products**)
- Water Management (**Reduced water withdrawal per product**)
- Green Chemistry (**Standardization of the Arçelik Green Chemistry Management System in production**)

Sustainability Tools/Initiatives:

- Science-based targets implemented in the company's carbon neutral roadmap
- Awareness raising activities and programs implemented such as "Leadership for Climate" in which the top management climbs mountains to raise awareness on environment; and recycling movement with the motto "Let's Return to Nature".
- Implicit Carbon Price Model implemented since 2010 to measure the low-carbon transition impact of applied energy efficiency projects and investments.
- The European Commission's Energy-Using Products (EuP) Directive is used in product development
- National, European, and international R&D and research project are implemented with research organizations and companies from the sector, (more than 500 HEIs, research organization and companies from 20 countries and 19 funded projects)

IN TOUCH WITH HUMAN NEEDS

Sub-focus Areas:

- Healthy Next Generation
- Combating Food Waste
- Supporting Local Communities

Approach: The company combines smart technologies with the needs of customers. The project design and development reflect this aspect of societal value and improving people's lives.

Targeted SDGs: SDG3, SDG4, SDG5, SDG8, SDG10, SDG12, SDG17

Targets for 2030:

- Healthy Next Generation with Beko (**Organization of awareness raising activities for healthy living**)
- Combating Food Waste with Grundig (**Organization of awareness raising activities for combating food waste**)
- Supporting Local Communities (**Supporting local needs of communities**)

Sustainability Tools/Initiatives:

- **She Mate Program** matches new mothers who are returning from maternity leave with experienced working mothers in the company to provide mentorship and support.
- **Eat Like a Pro initiative;** in collaboration with sportspersons to work as a behavior change tool
- **One Healthy Movement Project** in 2019 promotes quality, healthy living habits among the employees.
- Cooperation with **the Food for Soul Initiative** to combat food waste

- **Products Without Barriers Project** offers solutions to the problems visually impaired individuals experience when using home appliances

CERTIFICATES AND CERTIFICATIONS

The companies have various certifications in management systems and product/service compliance such as ISO 9001, ISO 14001, ISO 17025, ISO 10002, ISO 50001, ISO 14064, ISO 45001, ISO 27001, ISO 20000, ISO 22301.

AWARDS AND RECOGNITIONS

- Sustainable Business Awards 2020 (Turkey)
- Industry Leader in the “Household Durables” category in 2019 in Dow Jones Sustainability Index (DJSI)
- SAM Gold Class Award 2019
- Zero Waste Private Sector Award by the Republic of Turkey, Ministry of Environment and Urbanization 2019

ARÇELİK AND SUSTAINABILITY

Sustainability approach is fully integrated in the company’s main business operations in line with its vision and mission statements. The company determined the aspects of its sustainability in economic, environmental, and social dimensions.

In this regard, ARÇELİK aspires to develop and market products which are energy and resource efficient and innovative in design and use. Doing so, the company develops solutions to future challenges related with environment and aims to add social value.

Sustainability is managed by the senior management and all company departments are working to reach set targets.

Impact of the implementation of sustainable solutions on competitiveness:

- Sustainable solutions that the company provides in terms of R&D highly increases its competitiveness.
- Research and development internally and externally through collaborations with triple helix stakeholders increases the innovativeness of the company. “
- Training and professional development opportunities for staff and business partners creates an environment of mutual benefits
- Sustainable practices in environmental area helps in waste reduction and energy efficiency.
- Social investment activities result in a positive perception from the public.

BEST PRACTICE



markta GmbH

Vienna, Austria
www.markta.at

ABOUT THE COMPANY

markta is Austria's first digital farmer's market that brings regional food producers and direct marketers together with people who are looking for high-quality, regional products. Customers can order a full range of hundreds of regional and seasonal foods, as well as household goods, quickly and conveniently online.

These products exclusively come from small and family businesses in the region, and the orders get bundled in the markta logistics centre in Vienna so that the entire order arrives in just one package.

The company has also opened markta collection points in Vienna. These points make shopping easier and more convenient for people in cities because ordered products can be picked up around the clock. This means that customers can have the parcel sent directly to their home or delivered to a collection point within 48 hours (see: www.markta.at).

COMPANY IDENTITY

Starting year: 2017

Annual turnover: 130.000 EUR
(estimated number for 2019)

Market scale: regional/national

Sector: digital trade of
agricultural products

MISSION

Simple online-ordering of regional food products from SMEs

VISION

Connecting rural range with urban demand

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

markta covers various SDGs by implementing different activities and structures to improve the current social and environmental aspects.

INTEGRITY/PEOPLE: markta is pure social innovation. It brings together people from different economic sectors like farming, craft, marketing, PR, business development, controlling or software management from several Austrian regions.

Goals:

- Products of high quality from regional producers

- Support of small family businesses in Austrian regions
- Fair production conditions and pricing

Key activities:

- 60% women in the markta-staff (employees); the boss and many other key functions are female.
- A mix of different cultural and socio-economic backgrounds
- Transparent designations of origin for all products
- Transparent assessment system and criteria for producers relating to SDGs.
- Only family businesses and SMEs as partners
- Contact points in the city of Vienna to bring together people with different social and economic backgrounds

SERVICES: markta's business concept of implementing a digital farmer's market that fits the specific needs of urban people was revolutionary in Austria, and many other companies have since tried to copy or adapt this idea.

Goals:

- Simple access to high-quality food
- A wide variety of seasonal food, drinks, and household products

Key activities:

- 48hrs delivery service for customers
- Active acquisition of new cooperation partners
- Collection points in public buildings all over Vienna (e.g., University of Vienna)
- Individual creation of packages

ENVIRONMENT: markta demands strict criteria from their production partners to fulfil SDGs relating to environmental aspects.

Key activities:

- All producers must be certified BIO-businesses, or the certification must be in the process
- Pesticide-free farming
- No chemical fertilisation
- Green packing solutions (paper, glass)
- Zero waste activities

- Ecological transportation solutions
-

AWARDS AND RECOGNITIONS

- 2015 Austrian Foodblog
- 2016 Smart City Award
- 2017 Austrian Foodblog
- 2019 Austrian SDG Award
- 2020 Sustainable Creators of Austria
- ZONTA Young Women in Public Affairs
- Forbes under 30

markta AND SUSTAINABILITY

markta's business concept environmental aspects and deals with sustainability in all its different characteristics. Sustainability is more than just environmental protection; it covers awareness-raising and especially social innovation and social change.

Impact of the implementation of sustainable solutions

- markta is seen as a "colourful" group of people who want to realise their dreams of a better future in terms of social and ecological aspects
- Environmental impact: waste reduction, "soft pressure" towards biological farming, reducing emissions in transportation
- Impact on the community: bringing together people with different socio-economic backgrounds, supporting women in business

SOURCE: WWW.MARKTA.AT

BEST PRACTICE



Lyreco CE, SE

Pezinok, Slovakia

<https://lyreco.com/group/ce/sk>

COMPANY IDENTITY

Starting year: 2005 (in Slovakia)

Annual turnover: 46 708 492 €

Market scale: Global

Sector: Commerce company

ABOUT COMPANY

Lyreco is a European leader and the world's third-largest distributor of workplace products and services.

Lyreco, with a history dating back to 1926, is constantly adapting to the evolution of workspaces. The Lyreco Group operates directly in 25 countries in Europe and Asia and covers 17 other markets on four continents through a network of distribution partners.

MISSION

"To simplify life at work."

VISION

"All you need at work: think Lyreco"

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The company's strategy covers six main areas: the environment, the economy, people, ethics and sustainability in the supply chain, risk management and support, and community support.

ECONOMICS: Promote and develop a sustainable product offering and provide support to all customers. The processes of the company are directed to responsible consumption and production (SDG12).

Goals:

- To maintain and develop excellence in logistics processes - ordering and delivery and all services and processes related to the customer.
- To promote and support the purchase of products that have a minimum impact on the environment.

Key steps:

- To sustain proximity and efficiency of the logistics chain and digital transformation.

- To develop and promote alternative products in all categories that concern sustainability.
- To change the offer of the products and services in accordance with the circular economy.

Key indicators:

- Measurement of customer satisfaction with customer survey experience.
- Sales of products with minimal impact on the environment.

ENVIRONMENT: In all activities, the company mitigates the environmental impact, from suppliers to customers, with a strong focus on combating climate change. The company is strongly focused on taking action against climate change (SDG13).

Goals:

- Identify and evaluate opportunities to reduce impacts on the environment.
- Ensure that operations and projects are managed by the accredited quality system (ISO 9001) and environmental management (ISO 14 001) so that their priority is precisely sustainability.

Key measures:

- Shift towards a greener car park and more ecological buildings.
- Management of waste management and offers customer recycling service.
- Commitment to projects and strategies of the circular economy.

Main indicator:

- Reduction of CO2 emissions between 2019 and 2010 by 19.3%.

Next steps:

- Fight against deforestation - a commitment of Lyreco, along with suppliers, to limit the impact of their activities to sufficient extent resources and raw materials.
- Commitment to implementing the principles of the responsible company by 2020.
- Packaging and all subsidiaries that will be carried for the use of recyclable packaging.

SUPPLY CHAIN: Develop a sustainable and ethical foundation throughout the supply chain to increase Lyreco's competitiveness, innovation, and customer success. Activities in this area support decent work and economic growth (SDG8).

Goal:

- Ensure customers the best value for money in terms of products and solutions and at the same time sustainability and ethics in supply chains.

Key measures:

- Assess the ethics and sustainability of suppliers.

- Subsequent steps in agreement with the supplier.
- Training and dissemination of information to suppliers on sustainability.
- Internal education and awareness-raising on sustainability.

Sustainability activities:

- Manufacturer audits and improvement programs: Lyreco annually checks the level of sustainability of factories and manufacturers of Lyreco products.
- Supplier Performance Improvement Program: Mechanisms focused on ensuring continuous improvement of suppliers.
- Evaluation of suppliers' performance concerning sustainability:
 - Evaluate the socially responsible businesses and suppliers in five areas and deliver an action plan with possible steps improvements.

MANAGEMENT: Create Risk and Opportunity Management programs as an integrated part of the business. Targets focused on Responsible consumption and production (SDG 12) and Decent work and economic growth (SDG8).

Key measures:

- Risk management and risk matrix
- Awareness raising and training in risks and opportunities.

Sustainability Tools:

- Certification process - international ISO standards 9001, ISO 14001, OHSAS 18001, ISO 26000 - integrated system management.
- The extended process of risk management in corruption risks, social risks, cybercrime.
- Support aesthetics in all procedures.

PEOPLE: Leverage the many year's experiences of employees to maximise customer satisfaction. Activities in the field People contribute to the goal of Decent work and economic growth (SDG8).

Key activities:

- Employees support environmental initiatives, and low-initiative initiatives impact on the environment.

COMMUNITY: Make education the basis of the Lyreco charity program on a global and local level.

CERTIFICATES AND CERTIFICATIONS

Trust and transparency of components to meet environmental and customer requirements. Lyreco's sustainable products provide clear information through:

1. ISO 9001 quality management system.
2. recognised environmental inspections and certificates.
3. Green Lyreco tree.

The company is committed to international initiatives aimed at implementing ethical and responsible practices in the markets.

Approved initiatives:

- UN GLOBAL COMPACT, NEW YORK FOREST ON THE FORESTS, CLUB OF HUMAN RIGHTS.

AWARDS AND RECOGNITIONS

- Lyreco UK wins the SHD Logistics Environmental / Sustainability Award 2016.
- Lyreco Award Highly Commended at Lux Awards.
- For the 2nd consecutive year, Lyreco won the trophy (Corporate Social Responsibility) in the "European Office Products Awards 2013".
- 2009 Green Apple Award.

LYRECO AND SUSTAINABILITY

Lyreco has a well-developed strategy considering SDGs. Supply chain activities are influencing suppliers and requiring sustainable measures throughout the supply chain. The positive activities related to responsible consumption, creating awareness among customers about responsible consumption and expanding the offer of "green products" and clear labelling and clear accessibility. By clear definition of circular economy and intentions for achieving it, Lyreco represents a clear vision of sustainability. Activities connected with Decent work objectives and Economic growth, Responsible consumption and production, and the climate crisis are also positive.

Impact of the implementation of sustainable solutions:

- Directly influenced and increased competitiveness.
- Increased customer satisfaction.
- Raising awareness of responsible consumption and production.
- Influence of the company on other companies in the supply chain.

BEST PRACTICE

"Social & Green IT"

Afb Slovensko, s.r.o

Trnava, Slovakia

<https://www.afb-group.sk/en/>

COMPANY IDENTITY

Starting year: since 2019 (in Slovakia), 2004 (Germany)

Market scale: European

Sector: IT company

ABOUT COMPANY

As Europe's first non-profit IT company, AfB is specialized in data erasure and remarketing of decommissioned IT hardware from European corporations, insurances, banks, and public institutions. AfB retrieves the devices with trained personnel and transports these devices to the nearest AfB location. The devices are checked, all data is removed in a certified manner, and required repairs are undertaken. The IT devices are remarketed with up to three years warranty. Old or defective devices are disassembled and recycled under the highest ecological and ethical standards, resulting in savings of earth resources. The original owner of the devices receives all relevant reports, including data destruction certificates for delivered hardware. All work steps are designed barrier-free and employees with and without disabilities work together side by side.

MISSION

AfB is Europe's largest non-profit IT company and has the vision to be the world's leading non-profit IT company with the slogan "Social & Green IT".

VISION

In our company, employees with and without disabilities work together side by side to provide high-quality IT services and products. Here, acting economically but also environmentally friendly takes center-stage.

VALUES

Our business model includes diversity and is socially responsible.

The protection and privacy of data and give it the highest priority.

High-quality IT services, consulting work and products.

Being versatile, friendly, and focused on success.

Act ecologically responsibly.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

For more than 15 years, AfB has been campaigning for ecological action in the IT industry and greater inclusion in the labour market. By joining the Sustainable Development Solutions Network (SDSN) in 2017, AfB has committed to supporting the protection of human rights, ensuring compliance with international labour standards, taking action to protect the environment, and fighting corruption and bribery through its business operations and policies

INTEGRITY: As a signatory to the Global Compact, AfB is part of a network of more than 15,000 companies and organizations from more than 160 countries working together to create a sustainable future for the benefit of all people communities, and markets. The [Communication on Progress \(COP\) 2019](#) reaffirms AfB's commitment to the goals of the United Nations Global Compact

An overview of the principles of the UN Global Compact:

Human Rights

- Support and respect the protection of internationally proclaimed human rights.
- Make sure that they are not complicit in human rights abuses.

Labour

- Uphold the freedom of association, and the effective recognition of the right to collective bargaining.
- uphold the elimination of all forms of forced and compulsory labour.
- Uphold the effective abolition of child labour.
- Uphold the elimination of discrimination in respect of employment and occupation.

ENVIRONMENT

- Support a precautionary approach to environmental challenges.
- Undertake initiatives to promote greater environmental responsibility.
- Encourage the development and diffusion of environmentally friendly technologies.
- **Part of Circular Slovakia**, the platform connects companies, government institutions, knowledge centers, business associations and non-governmental organizations to accelerate the transition to a circular and greener Slovakia.

COMMUNITY

- Work against corruption in all its forms, including extortion and bribery.

PEOPLE

- More than 380 jobs have been created since the company was established in 2004.
- Almost 47% of those jobs were filled with people with disabilities.

SUPPLY CHAIN:

- Reduction of electronic waste.

- Through our creation of value, we aim to reduce damage to the environment.
 - Developing the new business model and cut back even more on electronic waste.
 - Approach to reducing environmental impacts – reducing paper consumption, energy consumption and electronic waste.
-

AWARDS AND RECOGNITIONS

2021 German Sustainability Award

AfB "for its exemplary combination of environmental protection and social responsibility and the development and maintenance of long-term partnerships" with the award of the German Sustainability Award 2021 in the transformation field "Society + Fairness".

ISO 9001

ISO 14001

AfB wins the Inclusion Award of NRW 2020 in the "Work and Social Purpose" category

AfB wins the Digital Leader Award 2020 special prize "Social Purpose"

AfB is awarded as " Sustainability Hero 2020" in the category "Circular Economy"

AfB is awarded the SFE CEFEC AWARD as "Europe's Social Firm of the Year 2020"

AfB is nominated for the German CSR Award

AfB is nominated for the CSR Prize of Germany

AfB, Slovensko, S.R.O. AND SUSTAINABILITY

Our actions are guided by the principle of social and ecological responsibility. We are Europe's first non-profit IT company and create numerous jobs for people with disabilities. We are a Corporate Social Responsibility (CSR) partner, vendor, and employer.

AfB confirms the responsibility to consider all our business decisions and activities with respect to their economic, social, and environmental impacts.

BEST PRACTICE

Banca Etica

Padova, Italy

<https://www.bancaetica.it/about-us>

ABOUT COMPANY

On the **8th of March 1999**, Banca Etica opened its **first bank branch in Padua**. Banca Etica is a **cooperative bank** that operates in **Italy and Spain**. It was established thanks to the commitment of several individuals and organisations who joined forces to create a credit institution based on **Ethical Finance** principles: transparency, participation, sobriety, efficiency and attention to the non-economic consequences of economic actions.

“Ethical Finance”

COMPANY IDENTITY

Starting year: 1998

Market scale: International

Sector: Bank, finance company

VISION

“We are the financial institution that has chosen to inspire its strategic choices, policy and operational behaviour to the founding principles of Ethical Finance.”

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The company Banca Etica has defined four main areas of sustainability: Cooperation and innovation, international cooperation, environment and reduction of energy consumption, culture, and civic society

INTEGRITY: With the savings that it raises, Banca Etica finances only projects, companies and organisations that can produce social and environmental value in one of the following areas:

- Cooperation and innovation: social services, education, health, fighting social exclusion, employing disadvantaged individuals.
- International cooperation: Providing funding to non-profit organisations and NGOs working in the southern areas of the world, supporting Fair Trade, training for micro-enterprises, and developing partnerships.
- Environment: Reduction of energy consumption, development of renewable energy sources, promotion of organic and bio-dynamic farming and sustainable projects.
- Culture and Civic Society: Promotion of a culture of legality, enhancement of artistic and cultural heritage, support for non-profit associations and projects for socio-cultural leadership, responsible tourism.

SERVICES: Products and services include savings accounts, current accounts, debit and credit cards, affinity cards with Amnesty International, payment services and online banking. Typically, Banca Etica focuses on financing organisations operating within the third sector that carry out civil society-oriented economic projects, having the legal form of cooperative organisations, associations, or social institutions. In recent years, the bank has started to include working with for-profit organisations focused on organic food, green energy, and employee buy-outs.

PEOPLE: Its democratic management and ethical approach are ensured by the fact that its members freely participate according to the **“one head, one vote”** principle. All shareholders have the same right to vote in the General Assembly, irrespective of the number of shares they own. Thanks to the savings accumulated, Banca Etica **funds the projects that are aimed at welfare, social economy, environmental protection, innovation, international cooperation, and culture**. This information is verifiable: Banca Etica is the only bank in Italy that publishes its loans on its website.

Initiatives:

- Crowdfunding: In 2014, Banca Etica created its network on Produzioni dal Basso: an online platform where organisations, members and clients of Banca Etica can raise funds to carry out their own cultural, social, and environmental promotion projects. Produzioni dal Basso is Italy's first crowdfunding platform and was created in 2005. It represents the most significant Italian community of reward-based crowdfunding and donations and one of the most significant European contributions to the panorama of the sharing economy.

COMMUNITY:

The owners of Banca Etica are **thousands of Italian and Spanish members** who preserve its freedom from politics and the considerable economic and financial groups supporting its development.

Individual members and member organisations are encouraged to support the operating structure and actively share in the life of the Bank through the Territorial Organization of Members, an association tool unique to the banking sector, and organised in Local Districts. Each constituency elects its **Territorial Initiative Group (GIT)**.

The **GIT** is composed of volunteer members who promote ethical finance locally and ensure a connection between the territories and the general bank policies through:

- participating in the governance choices;
- connecting the Bank's activities to local needs;
- building relationships, synergies and solidarity with local movements and the social economy;
- supporting economic analysis with social evaluation of organisations applying for credit;
- facilitating the most suitable mutual returns for each territory.

Initiatives:

- Global Alliance for Banks (GABV) is an independent network of the central banks that, worldwide, operate inspired by the principles of ethical finance
- European Federation of Ethical and Alternative Banks (FEBEA) a non-profit organisation created in Brussels in 2001 by Banca Etica, Crédit Coopératif (France), Caisse Solidaire du Nord Pasde-

Calais (France), Crédal (Belgium), Hefboom (Belgium), TISE (Poland) and La Nef (France), for the development of ethical and solidarity-based finance in Europe.

AWARDS AND RECOGNITIONS

- 2001 Social assessment of small and medium-sized enterprises
- 2004 National Peace Culture Award
- 2016 Italian Resilience Award
- 2017 Top Fund Manager Italia-Small

BANCA ETICA AND SUSTAINABILITY

Impact of the implementation of sustainable solutions:

In 2019 Banca Etica disbursed 222 million euro in loans to organisations and enterprises, producing these positive impacts:

- 9822 new jobs
 - 4894 tonnes of CO2 emissions avoided
 - 20 3785 tonnes of recycled waste
-

BEST PRACTICE

Fondazione Fenice Onlus

Padova, Italy

<https://www.fondazionefenice.it>



ABOUT COMPANY

Fondazione Fenice Onlus was founded in **2005**, bringing together the Consorzio Zona Industriale di Padova (ZIP) and the scouts of the National Corps of Young Explorers and Italian Explorers (CNGEI). In **2008** the Park was fully active, and during the year, it hosts more than 200 schools for specialised routes on renewable energy. In **2013** it officially became "Fenice Green Energy Park" and inaugurated the structures of the Park, including the Youth Hostel and the Training Center. To date, the Park offers and promotes its activities and hosts external activities to bring individuals, students, professionals, and companies to a way of living, working, and consuming efficiently and healthily for society.

COMPANY IDENTITY

Starting year: 2005

Annual turnover: ---

Market scale: local, international

Sector: renewables energies

VISION

To educate young people, train workers and improve business policies with the right resources.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The company's five defined areas of sustainability are: quality education, affordable and clean energy, sustainable cities and communities, responsible consumption and production, and climate action.

INTEGRITY: The primary effort of the Fenice Onlus Foundation is to combine environmental protection of the landscape and research for new technologies to respond to environmental emergencies and future development scenarios.

SERVICES: Fondazione Fenice offers different services:



- Fondazione Fenice is a training agency accredited by Veneto Region. Its training courses are available to companies, professionals, and individuals. Fondazione Fenice offers opportunities for professional growth on Green and New Jobs themes with training courses on the topics of Euro-planning, Crowdfunding, Social Enterprise and Third sector, Project management, Agile and Scrum, Energy manager, Domotic and many more.
- Fondazione Fenice helps students of all ages becoming the perfect "citizens of the Smart City". Therefore, it offers educational activities and educational workshops valid for work placement purposes.
- Fondazione Fenice offers personalised consulting services and support to companies and organisations of the Third Sector (Associations or Cooperatives), including the rental of classrooms and technical spaces.
- Green Energy Park, the Foundation's headquarter, is a public ground where individuals can spend their free time learning and living sustainability concretely.

ENVIRONMENT: The environment is an essential asset of the community, and Fondazione Fenice has focused on its corporate mission. The concepts of environmental protection, energy efficiency and pollution prevention are the founding principles of the Foundation itself. The respect of these is essential for Fenice. Given this premise, Fondazione Fenice promotes training, consulting initiatives and projects on the topics mentioned above.

Initiatives:

- H.E.L.P. Veneto: High-efficiency Emergency Living Prototypes Veneto - Sustainable adaptive residences for temporary stay in an environmental emergency. The purpose of H.E.L.P. Veneto is to design a housing module for environmental emergencies that is flexible, light and adaptable to different environmental contexts, from mountain environments subject to landslide risk, to flat areas subject to hydrogeological instability. These structures will be located for the most part within areas that, due to the events occurred, could be isolated (off-grid) and therefore these modules will operate completely independently, both from a functional point of view, and plant. In order to be sustainable, the modules will also be designed according to nZEB standards (nearly zero energy buildings), and equipped with the necessary equipment to handle different emergency situations
- SHIP Project- Sustainable, Healthy and Inclusive furniture and games for Parks. The project aims to encourage environmental, social and cultural sustainability actions and practices by developing equipment and technologies for public parks. The project considers the park no longer as a mere place for purely aesthetic and passive use. Besides, by building public parks as a space for new educational models and actions, the project aimed at improving citizens' psychophysical and social wellbeing.
- NETWAP – Network of small “in situ” Waste Prevention and management initiatives. The project provides for developing, verifying, and validating a sustainable municipal strategy and waste management model by promoting a cross-border approach based on practical cooperation. The project’s aims are in line with the EU waste hierarchy, and economic principles circulate. The project also addresses increasing tourist pressure on fragile cultural and natural sites, focusing on small, isolated communities away from well-established collection and treatment services.

- Vehicle to Home – V2H. In a joint action between companies in the Veneto region, the project aims to develop an integrated electric mobility system fed through a renewable energy production plant installed in a civic building.
- S.O.L.E.H – Sustainable Operation Low-Cost Energy for Hotels. The S.O.L.E.H. project aims to encourage the energy efficiency upgrading of hotel buildings in the Veneto region, through appropriate strategies based on the development of innovative and sustainable technologies and the proper communication of the requalification project. This project wants to stimulate the building sector by introducing Innovative and Smart Technologies for the collection, processing and visualization of both in-put data of the building and out-put data related to the redevelopment project, adapting them to different stakeholders (stakeholders, investors, owners, professionals and companies).

COMMUNITY:

Initiatives:

- Fenice Foundation is an embryo of Smart City that guides the education of the citizen of the future. The Fenice Green Energy Park is the physical location due to which Fondazione Fenice operates concretely. It is, therefore, not only a collector of opportunities, but it is above all a place. It is an ideal place to meet, experience a new way of making communities, improve own business, and integrate it with the resources and experiences of other companies to create a new future and then take it to small and large communities around the world.

AWARDS AND RECOGNITIONS

- European Commission Energy - Manage Energy

FONDAZIONE FENICE ONLUS AND SUSTAINABILITY

Social impact:

12,000 visiting students every year from all over Italy and Europe

16,000 visiting citizens each year

20 high training courses per year, with the participation of about 350 companies and for a total of 800 hours of training

200 institutional visitors from worldwide

300 local government visited

500 companies involved each year

Impact of the implementation of sustainable solutions:

Savings thanks to the services offered by Fondazione Fenice to private and public companies:

18,81 TEP

22663 SCM (Standard Cubic Metres) *

43639,2 CO₂

Savings thanks to pellet stoves:

16560 CO₂

552000 kWh

SMC: Amount of gas contained in one cubic meter at standard conditions of temperature (15 °C) and pressure (1013.25 millibars, i.e. atmospheric pressure).

BEST PRACTICE



Betolar Ltd.

Kannonkoski, Finland
<https://www.betolar.com/>

COMPANY IDENTITY

Starting year: 2016
Annual turnover: 21 000 € (2019)
Market scale: aiming to be global
Sector: Construction

ABOUT THE COMPANY

Betolar is a Finnish pioneer company in materials technology. Our story began with a bold experiment to replace cement used as a raw material for concrete with a side stream-based material. From the beginning, it was clear that something great could be achieved with these geopolymers – something – that would change the way we make products and use raw materials.

At the heart of Betolar are visionary thinking, a high level of expertise in construction, and a deep understanding of the opportunities offered by technology and digitalization.

Today Betolar has grown to be a pioneering partner, helping the construction industry build a new, more sustainable future. They help to reduce CO² emissions and the usage of fossil resources to achieve climate goals in practice.

MISSION:

Sustainability: Together we can make an impact on the world. Learn more about the change awaiting in the construction industry.

VISION

From a peripheral venture to a pioneering partner

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

ECONOMICS/ENVIRONMENT: The construction industry is among the most polluting sectors, creating over 20% of the global CO₂ emissions. One of the most significant problems in the industry is the cement used in concrete, which causes a significant carbon dioxide load in its production.

Betolar’s solutions help turn different side streams from the energy, mining, steel, and forestry industry into low carbon, cement-free construction materials that perform the same as concrete in terms of qualities such as strength but leave a carbon footprint that is up to 80 per cent smaller.

The technology also enables a way to utilize the rapidly growing waste sites and accelerates sustainable construction and a circular economy. Moreover, the side-stream materials used, and easy production implementation make the introduction of new methods easy.

Goals

The mission is to create an impactful and scalable business.

Betolar is a pioneering materials technology company focusing on turning industrial side streams into value. They aim to offer a continuous competitive edge to the construction industry and transition towards a sustainable built environment - socially, environmentally, and economically.

- From Piloting and small scale to global impact

Recent headlines:

- Successful piloting: Forest sector's side stream to replace rock material
- Low carbon paving stones at Kotka Green flag parks
- From innovations to products in just two years

FUNDING AND RECOGNITIONS

- 2021 Featured in Helsingin Sanomat, the largest subscription newspaper in Finland and the Nordics
- 2021 Betolar featured in Finnish newspaper Maaseudun Tulevaisuus: "Finland's strict environmental policy gives us an advantage."
- 2020 New investment round led by Voima Ventures

BETOLAR AND SUSTAINABILITY

Betolar is a pioneer company in materials technology. The solution Geoprime® is the next-generation, low carbon innovation and a sustainable alternative to cement. It is a recipe and a material that enables us to create cement-free construction materials from industrial side streams.

The solution's durability and strength are comparable to cement-based products – yet it outperforms the traditional products with up to 80% smaller carbon footprint.

Betolar supports the manufacturers to meet the demand for new sustainable building materials and products. Betolar's solutions are scalable and easy to implement into current production.

Betolar benefits for manufacturers

Sustainable construction in the future

- Low carbon, up to 100% cement-free material solutions
- Cost-effective compared to current materials
- An easy way to grow a greener business

SOURCE: WWW.BETOLAR.COM

“Consulting Company”

COMPANY IDENTITY

BEST PRACTICE

FIANT Consulting Oy

Helsinki, Finland
<https://fiantconsulting.com/>

Starting year: 2012
 Annual turnover: 114 000 €, 2019
 Market scale: National to global
 Sector: Consulting

ABOUT COMPANY

FIANT was established in 2012 to provide high-quality consultant services on human rights and sustainable development to companies, the public sector, civil society, and other actors.

The Latin word ‘fiant’ means be made, be done, happen. It reflects the company’s commitment to serving the clients in a focused and pragmatic way at their premises. Continuous development of approaches, practices, and tools and inspiring teamwork form the foundation of their work.

MISSION

High-quality consultant services on human rights and sustainable development.

VISION

Our solid expertise together with strong understanding on different grassroot realities helps our clients to achieve their goals.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

With human-rights based methods and tools, FIANT helps their clients in operationalizing human rights due diligence in line with the UN Guiding Principles on Business and Human Rights. FIANT also supports in identifying and monitoring the contributions of the business to sustainable development.

FEASIBILITY: Actively finds ways to support the clients in achieving their goals in different local contexts. In their work, theory and practice support each other.

IMPACT: Supporting the clients in identifying, monitoring, and evaluating the impacts of their operations is an essential element in our work for sustainable development.

ADDING VALUE: The statement is based on a belief that recognizing, capitalizing and strengthening the knowledge and skills of all stakeholders involved in development processes is a prerequisite for sustainable development.

NEW LEARNING: Continuous learning and making use of the latest research is vital for FIANT. Interactive learning with different stakeholders is an essential factor in successful and sustainable action.

TEAMWORK: Dynamic teamwork where the expertise and skills of all involved are brought together for achieving shared goals.

Goals:

- Impact on combining business and human rights:

Key steps:

- support for the development of human rights policy statements and human rights impact assessments
- human rights impact monitoring
- development of grievance mechanisms and remedy processes
- identifying linkages between the environmental and human rights impacts of the business
- case-specific assessments and facilitation
- training on human rights in different local contexts and human rights due diligence
- mapping and monitoring contributions of business activities to the UN Sustainable Development Goals (SDGs)

SUSTAINABLE DEVELOPMENT

FIANT has solid experience supporting public and private sectors and civil society organizations in promoting sustainable development in developing countries and Finland. FIANT has specific expertise in providing technical assistance and training on results-based management and human rights-based approaches to development.

Effective development cooperation: FIANT supports its clients in the planning, implementation, monitoring and evaluation of development cooperation strategies, programs, and projects. We help them in developing quality assurance systems and tools and mobilizing resources for their interventions.

Sustainable development in Finland: FIANT conducts studies, assessments, and evaluations in environmentally and socially sustainable development and related interventions. We support our clients in integrating a human-rights perspective into their work.

REFERENCES

2018-2019 Finnish Development Policy Committee

2015-2018 Trade Union Solidarity Centre of Finland

2019 Finnish Red Cross, Disaster risk management project in Cambodia

2019 Helsinki Region Environmental Services Authority

REPORTS

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- **2019 No time to Waste, Assessing Finnish Companies' Alignment with SDGs**
https://fiantconsulting.com/wp-content/uploads/2019/01/No_time_to_waste.pdf
- **2019 Words to Deeds: Study on Operationalization of UN Guiding Principles on Business and Human Rights among Listed Companies in Finland.** https://fiantconsulting.com/wp-content/uploads/2019/12/Words_to_Deeds_Nov_2019.pdf

SOURCE: FIANTCONSULTING.COM

BEST PRACTICE

BIRZIPLASTIC, S.L.

Zalla, Basque Country (Spain)

<https://birziplastic.com/>

"Waste Management"

COMPANY IDENTITY

ABOUT COMPANY

Birziplastic is dedicated to recovering technical composites through the proper management of non-hazardous plastic waste of industrial origin. It has a design of processes already certified that do not generate added waste during the same.

The composites are treated using mechanical systems, without acids, without washing stations, without melting. Birziplastic obtains a treated waste suitable for industrial use, which means that it meets two critical objectives of the European Green Strategy 2030: the circular economy and the reduction in the use of virgin materials.

Starting year: 2018 (in Basque Country, Spain)

Annual turnover:

Market scale: Global

Sector: Commerce company

AIM: the recovery of end-of-life plastics, through the proper management of this waste, and for this it has a design of certified processes that do not generate added waste.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The company's strategy covers those main areas: the environment, the economy, ethics and sustainability in the supply chain, risk management and support, and community support.

ECONOMICS:

- Birziplastic is part of the Enkarterri Group Business Association, which focuses its activity on boosting the economic activity of the Enkarterri/Encartaciones region, an exercise in the implementation of social responsibility for the region (one of the two regions most affected by unemployment in the Basque Country).
- Birziplastic responds to a need that the injection moulding sector demands by recovering 95% of the plastic materials that arrive at its facilities, with "zero waste" primary objective. They promote and develop a sustainable product offering and provide support to all customers. The company's processes are directed to responsible consumption and production (SDG 8, SDG 9).

Goals:

- Waste collection and management of the product, excellence in logistics processes.

- Promotion and support of the products purchased with a minimum impact on the environment.

Key steps:

- Proximity and efficiency of the logistics chain, maximum 150 km around (addressed to Basque industries)
- A circular economy process with post-industrial waste

Key indicators:

- Measurement of customer satisfaction with customer survey experience.
- Sales of products with minimal impact on the environment.

ENVIRONMENT: Birziplastic is a partner of the Basque environmental cluster ACLIMA. They favour the reduced use of petroleum derivatives to create new virgin plastics and sourcing from an operating environment. They also minimize the impact of our carbon footprint and indirectly help its industry to reduce costs. (SDG 12, SDG 13)

Goals:

- Identify and evaluate opportunities to reduce impacts on the environment.
- They source waste from Basque industries, a maximum of 150 km radius
- They do not use polluting agents, such as acids, in their processes

Key measures:

- They reduce electricity consumption since they avoid stoves, washing stations, dryers

Main indicator:

- Recovery of 95% of the plastic materials
- Bringing an eco-friendly product back to the market

Next steps:

- The automation of the production process to obtain high-quality shredding of technical plastics for injectors, even in parts with different glass fibre fillers.
- Installation and collection of waste containers in each warehouse occur by collecting all the waste they classify and recover for the customer. Their classification works with the client, previously identifying each type of piece, the materials that the client wants to recover and the materials that s/he intends to recover.
- Removal of metal inserts in non-conforming parts for subsequent reclamation

MANAGEMENT: Create Risk and Opportunity Management programs as an integrated part of the business. Targets focused on Responsible consumption and production (SDG 12, SDG 13) and Decent work and economic growth (SDG8, SDG9).

Key measures:

- Risk management and risk matrix

- Awareness raising and training in risks and opportunities.
- The company is a start-up with exponential growth expectations.

Sustainability Tools:

Certification process - Their materials are certified by the following tests:

- Calorimetry (DSC), ISO 11357-1:2019
- Fluency index, by weight, ISO 1133:2012
- Inorganic filler content, ISO 1172:1999

PEOPLE: The company was created with a team of 4 people with extensive experience in the injection and construction sector and continues to grow under the values with which the project was born to promote quality employment and help the sustainable value chain of the environment (SDG 8, SDG 9, SDG 12, SDG 13).

Key activities:

- Employees support environmental initiatives
- Low- initiatives impact on the environment.

BEST PRACTICE

LUFE

Zalla, Basque Country (Spain)

<https://muebleslufe.com/>



COMPANY IDENTITY

Starting year: 2018 (in Basque Country, Spain)

Annual turnover:

Market scale: Global

Sector: Commerce company

ABOUT COMPANY

The company was founded in 2014 in the middle of a crisis. It was possible thanks to the pride and stubbornness of Enrique Arrillaga, the founder, who wanted to continue with the familiar tradition. He wanted to go on with what he had learned from his father, but it was evident that he could not do it in the same way.

The company brainstormed to turn the situation around, and concepts like “sustainability”, “design”, “low-cost”, and “do-it-yourself” came out. One thing was obvious; they wanted to sell well-designed furniture at democratic prices.

LUFE

Local, Universal, Functional and Ecological.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

The company has defined three areas of sustainability

INTEGRITY: A clear definition of social responsibility as part of corporate social responsibility culture and values. They are seriously concerned about sustainable development; they try to care for today’s forests for tomorrow’s landscapes.

Tool: This is the reason why since they started designing furniture, they have only used PEFC certified organic wood.

Initiatives: Keep local ecosystems intact and promote biological diversity. SDG: 9, SDG:12, SDG:13

COMMUNITY: Support economically local companies that live from the timber sector and being the leaders of these changes. Behind Muebles LUFE there are local suppliers.

ENVIRONMENT: Products of forest origins such as wood, cork, or PEFC certified products guarantee consumers that they buy organic wood. In other words, they keep a large ecosystem intact.

AWARDS AND RECOGNITIONS

Businessman of the year in Gipuzkoa 2017

LUFE AND SUSTAINABILITY

Impact of the implementation of sustainable solutions:

Their furniture is environmentally friendly, and PEFC certified, which shows that another is planted when a tree is cut down. The exploitation of the forests in which raw material of solid pine wood-obtained is sustainably managed.

BEST PRACTICE

GOODBIKE PADOVA

Italy (Padova)

<http://www.goodbikepadova.it/default.aspx>



COMPANY IDENTITY

Starting year: 2012

Annual turnover:

Market scale: local

Sector: Commerce company

ABOUT COMPANY

GOODBIKE PADOVA, the bike available where you need it. A public transport that should not be waited on, that allows you to arrive early and is also fun and healthy. Active 24 hours a day. Free from travel, time and waiting constraints, the service guarantees comfort and flexibility, combined with the protection of the urban environment. 200 traditional bicycles and 50 pedal assisted bicycles are the protagonists of this new mode of urban movement.

GOODBIKE PADOVA

The bike available where you need it.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACT

- Goodbike is part of the EU-funded Velocità project involving the cities of Burgos (Spain), Szeged (Hungary), Krakow (Poland), Southwark - London (United Kingdom) and Lambeth - London (United Kingdom).
- Sustainable mobility services are a need for local Italian institutions, especially for cities such as Padua, which is among the most polluted in the country

Strengths/Weaknesses:

Strengths: Pool of potential users is increasing (commuters in transit every day are 48,000 and enrolled at the University of Padua are more than 57,000 per year).

Weaknesses: The number of users isn't growing since 2017. There are still entire districts, among the most populous of Padua (Arcella, Guizza, Chiesanuova, Brusegana, Montà, Mortise), without bike stations so that they are totally cut off from the initiative. Few positions in the university areas (the Liviano, the "flower" of Botta and Agripolis in Legnaro).

Social, economic, environmental impact:

- 200.000 trips per year (source Velocittà)
 - Less emissions for the city of Padua
-

Chapter 3: Methodology of current state analysis

The project “**Knowledge Alliance for Business Opportunity Recognition in SDGs**” provides insights into research questions about the current state of sustainability and SDGs awareness by conducting a survey. The study aims to determine the level of awareness and interest in sustainability and the Sustainable Development Goals in three stakeholder groups covering the academic and business environments.

Key target groups for the state-of-the-art analysis targeted in the SDG4BIZ project are as follows:

- Staff and students of European higher education institutions (HEIs).
- Small, mid-sized and large enterprises

3.1 Workflow of current state analysis

Data were collected between April and June in 2021 through questionnaires using Webropol software for the possibility of working with multilanguage versions. SDG4BIZ partners have translated the questionnaires from English into their national languages. While Finnish, Turkish, and Slovak versions were produced for each key target group defined above, the German, Italian and Spanish versions were created only for business-related key target groups. These multilanguage versions of the questionnaires for the survey were necessary so as not to be limited by language barriers in what was a multi-national data collection exercise. While reaching a broader sample by remaining inclusive, the multi-language survey used in this research also achieved a higher response rate.

The SDG4BIZ survey determines the extent of awareness, interest and knowledge of academics and students at HEIs, and employees in companies about Sustainable Development (SD) in general and the Sustainable Development Goals (SDGs). The process of current state analysis is illustrated in the workflow in Figure 4:

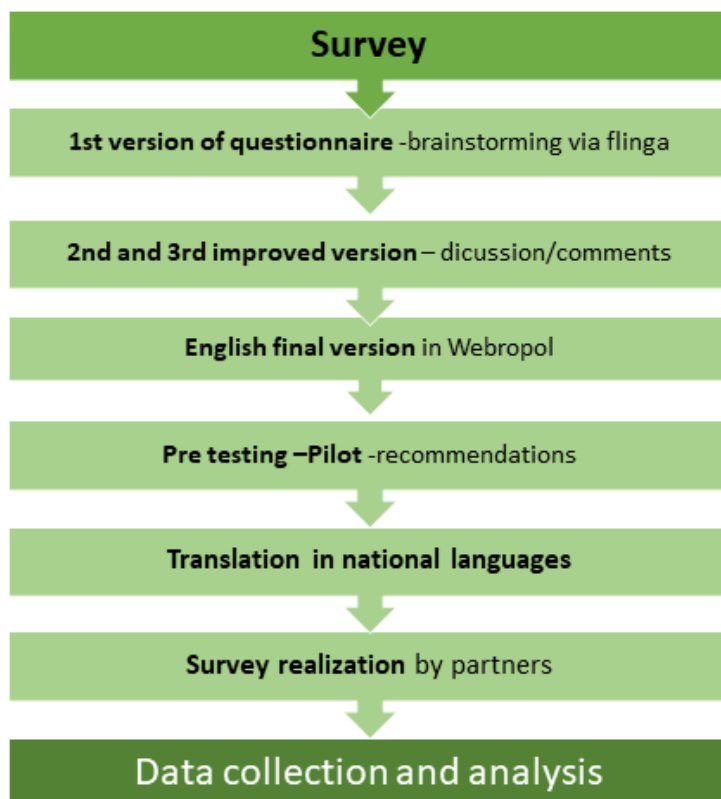


Figure 4 Workflow of survey for current state analysis in project SDG4BIZ

First, research questions were defined, then the first version of the questionnaire was designed via brainstorming using an online whiteboard called Flinga. After elaborating on each of the items and questions for the survey with the participation of all partners, brainstorming sessions and fine-tuning enabled the project team to reach its final version first in English. Besides, the data collection methods, sampling, and digital platforms to be used are determined by consensus. The multilanguage versions were then created in Webropol by partners in six languages. A pilot study was conducted. Accordingly, pre-testing the survey obtained new improvements to progress at national levels. Thereafter followed the final distribution, collection of data, and analysis.

In the current state analysis, a qualitative research methodology was used. Key target groups were identified in order to enable better estimation of the potential for developing business opportunities by applying sustainable development goals as a prerequisite for developing sustainable economies, business practices, and industries throughout Europe.

The content of the questions of the questionnaire reflected the findings of the earlier analysis of the current state in the field of theory (literature in the form of scientific articles in journals, conference proceedings, monographs in English and national languages of partners) and best practices (creating a database of successful projects in the field).

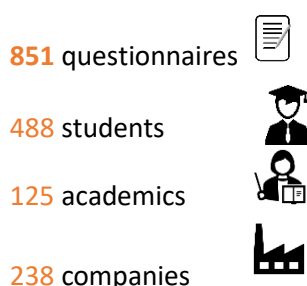
The survey focused on groups of respondents (students, academics, company employees) in partner countries. The structure of the survey questions consists of three parts, addressing different aspects of the state-of-the-art analysis.

The introductory part of the survey begins with classification issues (e.g., region/country, area of study, study degree, university, type of business) before moving to a deeper analysis and comparison of respondent groups' differences and common features. The second part of the survey considers the scope of knowledge and competences in the context of sustainable development and SDGs. The third part of the survey relates to entrepreneurship skills. In the questionnaire for HEIs students, attention was also paid to the characteristics and features of the proposed study material (time demand for learning, preferred length in case of video, preferred additional study material). At the same time, the questionnaire for academics considers the degree of interest and awareness of sustainability, SDGs, and entrepreneurship.

In the business sphere, the survey focused on the impact of sustainability, inclusion of sustainability content in strategy, reporting, responsibility for sustainability issues, and current and future organisation activities in the context of sustainability. These topics were addressed in order to identify employers' desired competences and skills of graduates as future workers.


3.2 Classification of respondents in SDG4BIZ survey

Data for the current state analysis were compiled with 851 respondents in the six national languages of project partners and English, concluding 488 HEIs students, 125 academics (plus surveys from seven senior managers) from four HEIs and 238 companies from six countries.



Information about respondents in SDG4BIZ survey and their background -students

Table 1 Classification of respondents in SDG4BIZ survey regarding subject area (HEIs students)

Classification of survey respondents (students) 	Absolute frequency	Relative frequency
Business and management	202	41.4%
Engineering and science	149	30.5%
Information technology	63	12.9%
Other (Please specify)	44	9.0%
Humanities	14	2.9%
Social sciences	5	1.0%
Health and wellbeing	4	0.8%
Culture (music/design/art)	4	0.8%
Law	3	0.6%
Total	488	100%

Nearly three-quarters of the HEIs students in the SDG4BIZ survey are from two study areas - Business and management (41.5%) and Engineering and science (30.5%). The third most represented group is Information technologies with nearly 13%, and the remaining subject areas cover only 6.1% (Health and wellbeing, Culture, and Law).

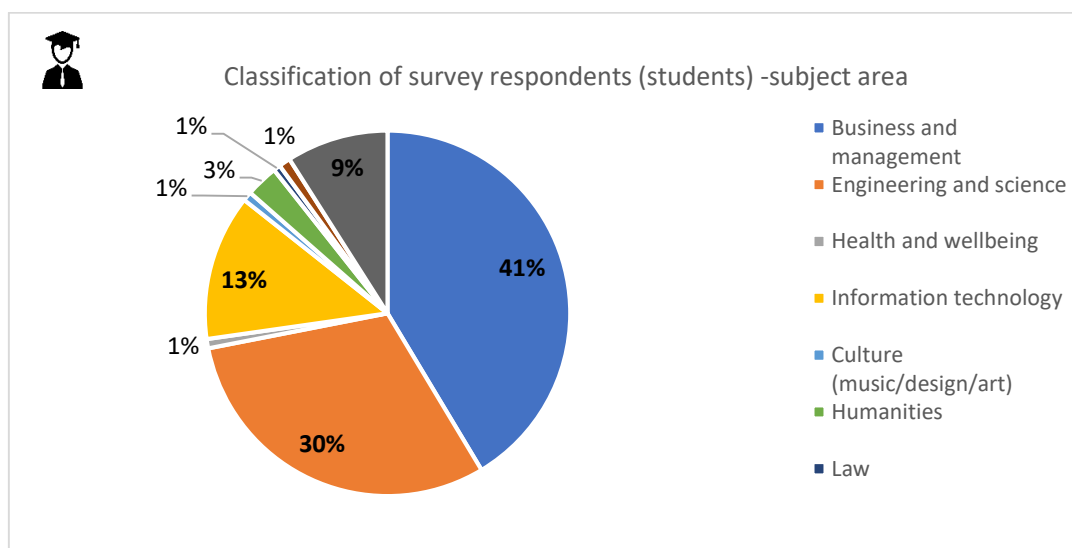



Figure 5 Current state analysis. Erasmus+ project SDG4BIZ: Classification of survey respondents according to the subject area (students)

According to their employment status, the classification of SDG4BIZ survey respondents indicates that most students are employed or part-time employed (58.6%), while a further 11% are in unpaid employment.

Table 2 Classification of SDF4BIZ survey respondents according to their employment status (students)

Classification of survey respondents (students) 	Absolute frequency	Relative frequency
Employed	149	30.5%
Parttime	137	28.1%
Not in paid employment	53	10.9%
Unemployed (only studying)	80	16.4%
Self employed	13	2.7%
Other	56	11.5%
Total	488	100%

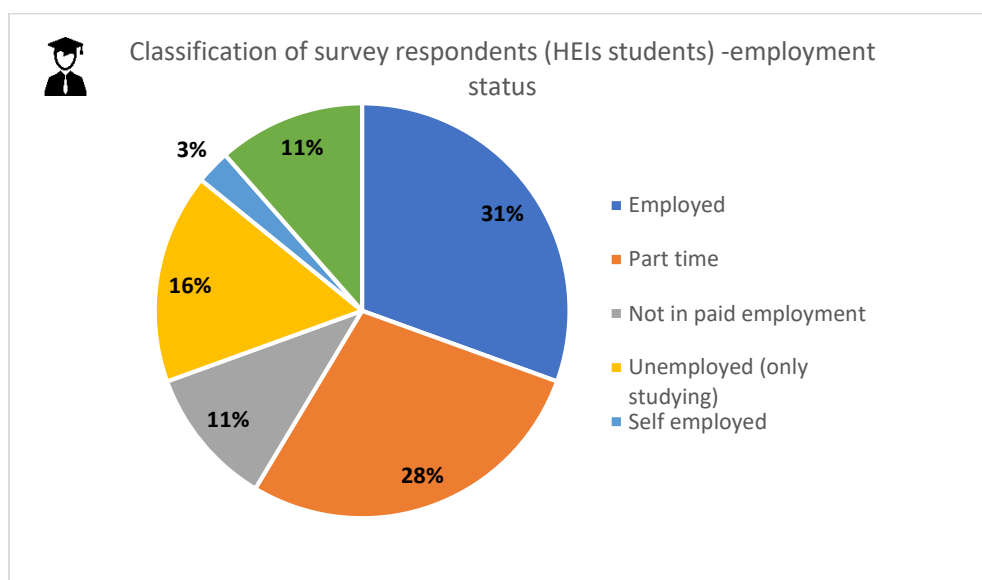



Figure 6 Current state analysis. Erasmus+ project SDG4BIZ: Classification of survey respondents according to employment status (students)

According to the study degree programs, three-quarters of HEIs' students who participated in the survey are at Bachelor's degree level (74%), while more than one fifth (22.5%) of them are in Master's studies, and nearly 3% are in Doctorate or Post doctorate programs, only 0.6% are from open university programs.

Table 3 Classification of survey respondents according to study degree (HEIs students)

Classification of survey respondents (students) 	Absolute frequency	Relative frequency
Bachelor's degree	361	74.0%
Master's degree	110	22.5%
Open University	3	0.6%
Doctorate or Post Doctorate	14	2.9%
Total	488	100%

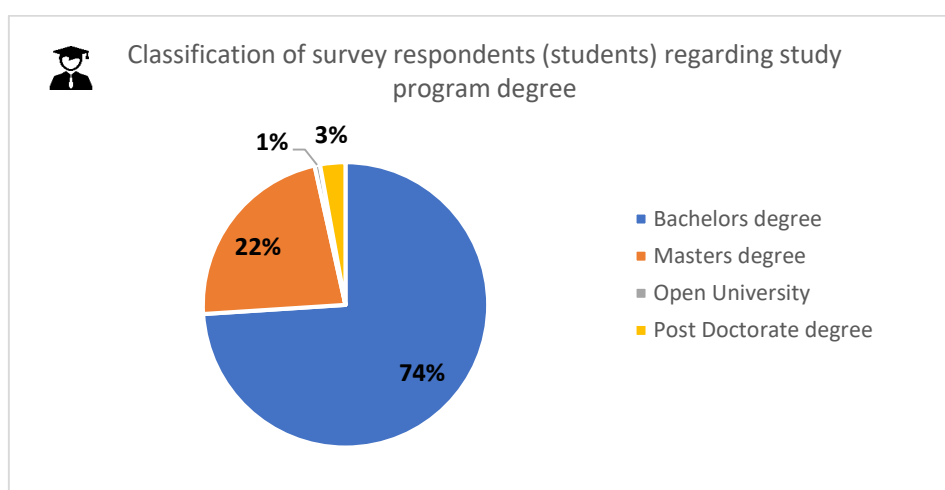


Figure 7 Current state analysis. Erasmus+ project SDG4BIZ: Classification of respondents according to study degree (HEIs students)


Regarding the university affiliations of the student respondents, most were from the Slovak University of Technology in Bratislava in Slovakia (50.4%). In comparison, one third (33%) of students belong to universities in Finland (Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences). More than 13% of respondents studied at Yasar University in Turkey; other HEIs account for 3.5%.

Table 4 Classification of survey respondents (HEIs students) regarding university

Classification of survey respondents (students) 	Absolute frequency	Relative frequency
Slovak University of Technology in Bratislava (Slovakia)	246	50.4%
Haaga-Helia University of Applied Sciences (Finland)	98	20.1%
Yasar University (Turkey)	64	13.1%
Metropolia University of Applied Sciences (Finland)	63	12.9%
Other	17	3.5%
Total	488	100%

Information about respondents in the SDG4BIZ survey and their background: academics

Table 5 Classification of survey respondents (HEI academics) according to the subject area of curriculum

The general subject areas of the degree programs: 	Absolute frequency	Relative frequency
Business and management	43	34.1%
Engineering and science	37	29.4%
Information technology	7	5.6%
Culture (music/design/art)	7	5.6%
Humanities	7	5.6%
Law	2	1.6%
Social sciences	12	9.5%
Other (Please specify)	11	8.7%
Total	126	100%

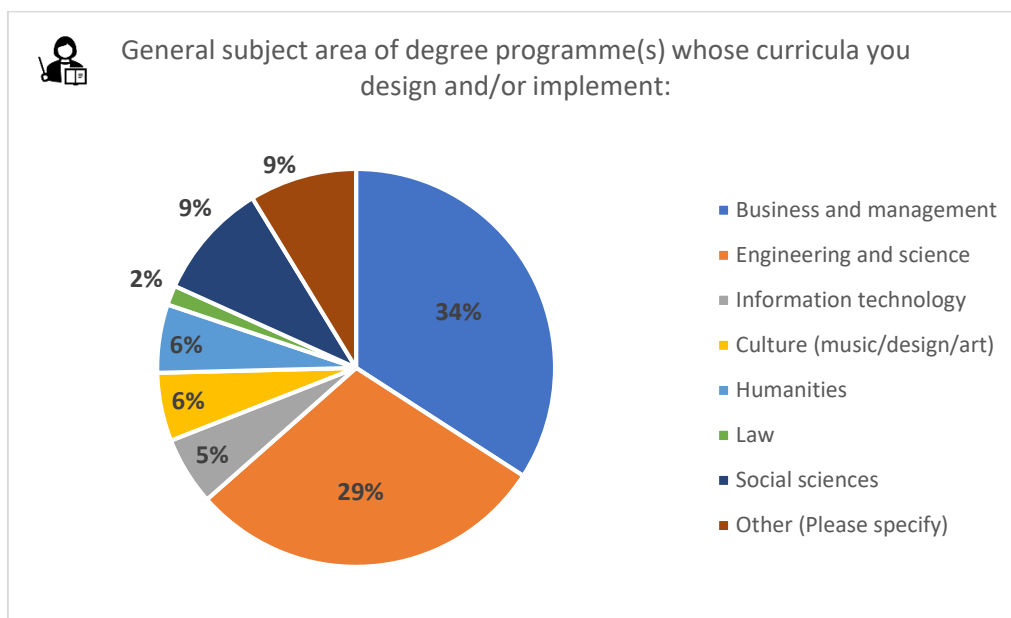



Figure 8 Current state analysis. Erasmus+ project SDG4BIZ: Classification of survey respondents -academics according to the subject area of curriculum)

Most of the academics in the SDG4BIZ survey (63%) have designed and/or implemented curricula in two subject areas: Business and management and Engineering and science

Table 6 Classification of SDG4BIZ survey respondents (HEIs academics) according to the subject area of curriculum


Academics affiliation university/HEIs 	Absolute frequency	Relative frequency
Slovak University of Technology in Bratislava (Slovakia)	36	28.6%
YASAR University (Turkey)	45	35.7%
Haaga-Helia University of Applied Sciences (Finland)	22	17.5%
Metropolia University University of Applied Sciences (Finland)	22	17.5%
Other	1	0.8%
Total	126	100 %

Regarding the university affiliations of academic respondents, they are nearly 35.7% from Yasar University, 28.6% from the Slovak University of Technology in Bratislava in Slovakia, and 35.0% from HEIs in Finland—Metropolia University of Applied Sciences (17.5%) and Haaga-Helia University of Applied Sciences (17.5%). Other academic respondents’ university affiliations remained at 1%.

Information about respondents in SDG4BIZ survey and their background: companies

This part deals with the classification of respondents to the SDG4BIZ survey according to the company's sector, ownerships, and country. Sectors represented among the respondents include nearly 38% manufacturing companies, almost 35% services, and more than 6% in the IT sector.

Table 7 Classification of SDG4BIZ survey respondents according to the sector of companies

Sector of company 	Absolute frequency	Relative frequency
Manufacturing	90	37.8%
Services	82	34.5%
IT	16	6.7%
Agriculture	6	2.5%
Other	44	18.5%
Total	238	100%

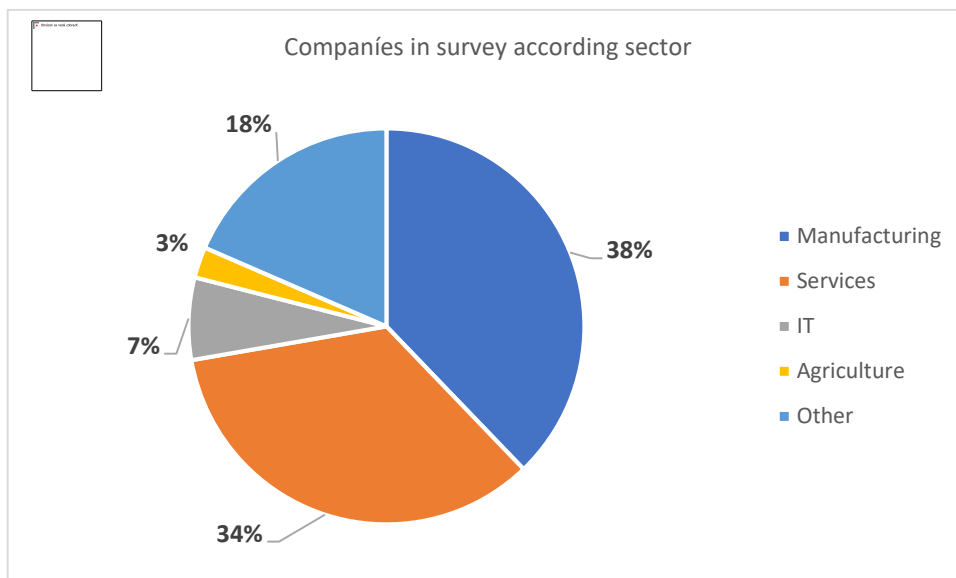



Figure 9 Current state analysis. Erasmus+ project SDG4BIZ: Classification of survey respondents (companies by sector)

Table 8 Classification of SDG4BIZ survey respondents according to the position of respondent in the company

Position of the respondent 	Absolute frequency	Relative frequency
Specialist	64	26.9%
Managerial	55	23.1%
Executive	39	16.4%
Administrative	39	16,4%
Customer/client-facing	13	5.5%
Other	24	10.1%
Ancillary service provider (e.g., estates management, catering, cleaning)	4	1.7%
Total	238	100,0%

Approximately half of the employer representatives who returned the questionnaire are specialists (26.7 %) or occupy managerial positions (23.1 %). Thereafter the most represented positions are executive and administrative, at more than 16 %.

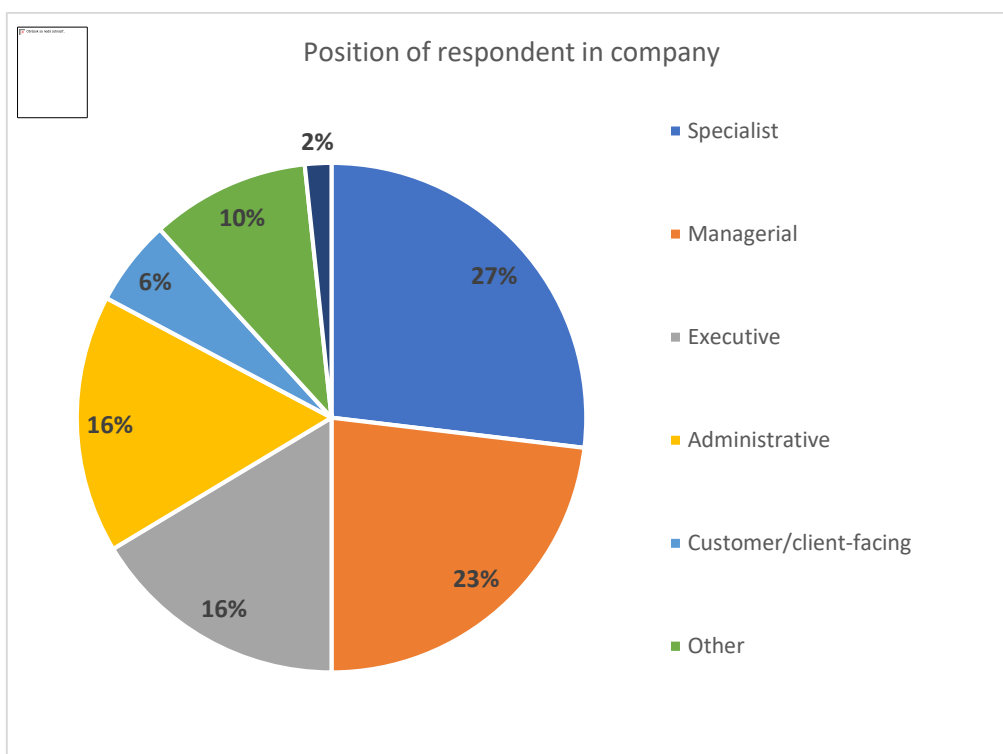



Figure 10 Current state analysis. Erasmus+ project SDG4BIZ: Classification of survey respondents according to respondents' position in the company

Table 9 Classification of SDG4BIZ survey: employer representatives by country

Country of survey respondent (companies) 	Absolute frequency	Relative frequency
Finland	22	9.2%
Slovakia	103	43.3%
Turkey	32	13.4%
Austria	35	14.7%
Spain	24	10.1%
Italy	22	9.2%
Total	238	100%

By country, most employer representatives participating in the survey are from Slovakia (43.3%), Austria (14.7%), Turkey (13.4%), Spain (10.1%), Italy (9.2%) and Finland (9.2%).

Chapter 4: Existing Learning Curricula

This chapter outlines the implementation of UN Sustainable Development Goals (SDG) education in existing curricula at four HEIs as partners of the SDG4BIZ project. The first part of the chapter is based mainly on analysing documents and information about the curricula with respect to sustainable development and SDGs. The second part of the chapter considers SDG4BIZ survey results regarding the curricula.

4.1 Existing Learning Curricula on SDGs

This section outlines the implementation of UN Sustainable Development Goals (SDG) education in existing curricula in four higher education institutions participating in the SDG4BIZ project—Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences in Finland, the Slovak University of Technology in Bratislava (STU) in Slovakia, and Yasar University in Turkey. The information was collected utilizing a template created for this purpose (annex 1). The aim of collecting data was to highlight the most prominent examples of objects—for example, courses, parts of curriculum or curricula—that explicitly strive towards the SDGs. Each organization collected the information on its behalf. Each organization also made the selection, and there were no further guidelines than the template for the task. No evaluation was made regarding whether the selection is complete or how the selected item in practice advocates SDGs.

In total, 47 SDG study objects were included, featuring either the potential or the actual implementation of SDG training in four HEIs. Out of this selection, 15 were entities with no apparent link to the SDGs defined by United Nations. The reminding 32 were seen to strive for one or more of the objectives specified in the SDGs. The summary of study objects are collected in Table 10, “Summary of objects collected”.

Concerning the information collected, it must be mentioned that not all the defined learning outcomes and their associated workload according to the European Credit Transfer and Accumulation System (ECTS) of the selected study objects enhance SDG-related knowledge. SDG-related learning elements or similar, e.g. skills and knowledge related to the Circular Economy as a tool for the SDGs, are nevertheless present in these study objects. Therefore, the learning objectives and content totaling 268 ECTS only partially strive towards sustainable development. Most of the content in that, e.g., specific courses, illuminates the topic in question from various perspectives. Business opportunity recognition as an element was mentioned in 19 objects, somewhat enhancing the SDGs. Whether the SDG and business opportunity recognition are leaned jointly is a question this dataset does not address.

Table 10: Summary of study objects collected

HEI	Study Objects linked to SDG	ECTS	SDG connection recognized and linked to SDG number	Objects where Business recognition is included
STU	8	45	N/A	5
Yasar University	14	80	8	5
Haaga-Helia UAS	7	30	7	4
Metropolia UAS	18	113	17	5
Total	47	268	32	19

Studies striving SDGs in partner HEIs

In general, SDGs-related studies are more common in lower level undergraduate studies (30 at Bachelor’s level) than in master or postgraduate studies (13 at Master’s level and 4 in doctoral degrees) in these four universities in question combined. However, when each HEI is examined separately, there are some notable differences. SDGs-related content is mentioned three times as part of doctoral studies and only twice in Bachelor’s level degrees in the Slovak University of Technology in Bratislava (STU). In addition, the universities of applied sciences in Finland, including Haaga-Helia and Metropolia, do not award doctoral degrees. Furthermore, the Bachelor’s degrees in the Finnish Universities of Applied Sciences are the primary qualifications due to national regulations and historical reasons. Therefore, it is logical that the Bachelor’s level courses have more SDG-related content than other degree levels. Two out of four HEIs are investigated with the focus mainly on Bachelor’s level education. Table 11 highlights the number of study objects related to SDGs, according to degree award level.

Table 11 The degree program levels and SDG-related study objects

HEI \ Study program level	Bachelor	Master	PhD
STU	2	3	3
Yasar University	10	3	1
Haaga-Helia UAS	7	0	0
Metropolia UAS	11	7	0
Total	30	13	4

The United Nations has agreed upon seventeen goals for sustainable development. In Table 12, the first column shows the name of the goal. The second column indicates the number of study objects associated with the respective SDG, such as courses or projects. The SDG 9, Industry, innovation and infrastructure, has the highest frequency of 18. However, a few SDGs, SDG2 (zero hunger) and SDG6 (clean water and sanitation), have no scores; nevertheless, they link to four learning objects targeting all the SDGs. Entries marked “not specified SDG linkage”, altogether 14 mentions, are cases that the data collection responsible parties decided to include without identifying a specific SDG. The Example column presents one or two random items over the data-set to demonstrate the homogeneity – diversity element of the cases collected. On the one hand, there are several distance learning and self-study courses with a theoretical approach listed, but on the other, several study objectives that were pointed out, foster more practical skill-set and strive even some vocational learning objectives are mentioned. The interesting finding is that the project-based learning and even intensive entrepreneurial pedagogy also described as “business hackathons” (Szymanska, Sesti, Motley & Puia 2020) could be identified. As the material was collected during the Covid19 pandemic, the number of the traditional scheduled university classroom studies was notably low in this data set. The total data as collected is made visible in Annex 1 for further analysis.

Table 12 The SDG titles and linked study objects summed up

SDG number and name	# Linked study Objects collected	Example
1 No Poverty	1	Metropolia UAS, Finland: Social Services, Master's programme, Changing Social Reality 5 ECTS, No business opportunity recognition Learning outcome: Students can critically analyse the global changes in society and anticipate the social impact of these changes on people's wellbeing. Students have a comprehensive view of the content and challenges of Finland's municipal, governmental, and EU social policy. Global social changes and their impact. Social policy in municipalities, in Finland and the EU. Socially sustainable development.
2 Zero Hunger	NA	NA
3 Good Health and Well-Being	6	Metropolia UAS, Finland: Public Health Nursing, Bachelor's Programme, Work Methods of Health Promotion and Vaccinations 5 ECTS – Learning outcome, e.g., learn to apply evidence-based health promotion methods to promote the health of individuals, families, groups, communities, and population in a client-oriented way
4 Quality Education	NA	NA
5 Gender Equality	1	Metropolia UAS, Finland: Master's Degree Programmes in Health and Social Care Management, Social Services, and Advanced Clinical Practice 5 ECTS, No business opportunity recognition Learning outcome e.g.: <ul style="list-style-type: none"> - Principles of human-centred management in a (continuously) changing operational and managerial environment - The principles of responsible management in multi-disciplinary organisations - Human-centred management in multi-disciplinary organisations - Values and ethics in the networks of multi-disciplinary management - Sustainable development and social responsibility
6 Clean Water and Sanitation	NA	NA
7 Affordable and Clean Energy	1	Yasar University, Turkey: a Master's Program course entitled " Sustainability " has 8 ECTS with a business opportunity recognition

SDG number and name	# Linked study Objects collected	Example
		<p>point of view. The course treats the conceptual framework behind sustainability at both micro and macro levels. It highlights the importance of a holistic triangle approach representing economic, social, and environmental aspects in society and current economic arrangements. Some topics such as ethics, corporate citizenship, green energy, social innovation, and social entrepreneurship will be handled.</p>
<p>8 Decent Work and Economic Growth</p>	<p>9</p>	<p>Metropolia UAS, Finland: the courses entitled Fashion and Clothing at the Bachelor's level, 5 ECTS.</p> <p>Business opportunity recognition enhancement as principles and activities of circular economy from the point of view of sustainable development, benefits and advantages of circular economy to the society and clothing organizations exist.</p> <p>Learning outcomes examples:</p> <ul style="list-style-type: none"> • the central principles and activities of circular economy, and its benefits from environmental, social, and economic viewpoints. • different viewpoints and operations of circular economy in the clothing industry. • principles and various sectors of clothing industry standards as well as their functions • CE standards. • Principles and activities of circular economy from the point of view of sustainable development, benefits and advantages of circular economy to the society and clothing organizations. Eco-design, sustainable consumption, extending service life and the efficient management of material or product end-of-life <p>Slovak University of Technology in Bratislava: Slovakia, Bachelor's degree program, subject "Basics of Economics and Management, 5ECTS</p> <ul style="list-style-type: none"> • Learning outcomes: Gaining essential knowledge e.g. definition of sustainable profit and sustainable entrepreneurship <p>Slovak University of Technology in Bratislava, Slovakia: Bachelor's study program, subject "Social Policy of Plant" 6 ECTS,</p>

SDG number and name	# Linked study Objects collected	Example
		A learning outcome is a view on decent work conditions from international and national perspectives.
9 Industry, innovation and infrastructure	18	<p>Yasar University, Turkey: Bachelor’s level program/university elective course entitled Social Entrepreneurship with 5 ECTS covers the following aspects. Business opportunity recognition connection, as the course starts with an introduction on the state of the world in terms of social and environmental problems and SDGs are explored. The concept of sustainability, financial sustainability, donations, and grants are employed. The focus is on system transformation, stakeholders, partnerships, and collaborations.</p> <p>Slovak University of Technology in Bratislava, Slovakia: Bachelor’s study program, subject “Socially Responsible Sustainable Entrepreneurship.”, 5 ECTS Definitions: sustainable development, corporate social responsibility, socially responsible sustainable business, sustainable entrepreneurship and understanding; Basic standards and documents regarding CSR – critical systems analysis; Corporate social responsible entrepreneurship in the context of sustainable development as a change management system business. Concept design methodology for the creation of a sustainable strategy</p>
10 Reduced inequalities	3	<p>Metropolia UAS, Finland: Master's Degree Programmes in Health and Social Care Management, Social Services, and Advanced Clinical Practice, Multi-disciplinary Social Welfare and Social Health Care Management in a Changing Operational Environment, 5ECTS, No business opportunity recognition Learning outcomes e.g.</p> <ul style="list-style-type: none"> • Values and ethics in the networks of multi-disciplinary management • Sustainable development and social responsibility <p>Slovak University of Technology in Bratislava, Slovakia: Master’s study program, subject Corporate Culture focuses on corporate culture in socially responsible sustainable entrepreneurship.</p>

SDG number and name	# Linked study Objects collected	Example
		No business opportunity recognition. The course has 5 ECTS credits.
11 Sustainable cities and communities	2	<p>Metropolia UAS, Finland: Construction Architecture, Bachelor's level, Technical systems in buildings and energy economy 5 ECTS. No business opportunity recognition.</p> <p>Learning outcomes, e.g., the student will see the effect of their decisions on ecology and sustainable development. The student will be familiar with technical systems and energy-related legislation and guidance.</p>
12 Responsible consumption and Production	8	<p>Haaga-Helia UAS, Finland: Bachelor's level, international Business, Green Product and Package Design, 5 ECTS No business opportunity recognition</p> <p>Learning outcomes e.g.</p> <ul style="list-style-type: none"> • The student learns green design tools <p>The student will be able to assess life cycle impacts of products and packages</p> <p>Slovak University of Technology in Bratislava, Slovakia: Doctoral level, Study subjects Logistics of Performance Enterprise 6 ECTS –individual consultations in sustainable performance in corporate logistics; International Program Management. 12 ECTS. Advanced methods of industrial enterprises management, project management and comparative management from the point of the sustainable productivity</p>
13 Climate action	7	<p>Haaga-Helia UAS, Finland: Bachelor's Business Administration, Hackathon camp- innovate Circular Economy 5 ECTS business opportunity recognition is based on future trends, and climate & circular economy targets students innovates the future solution for business</p> <p>Learning outcomes e.g.</p> <ul style="list-style-type: none"> • Learn to innovate, develop, and find solutions to the company's circular economy challenges at the ecosystem level in multidisciplinary groups • estimate innovations from the perspective of circular economy and company profitability

SDG number and name	# Linked study Objects collected	Example
14 Life below water	NA	NA
15 Life on Land	1/ NA	Haaga-Helia UAS, Finland: Bachelor Business Administration, Hackathon camp- innovate Circular Economy 5 ECTS business opportunity recognition is based on future trends, and climate change & circular economy targets students innovates the future solution for business. Learning outcomes e.g. <ul style="list-style-type: none"> • Learn to innovate, develop, and find solutions to the company's circular economy challenges at the ecosystem level in multidisciplinary groups • estimate innovations from the perspective of circular economy and company profitability
16 Peace, justice and strong institutions	NA	NA
17 Partnerships	NA	NA
All	4	Yasar University, Turkey: Bachelor study program/ university elective course “ Sustainability ” 2 ECTS, No business opportunity recognition, the course covers all SDGs
Unspecified SDG potential	14	Slovak University of Technology in Bratislava, Slovakia: PhD. Study Programme, HR Tools for Sustainable Performance Enterprise STU, Slovakia: Master’s study program “Strategic Management”, 5 ECTS, the expected outcome is critical system analysis of the theory and practice of sustainable strategic management in the 21 st century in general and at the level of the industrial enterprise based on the change of the strategic management paradigm

4.2 Curriculum analysis based on SDG4BIZ survey results

This section and the following section, considering the current state of SDGs-related competences, together with focus on the research conducted by the SDG4BIZ project team using the online survey, which took place in April-June 2021. In addition to private sector employers, the survey's target groups in the academic environment comprised academic staff and university students, including Ph.D. students in partner countries.

The survey was conducted in the national languages via the Webropol platform, and the respondent could choose whether to complete the questionnaire in the national language or English.


The questionnaire was structured into the following three parts:

1. classification questions (for students, degree of study, study program, employment status; for academics, their degree of responsibility and participation in curriculum development)
2. Cross-cutting competences in the curriculum, the field of sustainability, goals of sustainable development and entrepreneurship (their integration into the teaching process and the degree of interest and awards for academics and students)
3. questions focused on the specifics of the planned training material.

The questionnaires for all stakeholder groups (academics, senior academics, students, and companies in English are available in Annex 2,3,4,5. The questionnaires were distributed through various communication channels. Project partners created a pool of targeted participants after they conducted a stakeholder analysis. A stakeholder database enabled determining the target groups' communication addresses and communication channels for the partners, in line with the project's WP3 and WP8 objectives.

The questionnaire in the six languages of the SDG4BIZ project, and its English version, were all distributed to the various target groups. In total, there were responses from 488 students, 125 academics, seven senior academic executives, and 238 respondents from the private sector. As a result, 851 questionnaires were considered: results from their analysis and elaborations are reported in the sections presented below.

Table 13: Study program features sustainability-related content according to HEIs students survey

To what extent does your study programme feature sustainability-related content? 	Absolute frequency	Relative frequency
A lot	75	15.4%
To some extent	233	47.7%
Very little	95	19.5%
Not aware of any sustainability-related content	85	17.4%
Total	488	100%

The results regarding students' awareness of their study program's sustainability-related content are as follows: 15.4% of student respondents regard their study programme as containing a lot of sustainability-related content. In comparison, almost 48% answered that it is present at least to some extent. Meanwhile 20% of student respondents were aware of sustainability content only to a minimal extent, and more than 17% of students at HEIs are not aware of any sustainability-related content.

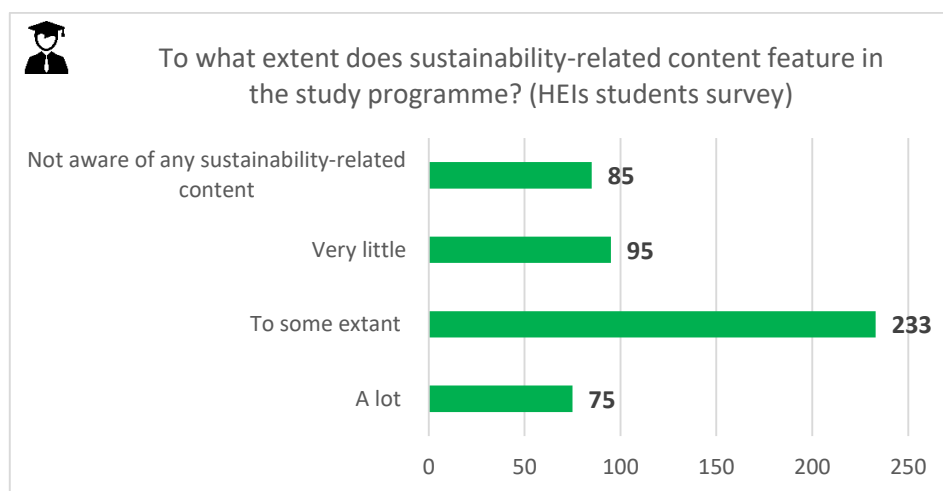


Figure 11: Current state analysis of companies. Erasmus+ project SDG4BIZ: Study programme features sustainability-related content according to HEIs student survey

Table 14: Student demand for more sustainability-related content in study programmes according to HEIs student survey

Do you think that there should be more sustainability-related content in your study programme? 	Absolute frequency	Relative frequency
Yes	279	57.2%
Not sure	154	31.6%
No	55	11.3%
Total	488	100.0%

One of the positive findings from the SDG4BIZ survey is that the majority of students (57.2%) want more sustainability-related content in their study programmes.

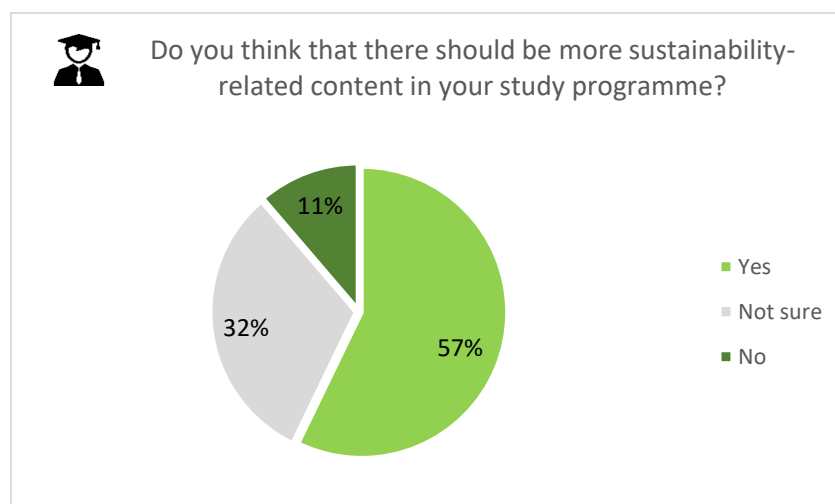



Figure 12: Current state analysis. Erasmus+ project SDG4BIZ: Interest of students to have more sustainability related content in the curriculum of the study programme.

Table 15: Student demand for more entrepreneurship-related content in study programme according to HEIs students survey

Do you think that there should be more entrepreneurship-related content in your study programme? 	Absolute frequency	Relative frequency
Yes	235	48.2%
Not sure	112	23.0%
No	141	28.9%
Total	488	100%

Another positive finding from the SDG4BIZ survey is that almost half of students (48.2%) from surveyed HEIs think there should be more entrepreneurship-related content in their study programmes.

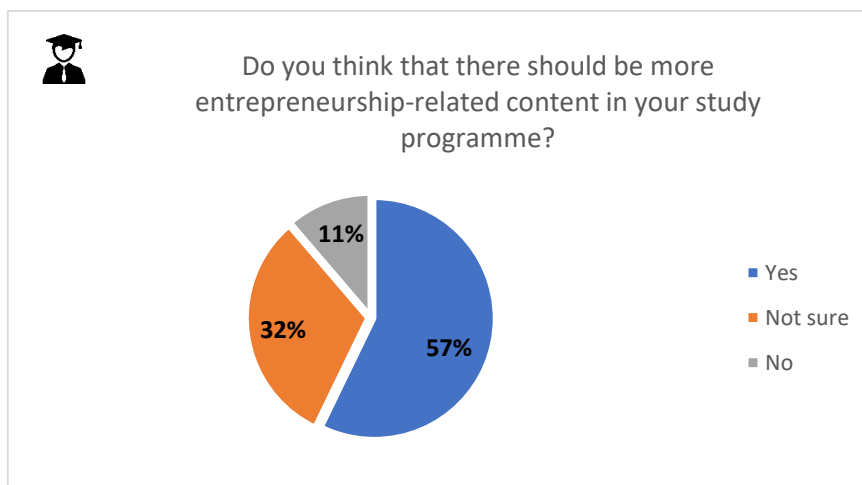


Figure 13 Current state analysis. Erasmus+ project SDG4BIZ: Student demand for more entrepreneurship-related content in the study programme curriculum.

Table 16: Study programme features sustainability-related content according to a survey of academics

To what extent does sustainability-related content features in the study programme? (Academics' survey)	Absolute frequency	Relative frequency
A lot	15	12.0%
To some extent	77	61.6%
Very little	22	17.6%
Not aware of any sustainability-related content	11	8.8%
Total	125	100%

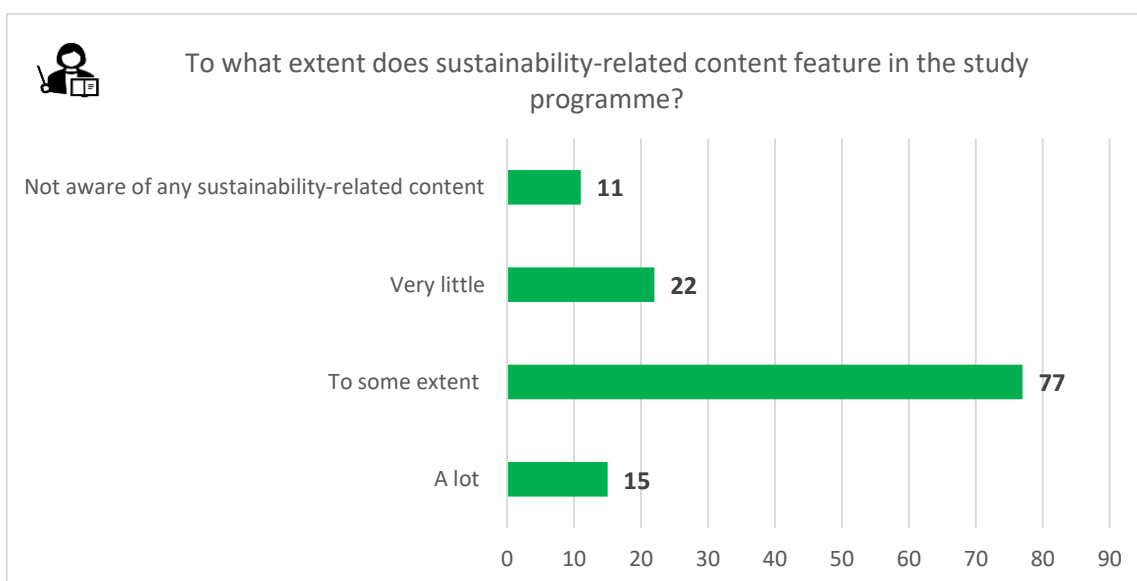


Figure 14 Current state analysis Erasmus+ project SDG4BIZ: Study program features sustainability-related content according to a survey of academics

According to the academic staff survey, sustainability-related content in study programmes is present mainly to some extent (nearly 60% of respondents), very little according to less than 18% of academics, and a lot of sustainability-related content according to 12% of respondents. Nearly 9% of academic staff is not aware of any sustainability-related content.

Table 17: More sustainability-related content in curriculum according to academics

To what extent do you think there should be more sustainability-related curriculum content? (academic's survey)	Absolute frequency	Relative frequency
A little	7	5.6%
To some extent	76	60.8%
Very much	37	29.6%
Not sure	5	4.0%
Total	125	100%

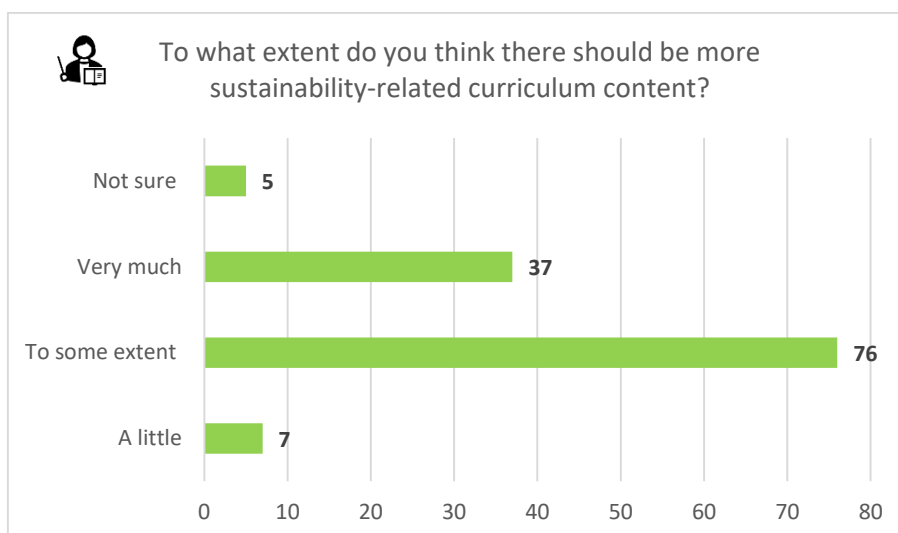


Figure 15: Current state analysis. Erasmus+ project SDG4BIZ: More sustainability-related content in curriculum according to academics

Another positive finding from the SDG4BIZ survey of academic staff is that nearly 30% of the respondents assert that there should be much more, while 60% advocate an increase of sustainability-related content in the study programme to some extent.

Table 18: Interest in sustainability-related curriculum content expressed by students, external partner institutions and academics according to academics' survey

Interested in sustainability related curriculum content	Students at HEIs	External partner institutions	Academics
Very much	21	14	52
To some extent	57	54	57
A little	17	18	10
Not at all	5	8	2
Not sure	25	31	4
Total	125	125	125

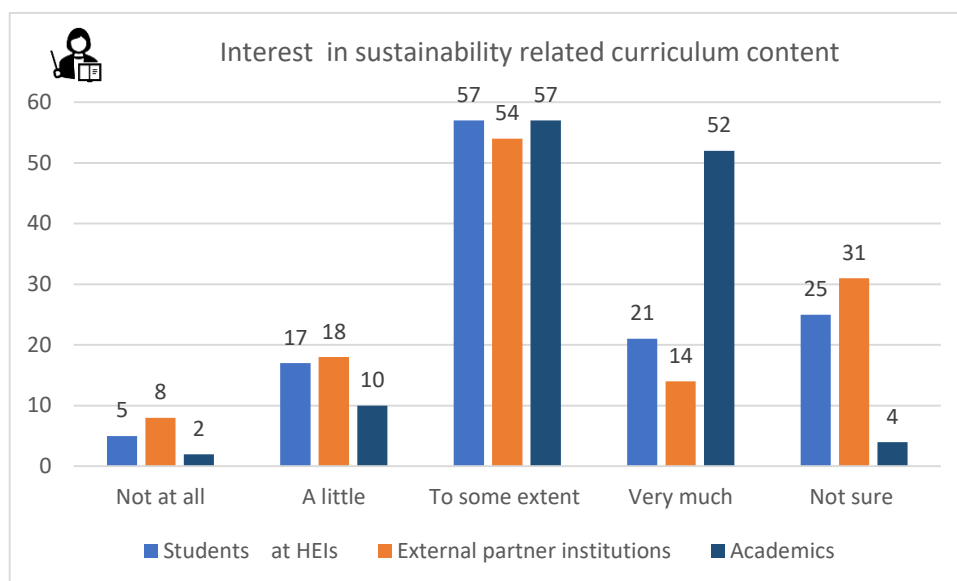


Figure 16: Current state analysis. Erasmus+ project SDG4BIZ: Interest in sustainability-related curriculum content expressed by students, external partner institutions and academics according to survey

From the SDG4BIZ survey results, most students, academics, and external partner institutions are interested in sustainability-related curriculum content. If a comparison is made, academics are very much more interested than students. The evidence of possible difference might be caused by the students’ lack of or limited awareness of the sustainability related content.

As mentioned before, there was a range of views on how sustainable development and, more specifically, the SDGs are included within the curriculum at HEIs. The content ranges from “not covered” to “isolated standalone modules specialized on a specific SDG”, “integrated modules incorporating the SDG as a whole idea”, or “individual subjects that dealt with sustainable development and SDGs”.

The survey results revealed several barriers. Factors obstructing the integration of sustainability issues to study programmes at HEIs may include possible regional differences in academic staff. At the same time, student knowledge of sustainability, SDGs and other broad topics might be low already as suggested by Zamora and Polo et al (2019). Besides, other external factors, such as the organizational difficulties in changing the curriculum or finding a space in the current curriculum, create obstacles. However, future opportunities exist in the implementation of industry-based or multidisciplinary projects.

Chapter 5: Current state of SDG Competences

The project “Knowledge Alliance for Business Opportunity Recognition in SDGs” aims to provide insights into the current sustainability awareness of three different defined groups of stakeholders.

The conducted survey aims to determine the level of awareness and interest in sustainability and sustainable development goals.

Key target groups for the state-of-the-art analysis that have been defined in the project proposal are addressed as follows:

- ∞ Staff and students of European higher education institutions.
- ∞ Small, mid-sized and large enterprises


The research questions are defined as follows:

1. What is the level of awareness of sustainable development for individual groups of respondents (students/academics/employees of companies)?
2. To what extent are employers/academics/students aware of the goals of sustainable development?
3. To what extent do employers/academics/students are interested in sustainability issues?
4. Are employers/academics/students currently involved in sustainable development activities?

- 5.1 Awareness of sustainability concept and SDGs in an academic environment

In this section are selected, and analyses data are selected and analysed from the survey of awareness of sustainability concepts and sustainable development goals (SDGs) among higher education students of Metropolia University of Applied Sciences (Finland), Haaga-Helia University of Applied Sciences (Finland), Slovak University of Technology in Bratislava (Slovakia) and Yasar University (Turkey).

Table 19: Awareness of sustainability concept among HEIs students

How familiar are you with the concept of sustainability? 	1 Completely unfamiliar	2	3	4	5 Completely familiar
Metropolia University of Applied Sciences & Haaga-Helia University of Applied Sciences (Finland)	3	3	29	78	67
Slovak University of Technology in Bratislava (Slovakia)	34	36	96	63	15
Yasar University (Turkey)	2	5	15	17	21
Total	39	46	143	162	103

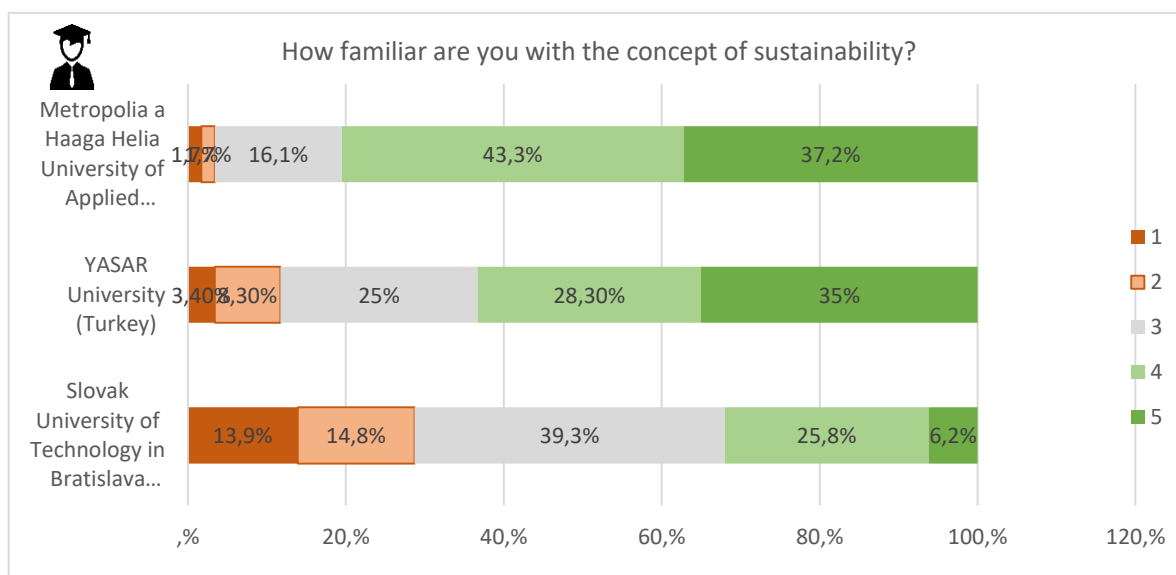


Figure 17: Current state analysis, Erasmus+ project SDG4BIZ: Awareness of sustainability concept among HEIs students

The survey results are presented using a five-point Likert scale (1 for completely unfamiliar and 5 for completely familiar). They indicate regional differences in awareness of sustainability. Thoroughly familiar with the sustainability concept are 37.2 % of HEIs students at Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences in Finland, 35% at Yasar University in Turkey, and only 6.2% Slovak University of Technology in Bratislava (STU) in Slovakia. Totally unfamiliar with sustainability concepts are 13.9% of respondents at STU, 3.4% at Yasar University and 1.7% in universities in Finland (Metropolia and Haaga-Helia).

Table 20: Awareness of Sustainable Development Goals (SDGs) produced by the United Nations among HEIs students

Are you familiar with the Sustainable Development Goals (SDGs) produced by the United Nations?	Metropolia and Haaga-Helia University of Applied Sciences Finland	Slovak University of Technology in Bratislava, Slovakia	Yasar University Turkey
Yes	78	31	27
Not sure	25	32	12
No	77	181	21

Awareness of SDGs is higher at Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences, where one-third of students claim to be familiar with the SDGs. The situation is similar at Yasar University, whereas much less familiar are students at STU, with only one-eighth of respondents familiar with SDGs.

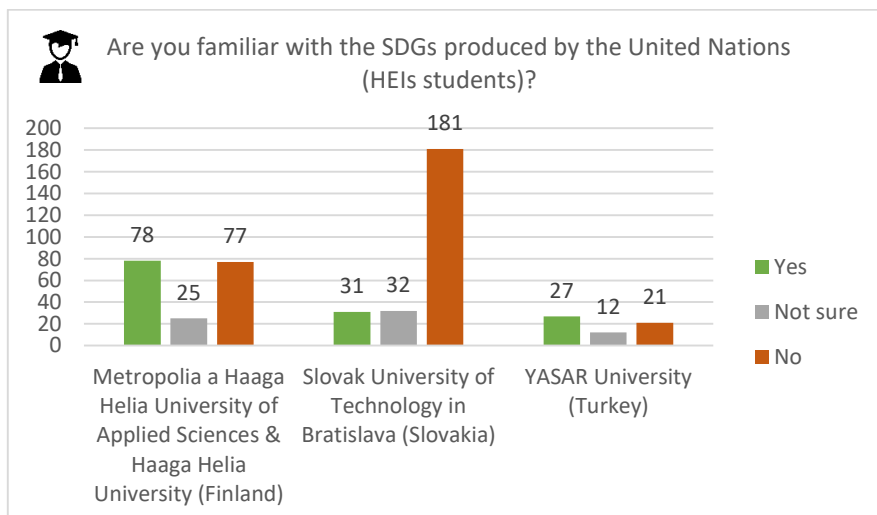


Figure 18: Current state analysis. Erasmus+ project SDG4BIZ: Awareness of Sustainable Development Goals (SDGs) produced by the United Nations among students

The survey of academics at universities has similar results as that of students mentioned above. Most academics claim familiarity with the SDGs at universities in Finland (70%) and in Turkey (65%), but considerably less so at STU in Slovakia (14%). The regional differences may be another explanatory factor regarding the findings on SDGs awareness and knowledge at HEIs.

Table 21: Awareness of Sustainable Development Goals (SDGs) produced by the United Nations among academics

Are you familiar with the Sustainable Development Goals (SDGs) produced by the United Nations?	Metropolia and Haaga-Helia University of Applied Sciences Finland	Slovak University of Technology in Bratislava, Slovakia	Yasar University Turkey
Yes	28	5	26
Not sure	0	5	6
No	12	26	14

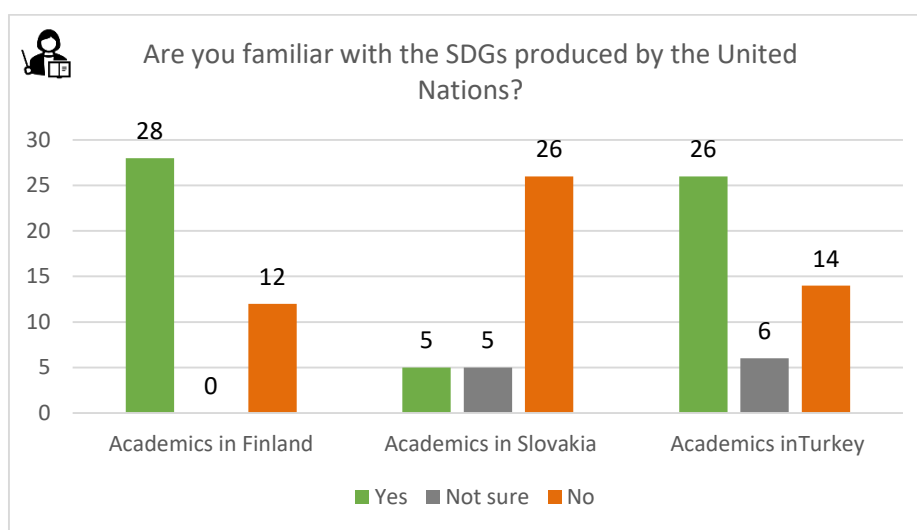


Figure 19: Current state analysis. Erasmus+ project SDG4BIZ: Awareness of Sustainable Development Goals (SDGs) produced by the United Nations among teachers

Nearly three-quarters of students (74.8%) at HEIs claimed to be interested in how SDGs can enhance sustainability in practice, with only 9.5 % expressing no interest (Fig. 21).



Figure 20: Current state analysis. Erasmus+ project SDG4BIZ: Interest of students in learning how the SDGs can enhance sustainability in practice.

Table 22: Interest of academics in learning how the SDGs help guide and shape curriculum and project development.

Would you be interested in learning how the SDGs can help guide and shape curriculum and project development?	Absolute frequency	Relative frequency
Yes	103	81.7%
No	12	9.5%
Not sure	10	8.7%

As depicted in Table 20, 82% of academics at HEIs claimed to be interested in learning how SDGs can help guide and shape curriculum and project development, and only 9.5% enhance sustainability in practice, and less than 9 % expressed no interest (Table 20).

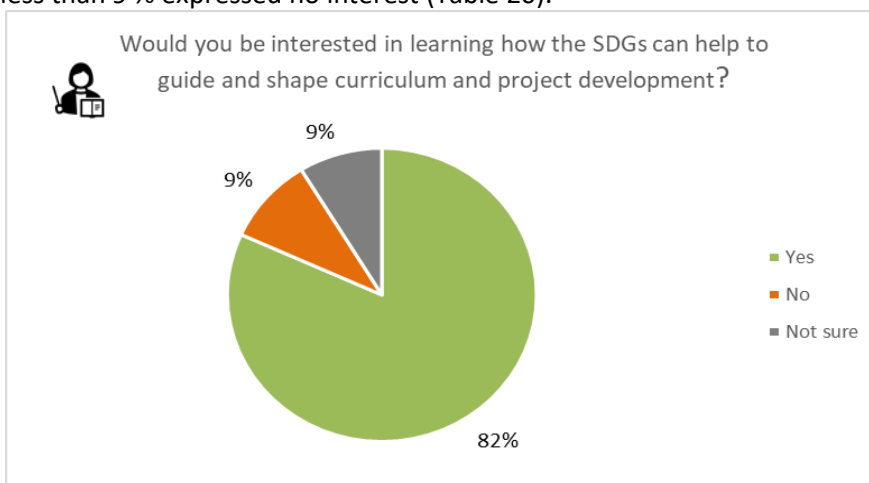


Figure 21: Current state analysis. Erasmus+ project SDG4BIZ: Interest of academics in learning how the SDGs can help to guide and shape curriculum and project development.

Table 23: Awareness of Sustainable Development Goals (SDGs) produced by the United Nations by academics

Are you familiar with the Sustainable Development Goals (SDGs) produced by the United Nations (academics)? 	Metropolia and Haaga-Helia University of Applied Sciences Finland	Slovak University of Technology in Bratislava, Slovakia	Yasar University Turkey
Yes	28	5	26
Not sure	0	5	6
No	12	26	14

The results of the survey of university academics are similar to those of the student survey. Most academics claim familiarity with the SDGs at universities in Finland (circa 70%) and in Turkey (65%), but significantly less so at STU in Slovakia (14%).

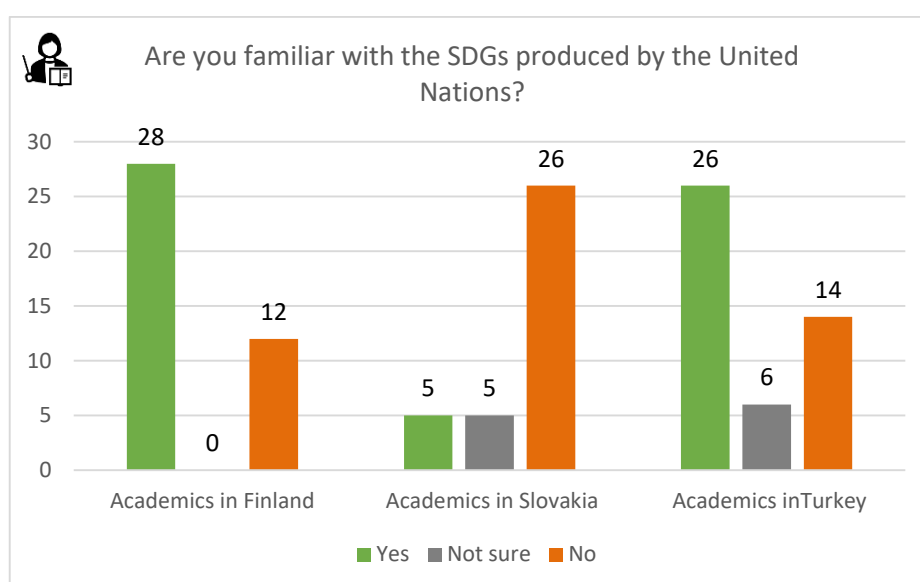


Figure 22: Current state analysis. Erasmus+ project SDG4BIZ: Academics' awareness of Sustainable Development Goals (SDGs) produced by the United Nations

Table 24: Interest of HEIs students in learning how the SDGs can enhance sustainability in practice

Would you be interested in learning how the SDGs can enhance sustainability in practice? 	Absolute frequency	Relative frequency
Yes	365	74.8%
No	44	9.0%
Not sure	79	16.2%

Positive findings from the survey are that nearly three-quarters of students (74.8%) at HEIs claimed to be interested in how SDGs can enhance sustainability in practice, and only 9 % is not (table22)

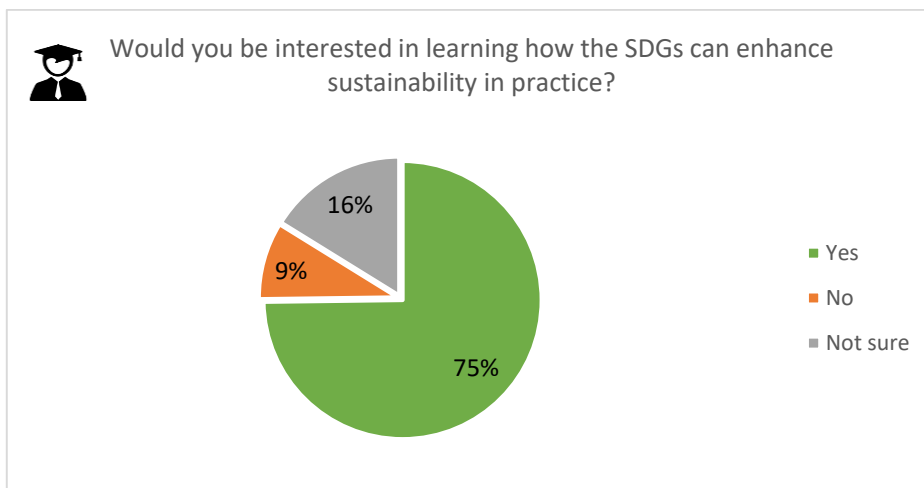


Figure 23: Current state analysis. Erasmus+ project SDG4BIZ: Interest of students in learning how the SDGs can enhance sustainability in practice.

5.2 Awareness of sustainability concepts and SDGs in a business environment

Table 25. Level of awareness of sustainability and SDGs in companies according to SDG4BIZ survey

Are you familiar with the Sustainable Development Goals published by the United Nations?	Absolute frequency	Relative frequency
Yes	93	39.1%
No	106	44.5%
Not sure	39	16.4%
Total	238	100%

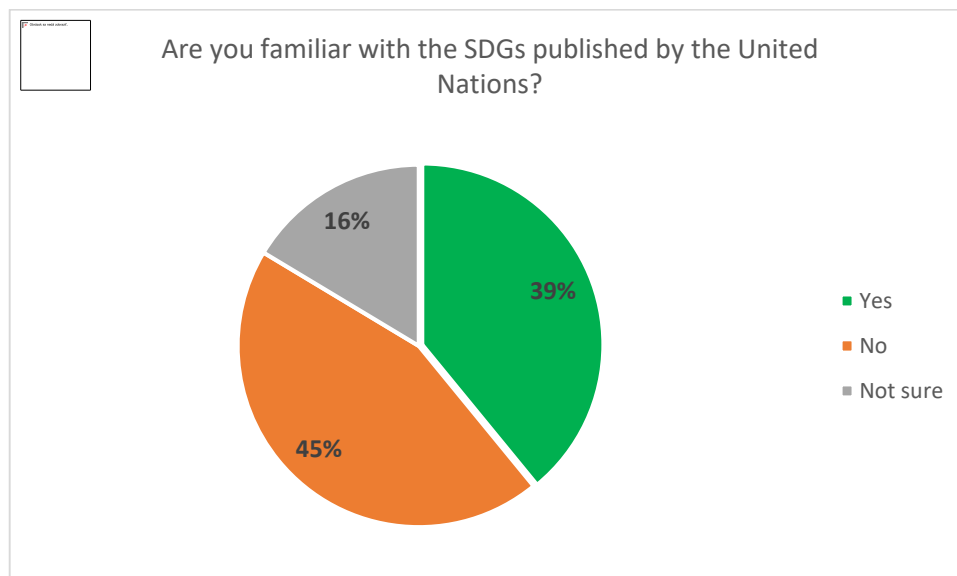


Figure 24 Current state analysis. Erasmus+ project SDG4BIZ: Level of awareness of sustainability and SDGs in companies

From the survey, 39.1% of companies claimed to be familiar with SDGs published by the United Nations, while 44.5 % are not familiar, whereas 16.4% are unsure.

Table 26: Awareness of sustainability in companies (strategy, responsibility, reporting system) according to survey


Sustainability in organization (strategy, responsibility, reporting) 	YES Absolute frequency	NO Absolute frequency	NOT SURE Absolute frequency
Does your organization have a sustainability strategy?	111	89	38
Does your organisation have a person designated responsible for sustainability practices?	87	112	100
Does your organisation’s management reporting system include sustainability criteria?	92	100	46



Figure 25: Current state analysis. Erasmus+ project SDG4BIZ: Sustainability awareness in companies (strategy, responsibility, reporting system) according to survey

Sustainability-related practices regarding strategy, responsibility, and reporting show that organisations have mostly sustainability strategy (54.1%), but only in 41% of surveyed organizations is there a person who is designated responsible for sustainability practice. Reporting regarding sustainability criteria is performed in 44.9% of organizations.

Table 27: The future interest of companies in recruiting employees with knowledge or experience of sustainability according to the SDG4BIZ survey


To what extent in future will your organisation specifically recruit employees with knowledge or experience of sustainability-related practices? 	Absolute frequency	Relative frequency
Very much	38	16.0%
To some extent	86	36.1%
A little	30	12.6%
Not at all	15	6.3%
Not sure	69	29.0%
Total	238	100.0%

Table 28: The interest of companies in future activities according to employees according to SDG4BIZ survey



To what extent should sustainability feature more in your organisation's future activities? 	Absolute frequency	Relative frequency
Significantly more	116	48.7%
To some extent	80	33.6%
A little	20	8.4%
No need for any additional content	12	5.0%
Not sure	10	4.2%
Total	238	100.0%

Table 29: The interest of companies in increase employees' understanding of sustainability-related practices via training or development courses, according to the SDG4BIZ survey

To what extent your organisation will increase employees' understanding of sustainability-related practices via training or development courses in the future? 	Absolute frequency	Relative frequency
Very much	59	24.8%
To some extent	88	37.0%
A little	37	15.6%
Not at all	6	2.5%
Not sure	48	20.2%
Total	238	100.0%

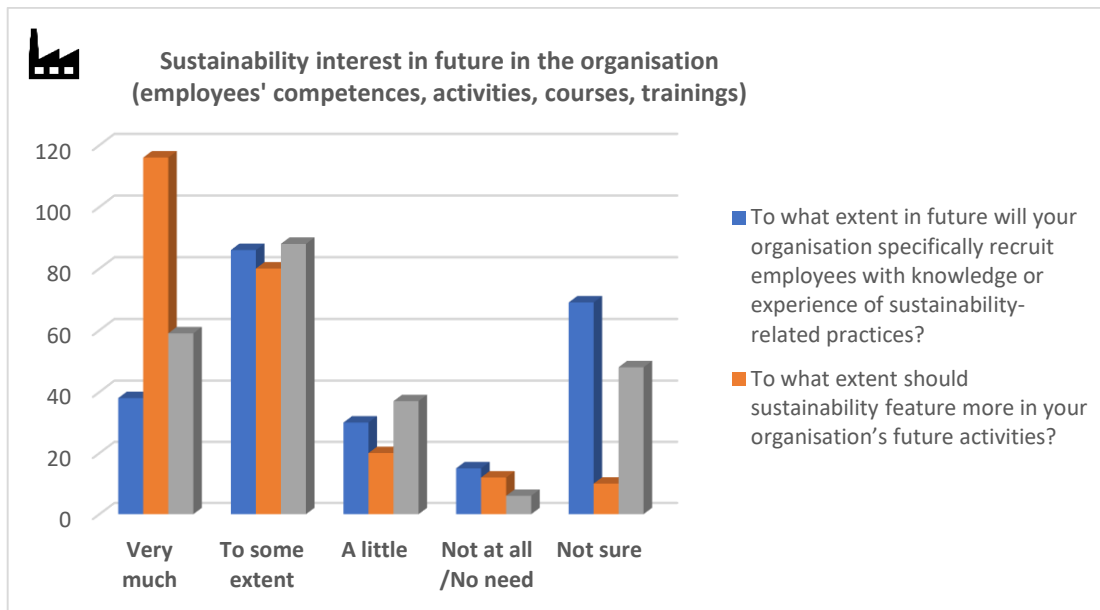


Figure 26: Current state analysis. Erasmus+ project SDG4BIZ: interest in future in the organization (employee's competences, activities, courses, training)

Results from the SDG4BIZ current state analysis about sustainability content in organisations in the future show positive trends. Nearly 62% of organisations responding claimed to be interested very much or to some extent in practices, training, or development courses to increase employees' understanding of sustainability. Almost half of all survey respondents (49.1%) indicate very much or to some extent that organisations will specifically recruit employees with knowledge or experience of sustainability-related practices. Sustainability should feature very much more in the organisation's future activities, according to 48.7 % of respondents and some extent (33.6%).

5.2 Key findings from current state analysis

The key findings from the SDG4BIZ survey show that sustainability and SDGs-related content are generating interest within all identified stakeholder groups (students, academics, and companies). Among students, there is high demand for learning sustainability in practice, and academics are interested in learning how SDGs can help guide and shape curriculum and project development. However, regional differences in knowledge about SDGs are evident. Nevertheless, international collaboration can help overcome this gap by implementing international projects, including universities, companies, and building the sustainable knowledge triangle (university- company-research).

Conclusions

This report summarizes the findings from the current state analysis within the wider SDG4BIZ project. The recent state analysis in academic and business environments of the awareness of sustainability practices in general and the SDGs more specifically indicate some regional differences which can be enhanced by international collaboration and knowledge exchange within an international project such as *Knowledge Alliance for Business Opportunity Recognition in SDGs (SDG4BIZ)*.

SDGs and sustainability are important topics, and many HEIs recognize this. For some reason, SDGs are still not implemented in the curricula as much as would be possible or even necessary. Metropolia and other higher education institutions offer material related to SDGs, but this could be improved. In general, SDGs and sustainability should not be only a separate course but can be integrated into all teaching. 68% of the respondents thought there should be more content related to sustainability in the study programmes. Additionally, based on the questionnaire results, more content related to entrepreneurship and sustainability would be needed.

Thoroughly familiar with sustainability concepts are 37.2% of HEIs students at Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences in Finland, 35% of students at Yasar University in Turkey and only 6.2% students at Slovak University of Technology in Bratislava (STU) in Slovakia. Those responding that they are totally unfamiliar with sustainability concept state were 13.9% at STU, 3.4% at Yasar University and 1.7% in universities in Finland (Metropolia and Haaga-Helia).

Most academics show familiarity with SDGs at universities in Finland (circa 70%) and in Turkey (65%) and less at STU in Slovakia (14%). Awareness of SDGs among students is better at Metropolia University of Applied Sciences and Haaga-Helia University of Applied Sciences, where one-third of students claim to be familiar with the SDGs. The situation is similar at Yasar University. By contrast, of STU students responding, only one-eighth (12.5%) said they were familiar with the SDGs.

Positive findings from the survey include evidence of relatively strong interest in sustainability issues and content in all stakeholder groups (students, academics, employees of companies). Nearly three-quarters of students (74.8%) at HEIs claimed to be interested in how SDGs can enhance sustainability in practice. Best practices featured in this report can inspire how to see SDGs as potential entrepreneurship opportunities. Nearly half of the surveys from businesses (49.1%) indicate very much or to some extent that organizations will specifically recruit employees with knowledge or experience of sustainability-related practices. That sustainability should feature much more in the organisation's future activities is the view of 48.7 % of respondents.

With just a few exceptions, the respondents are interested in working in sustainability and associated career opportunities. They believe that sustainability and SDGs will somehow affect future work life. Most of the student respondents are interested in this kind of content. Thus, it would be possible to bring the sustainability-related material available for everyone as it will be precious knowledge in the future.

However, the survey's research and findings are limited to the number of respondents (students, teachers, and companies) in SDG4BIZ partner countries. Nevertheless, the results provide promising clues regarding how best to locate and exploit opportunities for further development of sustainability awareness and education and identify business opportunities arising from the implementation of the SDGs.

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