

The logo for SIX, consisting of the letters 'SIX' in a stylized, white, sans-serif font.

HARMONIZING HORIZONS:

An Analysis of Sustainability Reporting Tools for a Resilient Tomorrow

A SIX White Paper

Foreword

Sustainability reporting has become increasingly vital in addressing global challenges such as climate change, poverty, and biodiversity loss. As these issues grow in urgency, businesses are under greater pressure to demonstrate their commitment to sustainable practices. Sustainability reporting serves as a key tool for companies to communicate their environmental and social impacts to stakeholders, including investors, regulators, and the public. By providing transparent information, companies can enhance accountability, build trust, and contribute to global progress towards sustainability.

However, the landscape of sustainability reporting presents significant challenges. A major difficulty is the lack of standardized frameworks, leading to inconsistencies in how companies present their sustainability efforts. This makes it challenging for stakeholders to effectively compare and evaluate different organizations' sustainability performance. Additionally, gathering accurate data across complex, global supply chains is both intricate and costly. These challenges are compounded by evolving regulations and the proliferation of various reporting standards, which companies must navigate to meet compliance and stakeholder expectations.

In recognition of the importance of advancing sustainability reporting, SIX Swiss Exchange partnered with the University of St. Gallen, tasking a team of masters students with exploring the role of sustainability reporting, the challenges companies face, and the impact of various tools in improving reporting practices. This collaborative effort aims to offer actionable insights and recommendations for companies seeking to align with global sustainability goals.

We hope the findings and recommendations presented in this white paper will provide valuable insights and practical tools for navigating the complexities of sustainability reporting. We wish you an insightful and pleasant read.

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Management Summary

This white paper, a collaborative effort between students from the University of St. Gallen and SIX, presents a comprehensive analysis of sustainability reporting practices across diverse industries. The study aims to unravel the intricacies of sustainability reporting tools, considering the proliferation of reporting standards, the diverse nature of companies, and the inherent challenges faced by different sectors. These challenges include the absence of standardization, complexities when trying to collect accurate and reliable data on sustainability performance of companies across supply chains, the high cost of implementing new processes, changing regulations and standards related to sustainability and a lack of skilled resources. The research was based on both desk research as well as qualitative interviews conducted with sustainability experts working across various industries. The findings and proposed concept underscore the evolving landscape of sustainability reporting. As companies grapple with diverse challenges, the proposed tools provide a structured approach to enhance transparency and comparability to other companies as well as investors. Global goals such as the United Nations' (UN) 17 Sustainable Development

Goals (SDGs), which aim to achieve a more sustainable and equitable world by 2030 (United Nations, 2024), challenge companies around sustainability reporting. Findings show that embracing sustainability not only aligns with global goals but also presents opportunities for improved risk management, enhanced stakeholder communication and market trust. A tool providing an overview of available tools as well as a chatbot and pre-designed templates could help companies meet these goals. This collective effort contributes to a more sustainable and equitable global economy.



1 Introduction

The world is facing global challenges, such as climate change, poverty, and biodiversity loss. In response, the United Nations (UN) developed the 2030 Agenda for Sustainable Development which is a global plan comprising also of the 17 Sustainable Development Goals (SDGs) to address these challenges. The SDGs urge not only governments and civil society but also businesses to adopt the goals to reach collective and sustainable development (Khaled et al., 2021). Thus, sustainability has become a prominent concept worldwide. In recent years, exponential growth in non-financial reporting on social and environmental activities can be observed in organizations (Herzig & Schaltegger, 2011). Many firms publish information about their sustainability initiatives through sustainability reports, which are shared with investors and additional stakeholders (Papoutsis & Sodhi, 2020). However, there is a wide variety in the types of reports released by companies. While some reports emphasize environmental aspects, others concentrate on the social dimension and incorporate the triple-bottom-line method (Tsalis et al., 2020)¹. Even though sustainability is becoming increasingly important, investors are often skeptical about the information companies disclose and their ability to implement their transition plans. The reason for this is the opaqueness and absence of harmonized reporting standards. Furthermore, the collection of accurate and reliable data on the sustainability performance of companies across their supply chains is a highly complex undertaking. The high cost of implementing new processes and changing regulations related to sustainability lead to additional costs and some companies lack skilled resources.

Additionally, there has been an increase in sustainability performance reporting regulations for companies. (Ioannou & Serafeim, 2017). In line with that, several state and private organizations have developed guidelines to advance the sustainability reporting realm (Afolabi et al., 2022). These standards comprise of the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), and the Corporate Sustainability Reporting Directive (CSRD) to name a few examples. Over the years, the standard setting bodies

have released numerous and varied guidelines on sustainability reporting. Although one might argue that different sustainability reporting guidelines are necessary to accommodate the varied nature of companies and resources, the swift increase in reporting standards has rendered their comprehension a highly intricate undertaking (Siew, 2015).

To address this challenge and enhance transparency in the sustainability reporting realm, a group of students from a Business Innovation master's course at the University of St. Gallen joined efforts with SIX. In a project spanning several months, the students focused on sustainability reporting practices of various industries including, for example, healthcare, technology, real estate, and consumer staples. This white paper is structured as follows: It begins by outlining the methodology employed to analyze the various sectors and their practices in sustainability reporting. Subsequently, the findings specific to each sector are presented. Building upon these findings, the suggested concepts are introduced, followed by concluding remarks and an outlook on sustainability reporting for listed companies.

Collection of accurate and reliable data on the sustainability performance of companies across their supply chains is a highly complex undertaking.

¹ The triple-bottom-line is a framework that organizations use to evaluate their performance in three key areas: economic, environmental, and social. By considering the impacts across all three dimensions, businesses aim to achieve sustainable outcomes that create value for shareholders, society, and the environment. (Tsalis et al., 2020)

2 Methodology

The research was based on both comprehensive desk research as well as qualitative interviews conducted with sustainability experts in various industries. The desk research consisted of a thorough examination of sustainability reports of listed companies on SIX Swiss Exchange which was complemented by online research to properly understand the landscape of sustainability standards, tools, and frameworks (see fig. 1).

This process laid the groundwork for a comprehensive understanding of the sustainability practices prevalent in sectors ranging from general industry (e.g. ABB, Geberit), IT (e.g. Logitech, Also Holding) to communication services (e.g. Swisscom, MCH Group), consumer staples (e.g. Emmi, Lindt), real estate (e.g. Züblin, Arbonia), consumer discretionary (e.g. Calida, VZug), financial services (e.g. UBS, Swissquote), and healthcare (e.g. Alcon, Novartis). With a holistic insight into each industry, the second phase involved consolidating the data. This

aimed to distill overarching trends, determine commonalities, and identify distinct pain points within each industry and, importantly, across multiple industries. This allowed for the identification of convergences across diverse sectors, revealing examples of shared challenges and opportunities in pursuing sustainable practices during the third phase. Building upon this foundation of insights, ideation and brainstorming sessions were conducted to conceptualize a fitting solution. The objective was to propose a concept that addressed the identified challenges and aligned them with the diverse needs of companies operating in varied industries. Lastly, in the fourth phase, we draw a conclusion based on our findings.

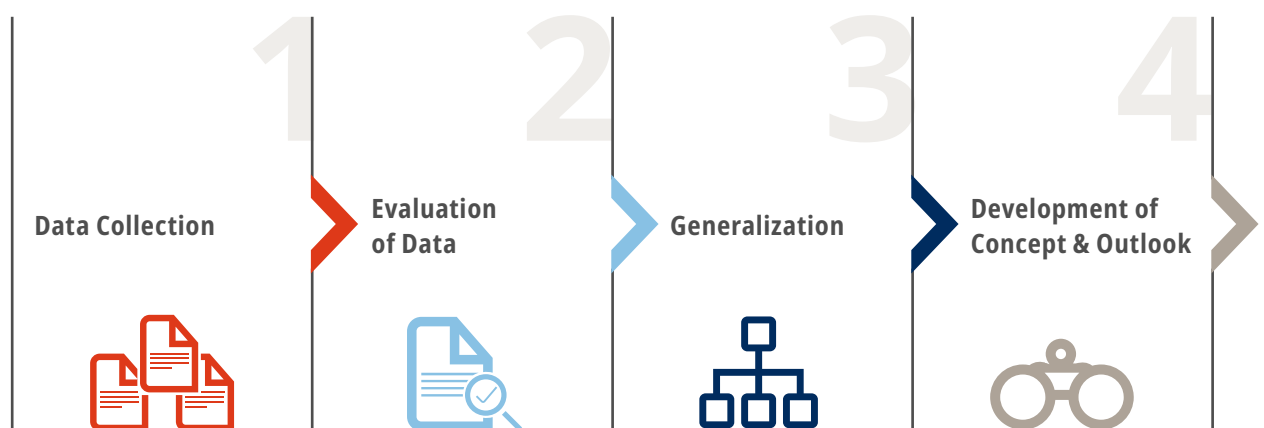


Figure 1: The methodology pursues the goal to develop an implementable concept

3 Findings

In the following chapter, the results from listed companies of various industries are presented, derived from qualitative interviews as well as from desk research. Furthermore, a detailed examination was conducted on specific challenges, insights, and reporting tools. This involved in depth analysis of 258 sustainability reports.

In the table below you find a summary of non-exhaustive list of reporting frameworks and standards that the companies used to prepare these sustainability reports.

Initiatives/ Networks/ Organizations (partly also coming with reporting obligations)	Reporting Frameworks and Standards	Industry related Standards	Climate-related Reporting Frameworks	Certifications and Policies	Conversion factors for CO ₂
<p><u>UNGC</u> Voluntary initiative based on CEO commitments to implement universal sustainability principles and support UN goals</p>	<p><u>GRI</u> Guidelines for organizations to transparently report their sustainability performance, covering economic, environmental, and social impacts</p>	<p><u>COSMOS</u> Certifies organic and natural cosmetics, ensuring products meet strict criteria for sourcing, production, and environmental impact.</p>	<p><u>TCFD</u> A framework that helps organizations disclose climate-related financial risks and opportunities, focusing on governance, strategy, risk management, and metrics & targets with the aim to improve transparency and consistency in climate-related reporting to better inform investors/stakeholders</p>	<p><u>ISO</u> Develops international standards, including ISO 14001 for environmental management, to help organizations improve their environmental performance through efficient resource use and waste reduction.</p>	<p><u>UK Conversion Factors</u> Provides standardized conversion factors for UK companies to calculate greenhouse gas emissions from energy use, transport, and other activities, aiding in compliance with reporting requirements.</p>
<p><u>UN SDGs</u> 17 development goals calling to end poverty and inequality, protect the planet, and ensure that all people enjoy health, justice and prosperity</p>	<p><u>SASB</u> Develops industry-specific standards to help businesses disclose financially material sustainability information to investors.</p>	<p><u>VfU</u> Provides guidelines and standards for environmental management and sustainability practices specifically within financial institutions.</p>	<p><u>GHG Protocol</u> Provides comprehensive global standardized frameworks for measuring and managing greenhouse gas emissions from private and public sector operations, value chains, and mitigation actions.</p>	<p><u>Conflict Minerals</u> Regulation that ensures companies source minerals responsibly, avoiding materials that finance armed conflict.</p>	<p><u>IEA</u> Offers comprehensive data on CO₂ emission factors from electricity and heat generation, covering a wide range of countries and providing essential metrics for environmental impact assessments.</p>

Initiatives/ Networks/ Organizations (partly also coming with reporting obligations)	Reporting Frameworks and Standards	Industry related Standards	Climate-related Reporting Frameworks	Certifications and Policies	Conversion factors for CO ₂
	<u>ESRS</u> Sets detailed requirements for sustainability reporting in the European Union, designed to meet the CSRD requirements.	<u>SNBS</u> A certification system for sustainable construction practices in Switzerland, focusing on environmental, economic, and social aspects of building projects.	<u>SBTi4/</u> A collaboration between four entities: the Carbon Disclosure Project (CDP), the United Nations Global Compact, World Resources Institute (WRI), and the World Wide Fund for Nature (WWF). It helps businesses and financial institutions set guidelines to aid them in reducing their greenhouse gas	<u>GRS</u> Certifies products containing recycled content, ensuring traceability, environmental and social practices, and chemical restrictions throughout the supply chain.	<u>ecoinvent Database</u> A global database providing high-quality life cycle inventory data for assessing environmental impacts, supporting life cycle assessment (LCA) and sustainability projects
	<u>GCCA sustainability guidelines</u> Sustainable practices in the cement and concrete industry, focusing on reducing environmental impact and promoting circular economy principles.	<u>GRS</u> Certifies products with recycled content, ensuring the traceability of materials, social and environmental practices, and chemical restrictions throughout the supply chain.	<u>PACTA</u> An open-source and free of charge software application that enables users to measure the alignment of financial portfolios with climate scenarios as well as analyze specific companies.	<u>EHS</u> Provides standards and guidelines for managing workplace safety, environmental compliance, and industrial hygiene to protect workers and the environment.	
	<u>LCA</u> A methodological framework used to assess the environmental impacts associated with all stages of a product's life, from raw material extraction through to disposal.	<u>FSSC 22000</u> Provides a certification scheme for food safety management systems, ensuring food producers meet international standards for food safety and quality throughout the supply chain.	<u>CDP Carbon Framework</u> Helps companies disclose their environmental impact, specifically focusing on greenhouse gas emissions, water use, and climate change strategies, promoting transparency and accountability in environmental performance.	<u>ZWTL</u> Certification for organizations that have successfully diverted all waste from landfill disposal, emphasizing waste reduction, reuse, recycling, and composting practices.	
		<u>GFSI</u> Benchmarks food safety standards for manufacturers to ensure they meet stringent food safety requirements, promoting continuous improvement in food safety management systems.		<u>SQA</u> Ensures suppliers meet specific quality standards through rigorous evaluation processes, focusing on improving product quality and reducing defects across the supply chain.	

Initiatives/ Networks/ Organizations (partly also coming with reporting obligations)	Reporting Frameworks and Standards	Industry related Standards	Climate-related Reporting Frameworks	Certifications and Policies	Conversion factors for CO ₂
		<p>Swisstainable sustainability program (MCH group standard) Enhancing sustainable practices in the tourism sector through a tiered certification system (committed, engaged, leading) that requires participants to integrate sustainability into their strategies, establish coordination centers, and develop action plans.</p>		<p>SAQ Used primarily in the automotive industry, the SAQ evaluates suppliers on human rights, environmental sustainability, business ethics, and responsible sourcing practices to enhance due diligence and sustainability in supply chains.</p>	
		<p>EPRA Provides sustainability best practices recommendations for real estate companies, focusing on enhancing transparency, environmental performance, and social responsibility within the sector.</p>		<p>IMDS A global standard used by the automotive industry to manage and track material composition data for compliance with regulations and to support sustainable product development.</p>	
		<p>RBA Sets standards for corporate social responsibility in global supply chains, aiming to improve social, environmental, and ethical practices within the electronics industry and beyond.</p>		<p>RSS Sets guidelines for companies to source materials ethically, ensuring supply chain practices are environmentally sustainable and socially responsible.</p>	
		<p>BRC Sets global standards for food safety, packaging, storage, and distribution, ensuring that products are safe, legal, and of high quality.</p>			

These frameworks and standards collectively aid organizations in managing and communicating their sustainability efforts and challenges effectively by providing structured and standardized approaches to sustainability reporting. Further, these frameworks and standards enable organizations to systematically evaluate their

sustainability performances, identify areas for improvement, align their operations with global sustainability goals, and build trust with stakeholders by demonstrating their commitment to sustainable practices.

3.1 General Industry, Materials, Utilities

Our research has shown that many different standards and tools are used in the general industry, materials, and utilities sectors. Overall, the companies within these industries are diverse and heterogeneous, so the only standard that is widely applied within sustainability reporting is the *Global Reporting Initiative (GRI)*, meaning 21 out of 25 companies use it. Companies adopt this standard because it is widely recognized and can be adapted to their needs. Apart from the GRI, companies selectively choose which norms to follow, potentially masking unfavorable performance indicators. Although 3 out of 5 companies use some kind of tool for their sustainability reporting, almost all these tools are internal and therefore difficult to compare. This leads to a lack of transparency and makes it difficult to benchmark companies against each other.

Number of Companies Using

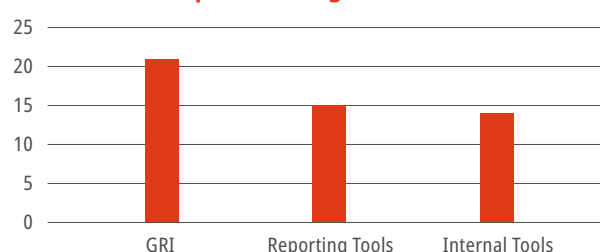


Figure 2: Number of companies using the standards

However, an outlier within the general industry is Givaudan. They are highly advanced with their sustainability reporting and not only focus on scope 1 and 2 emissions¹ in their operations but also aim to reduce scope 3 emissions through sustainable procurement of ingredients, optimized packaging, or circularity and upcycling. They also make use of satellite monitoring to track the palm oil production used in their supply chain to ensure no deforestation takes place (Givaudan, personal communication, November 3, 2023).

Insights and Challenges in the General Industry



Figure 3: Examples of Insights and Challenges in the General industry, Material and Utility sector

¹ Definition emission scope: "Scope 1 covers emissions from sources that an organization owns or controls directly. [...] Scope 2 are emissions that a company causes indirectly and come from where the energy it purchases and uses is produced. [...] Scope 3 encompasses emissions that are not produced by the company itself and are not the result of activities from assets owned or controlled by them, but by those that it is indirectly responsible for up and down its value chain. (nationalgrid, 2023)

Due to the heterogeneity of these companies and their very different requirements, it is not surprising that there is a variety of reporting tools and standards.

During the research, the list of non-exhaustive tools that were reportedly used are the following:

Tools	Axiom Digital Reporting Tools	A cloud-based platform that streamlines sustainability reporting by integrating all environmental, social, and governance (ESG) data, enabling real-time insights and compliance with regulatory standards.
	Microsoft/SAP	Offers comprehensive software solutions for sustainability management, including tools for tracking carbon emissions, managing energy consumption, and ensuring regulatory compliance.
	EcoVadis	SaaS Sustainability solution for companies of any size in any industry, providing sustainability ratings for global supply chains.
	Enablon	Aids in reporting greenhouse gas emissions according to the GHG protocol.
	Highwire Platform	Focuses on minimizing contractual risks by monitoring compliance with human rights, accident prevention, and child labor standards across the supply chain.
	RLi risk assessment tool	Forced labor due diligence efforts with company's supply chain, introducing a new rating model that provides a dynamic scoring method, providing a high-quality forced labor risk analysis and a confidence score for each supplier site evaluated.
	Sedex	Provides a platform for managing and improving ethical business practices in global supply chains, with tools for data analysis, risk assessment, and reporting.
	Aqueduct from WRI	WRI offers various tools for managing environmental impacts, such as water usage and climate risks, including the Aqueduct tool for water risk assessment.
	Workiva	Streamlines cross-team collaboration, providing audit-ready ESG reports for organizations aiming to enhance their environmental, social, and governance practices.
	SAP Ariba	Enables sustainable procurement by assessing ESG risk in value chains and providing reliable sustainability scorecards for trading partners.

3.2 IT and Technology

The IT and Technology sector is highly fragmented when it comes to the standards and tools it uses for sustainability reports. Only 36.8% of listed IT & Technology companies issue sustainability reporting. Software providers in this sector tend to build their own tools, resulting in a lack of transparency since it is usually not disclosed what type of data is used and how the results are calculated. To increase transparency and investors' trust, they also follow frameworks, such as the UN SDGs or standardized indexes, including the Dow Jones Sustainability Index or Bloomberg Equality Index. The company

first has to reach a certain capitalisation and/or have in place an ESG rating (via an independent provider) before it is admitted to any indices. The most common ratings include the ISS ESG Rating, FTSE4Good Rating, and MSCI Rating. As identified in other sectors, the biggest pain point for IT and Technology companies' sustainability reporting is the increasing demand for sustainable actions which can bear great expenses. This is further amplified by the cost pressures companies in the sector are facing. Some of the tools used in sustainability reporting in this sector include:

Framework	Dow Jones Sustainability Index	Tracks the stock performance of leading companies in terms of economic, environmental, and social criteria, providing benchmarks for investors who seek to integrate sustainability considerations into their portfolios.
	Bloomberg Equality Index	Measures gender equality across internal company statistics, policies, and external community support and engagement, helping investors identify companies committed to equality and diversity.
Tools	Umberto LCA Software	Helps calculate Life Cycle Assessments, Environmental Product Declarations (EPD), and Product Environmental Footprints (PEF).
	EcoInvent	A global database providing high-quality life cycle inventory data for assessing environmental impacts, supporting life cycle assessment (LCA) and sustainability projects.
	EcoVadis	SaaS Sustainability solution for companies of any size in any industry, providing sustainability ratings for global supply chains.
	Sphera's Life Cycle Assessment Software (GaBi)	Provides comprehensive LCA tools for assessing and managing the environmental impacts of products across their life cycles.
Ratings	ISS ESG Rating	Scientifically based rating concept focused on the materiality of non-financial information, covering relevant ESG topics managing ESG risks and seizing investment opportunities.
	FTSE4Good Rating	Score-based methodology rating companies on three pillars and 14 themes using over 300 indicators to determine the overall quality of a company's management of ESG issues.
	MSCI Rating	Provides ESG ratings and analysis, evaluating companies on their exposure to and management of ESG risks and opportunities across various sectors.

3.3 Communication Services

In the communications services industry, a relatively small sector with only three listed companies, there are many standards, frameworks, and tools. 75% of all companies issue a sustainability report or provide relevant information. The most commonly used index is the GRI index, which is used by 67% of companies who publish a sustainability report.

As an example of best practice, Swisscom is characterized by a strong commitment to sustainability and aims to achieve net zero emissions by 2035. The company uses specific tools tailored to its needs to improve data accuracy and reduce CO₂ emissions. The list of tools as an example used by Swisscom are as follows:

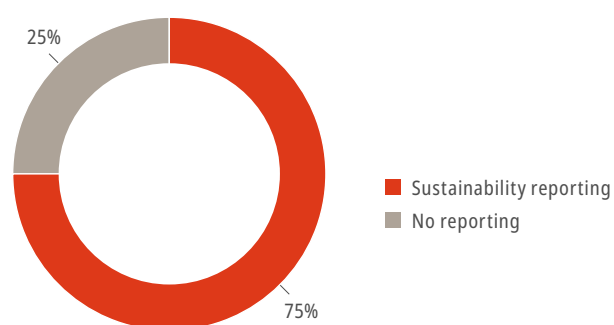


Figure 4: % of listed companies issuing sustainability reporting

Tools	Sweep (product of Swisscom)	Sustainability data management platform that helps companies track and act on their ESG data including CO ₂ measurements.
	Swenex (product of Swisscom)	Provides data-driven carbon accounting to assess the current internal company position.
	Swiss Climate Challenge app	Address sustainability challenges in the area of employee travel and its associated climate.

3.4 Consumer Staples

75% of the listed companies in the Consumer Staples sector regularly publish a sustainability report. After extensive analysis, it was discovered that these companies are facing similar issues due to the similarity of their products, namely food products. The focus of the reports is on Scope 3 emissions, especially on how and where resources are procured, and how the upstream and downstream supply chains can be monitored (Emmi, 2023; Nestlé S.A, 2023). The list of non-exhaustive tools used are as follows:

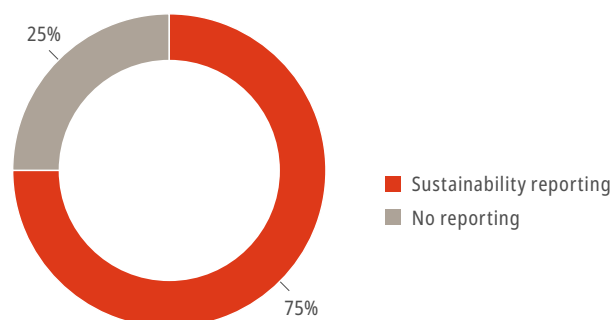


Figure 5: % of listed companies issuing sustainability reporting

Tools	Description
EcoVadis	Globally recognized assessment platform that rates businesses' sustainability based on four key categories: environmental impact, labor, and human rights standards, ethics, and procurement practices.
Sustainalytics	Assesses companies for their level of involvement in controversies that have an impact on the environment or society and the associated business risks companies face from such involvement.

3.5 Real Estate

The real estate sector has the biggest variety of sustainability tools and standards used compared to other industries. Through extensive research of sustainability reports, it was noted that companies select standards that most favorably represent their performance. This is due to the fact that there is no legal obligation to use one comprehensive standard throughout the industry. Therefore, companies tend to select standards that do not evaluate areas where their sustainability practices are lacking, when assessing their sustainability performance (Pom+, personal communication, December 3, 2023). Moreover, of all analyzed companies in the real estate industry, 80% of them have issued a sustainability report. The list of non-exhaustive tools used are as follows:

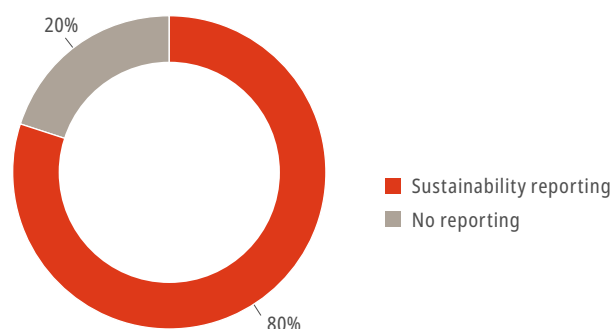


Figure 6: % of listed companies issuing sustainability reporting

Tools	Description
Sustainalytics	Offers ESG ratings and research, helping investors identify and manage ESG risks and opportunities, with a focus on the impact of ESG factors on financial performance.
Cority	An integrated Environmental, Health, Safety, and Quality (EHSQ) software solution that helps organizations manage their compliance, risk, and performance data across various sustainability metrics.
SAP	Sustainability solutions that integrate robust, auditable sustainability data into core ERP processes.

3.6 Consumer Discretionary

Over 80% of Consumer Discretionary companies have a sustainability report. This is above average compared to the other sectors. Although some general standards, such as ISO 14001 environmental certification and the GHG are used in many companies, the disparity in the data collection is evident. Moreover, most companies have their own software and methods for data collection. From the analysis of sustainability reports in this sector, it has become apparent that the companies

focus on suppliers to ensure that they act in a sustainable and ethically correct manner. To ensure this, labels and codes of conduct are often used. One of the major pain points is that the companies and their processes are not yet designed to track non-financial data. Thus, the challenge lies not in finding the right tools for the measurement but rather in initially generating the data.

3.7 Financial Industry

In the financial industry, sustainability reporting is becoming increasingly crucial, with 45% of Swiss Stock Exchange listed firms actively engaging with stakeholders, mainly using the Global Reporting Initiative (GRI) index. Leading this movement are UBS, Swiss Re, Swiss Life, and Cembra Money Bank, each employing distinct strategies and tools to embed ESG principles into their operations.

UBS has reduced its environmental footprint through a Cloud First strategy and partnerships with the Green Software Foundation (UBS Sustainability Report, 2022). Swiss Re uses the *IntegrityNext* platform for comprehensive ESG screening in its supply chain (Swiss Re Sustainability Report, 2022), while SwissLife employs *MDD* and *WeSustain* for accurate sustainability reporting (SwissLife Interview, 2022). Cembra Money Bank integrates sustainability into existing systems, utilizing tools like *Excel* for efficient tracking (Cembra Money Bank Interview, 2022).

Insights and Challenges in the Financial Industry



Figure 7: Insights and Challenges in the Financial Industry

Despite challenges like regulatory complexities and Scope 3 emissions, these firms are committed to advancing sustainability, adapting to changing regulations in the EU and Switzerland, and focusing on enhancing ESG

integration. Their efforts signify a broader shift towards more responsible and transparent business practices in the financial sector. The list of non-exhaustive tools used are as follows:

Tools	IntegrityNext	Streamlines supply chain sustainability management, helping businesses meet ESG requirements and enhance performance.
	MDD	A digital platform that fundamentally simplifies the process of creating financial and non-financial reports. Guaranteeing data consistency and automating repetitive steps.
	WeSustain	Delivers enterprise software solutions for sustainability management, enabling companies to track and report on ESG performance, manage compliance, and drive improvements.

3.8 Healthcare Industry

Almost 60% of listed companies in the healthcare industry issue a sustainability report. GRI and SASB are the most commonly used standards (83% and 41% respectively). Providing stakeholders with information about sustainability is a growing trend. In general, monitoring the supply chain is a crucial area of focus in this industry. This challenge makes it harder for companies to ensure data accuracy, track usage of e.g., water and energy, collect real-time data, and in the end, design lean processes along the supply chain. Collecting real-time data across the whole supply chain and finding the right tools to collect data and stay in line with standards and regulations are the main challenges. The list of non-exhaustive tools used are as follows:

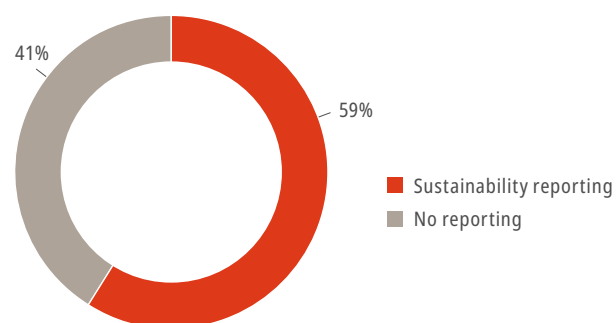


Figure 8: % of listed companies issuing sustainability reporting

Tools	EcoVadis	SaaS Sustainability solution for companies of any size in any industry, providing sustainability ratings for global supply chains.
	Cority	An integrated Environmental, Health, Safety, and Quality (EHSQ) software solution that helps organizations manage their compliance, risk, and performance data across various sustainability metrics.
	WeSustain	Delivers enterprise software solutions for sustainability management, enabling companies to track and report on ESG performance, manage compliance, and drive improvements.

4 Proposed Concepts

Based on the analysis of the individual sectors, their best practices, specific challenges, and the tools used, a concept was developed to support listed companies in their search for the right tools. The suggested concept features a modular structure, enabling the independent development, implementation, and use of its functions. The innovative range of solutions includes a reporting template tool, the Tool4Tools database, and a chatbot for tailored recommendations.

Reporting Template Tool

The purpose of the reporting template tool is to generate a sector-specific template for the development of their own sustainability report. The reporting tool is intended to be a guideline for reporting and therefore, supports listed companies. For implementation, a third-party provider could create the templates. It should be ensured that the data is always complete and updated so that the sustainability reports are correct. The reporting template tool works in such a way that the company defines what exactly is to be reported (e.g. GHG Protocol, Scope 1–3 emissions, etc.) and which country's/countries' regulations the report needs to adhere to. This information allows the tool to create a template that is customized to specific regulations and requirements.

Which parameters would you like to use in your reporting?

<p>Greenhouse Gas Emissions</p> <p>Scope 1 <input type="radio"/></p> <p>Scope 2 <input type="radio"/></p> <p>Scope 3 <input type="radio"/></p> <p>Supply Chain</p> <p>Direct Suppliers <input type="radio"/></p> <p>Indirect Suppliers <input type="radio"/></p>	<p>In which regions should the report be published?</p> <p>Switzerland <input type="radio"/></p> <p>EU <input type="radio"/></p> <p>United Kingdom <input type="radio"/></p> <p>United States <input type="radio"/></p> <p>China <input type="radio"/></p> <p>Africa <input type="radio"/></p> <p>Worldwide <input type="radio"/></p> <p>Other <input type="radio"/></p>
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Figure 9 Mockup: Reporting Template tool to support listed companies across jurisdiction.

Tool 4 Tools

The Tool 4 Tools (T4T) is a platform that aims to simplify the complex and opaque landscape of reporting tools available in today's market. It provides users with a comprehensive overview, thus addressing the common challenge of comparing and selecting the most suitable tools and standards for their reporting processes. To ensure a complete database, extensive knowledge about each tool is required. The T4T assists businesses when comparing existing tools and finding the one that is right for them.

It has multiple filters that allow the user to set preferences. These preferences include – but are not limited to – the industry which the user's company operates in, e.g. through a dropdown menu choice. Then the user has the option to choose which sustainability reporting area should be covered by the tool they are searching for. The tool then displays all relevant tools according to the preferences. The tools are listed in an overview highlighting their popularity, whether they are industry specific or being used across industries, and relevant keywords describing the tools briefly. Additionally, the tools can be sorted based on various criteria and upon inspecting a tool, one is directed to the tool's website where more detailed information can be found.

GHG Tools			
Sort by	Tool Name	Popularity	Reach
Name	CSI Tool	Low	Sector Specific
Popularity	2 GHG Emissions from Stationary Combustion	High	Cross-Sector
Reach	3 Terrascope	Low	Cross-Sector
Keyword	4 Scope 3 Uncertainty Calculation Tool	Medium	Cross-Sector

Figure 10 Mockup: Tools 4 Tools platform to compare and select the most standard tool and standard per sector.

Chatbot for Tailored Recommendations

A chatbot suggests tailored recommendations (tools, standards) to companies and informs them about new developments according to their individual needs and industry standards. It is based on a Large Language Model (LLM) that has access to a tool database (e.g., Tool4 Tools) and ESG news sources. Implementing this, requires corresponding infrastructure, resources, and know-how. The goal is for companies to input their issues, company details, challenges, and goals into the chatbot, and based on this information, a suitable tool is recommended. There is also the option to inquire about innovations or regulations in the field of sustainability reporting through the chatbot.

“Sustainability is no longer about doing less harm. It’s about doing more good.”

(Jochen Zeitz).

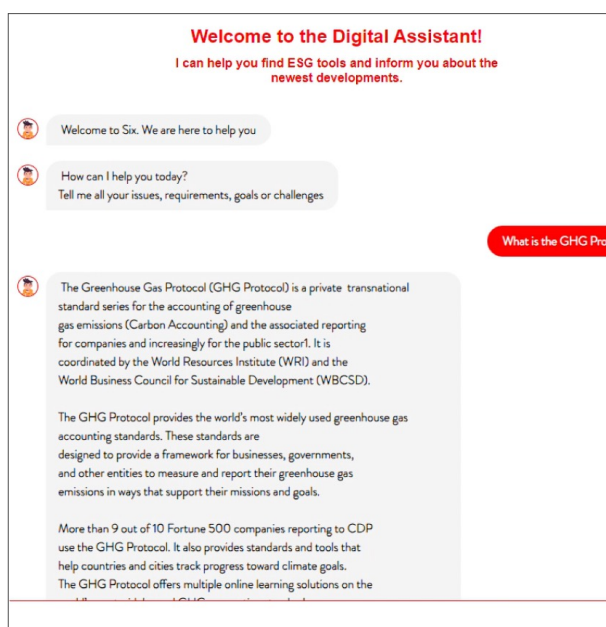


Figure 11 Mockup: Chatbot for tailored recommendations.

5 Conclusion

The objective of the project was to conduct a market analysis for SIX Swiss Exchange Listed companies to determine which third-party providers offer tools for tracking, assessing, and reporting sustainability performance. Based on this, a concept has been developed on how one could contribute to support listed companies in their efforts to enhance transparency around sustainability.

The tracking of the underlying supply chain is often a major challenge across many sectors. The extent of the required sustainability reports is constantly increasing, which makes collecting accurate data from suppliers more important. This results in an additional workload that poses a challenge for many companies. In the materials sector, some corporations selectively choose which norms to follow, potentially masking unfavorable performance indicators. This leads to a lack of transparency and makes it difficult to compare companies. Sustainable and ethically correct behavior of the suppliers is a major topic in the consumer discretionary sector. Sustainability labels (e.g. Energy Star, Fair Trade Certified, etc.) and codes of conduct which suppliers are required to follow are the main approaches which many corporations in this sector follow. To become more transparent and accountable, firms in the financial sector have started to incorporate ESG factors into their core strategies. Tools and software act as an enabler to track the

upstream and downstream supply chains and support sustainability reporting.

Based on our analysis, three concepts have been proposed to assist companies in their search for appropriate tools and the preparation of their sustainability reports. The Tool 4 Tools (T4T) platform will help simplify tool selection using filters and industry-specific criteria. The template tool is intended to recommend templates to companies, depending on their requirements. And finally, there is a chatbot which can make suggestions regarding tools. Additionally, it should be able to answer questions from users about ESG trends and regulations.

The evolution of sustainability reporting, as outlined in this paper, has significant implications for various stakeholders. For investors, enhanced transparency and standardized reporting facilitates better-informed investment decisions and helps them align their financial interests with ESG criteria. Companies benefit from having improved risk management and opportunities to showcase their commitment to sustainable practices, potentially leading to increased market trust and customer loyalty. Lastly, these advancements have a broader societal impact by promoting corporate accountability and environmental stewardship, thus driving a collective effort towards a more sustainable and equitable global economy.

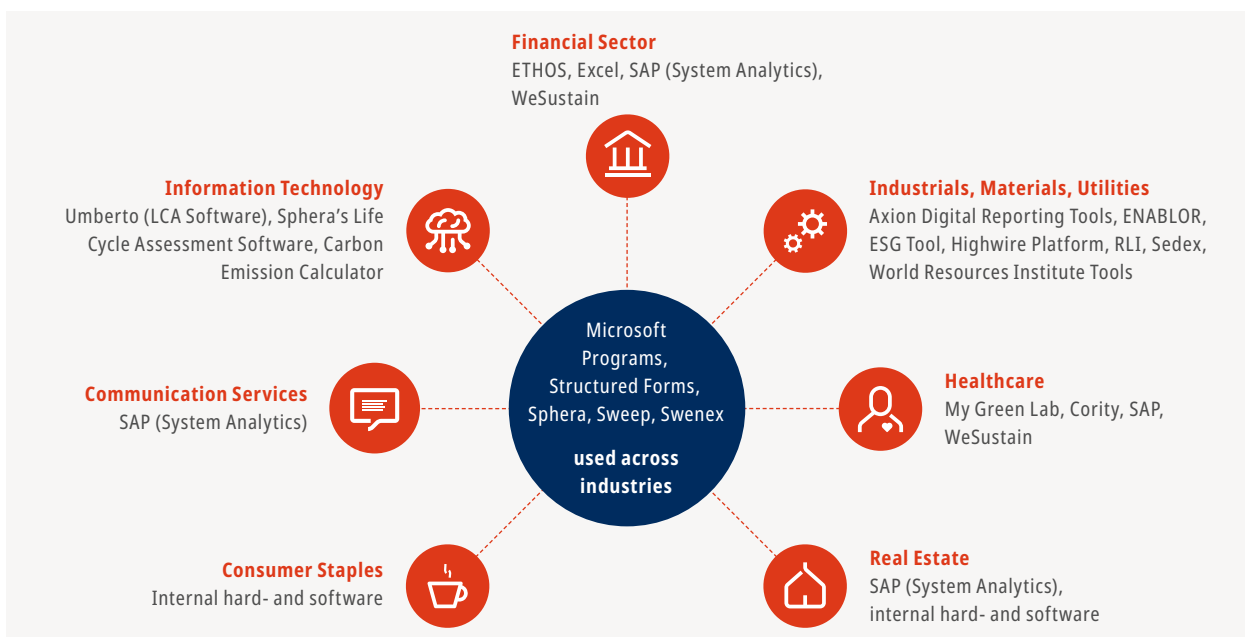


Figure 12: Overview of tools used across sectors

6 Outlook

The SUSTAIN framework is proposed by the students to offer a strategic lens for listed companies to project their future sustainable reporting practices. This framework is designed to help organizations systematically plan, implement, and communicate their sustainability initiatives and performance.

By leveraging the SUSTAIN framework, companies can align their operations with global sustainability standards, enhance transparency, and build long-term value for stakeholders through effective sustainability reporting.

S

Sustainability Foundations refers to the core principles and values that underpin a company's approach to sustainability. This involves building a strong base where sustainable practices are not add-ons but are integrated into every business decision and action.

U

Use Tools highlights the necessity of employing advanced management and reporting software, which enables companies to collect, analyze, and report sustainability data with greater precision and less effort.

S

Supply Chain scrutiny is a call to extend sustainable practices beyond the immediate company, ensuring that all elements of the product lifecycle, from raw materials to end-users, adhere to the same high standards.

T

Tech-Enabled Reporting underscores the importance of leveraging the latest technologies, such as AI, blockchain, and satellite imaging. Satellite imaging allows for real-time monitoring of environmental impacts.

A

Audit Enhancement suggests strengthening the role of external reviews and verifications to solidify trust in the reported information.

I

Investment focuses on the trend that investors are increasingly directing funds towards companies with solid sustainability practices, recognizing them as indicators of forward-thinking and resilient business models.

N

Not Just Green serves as a reminder that sustainability is a multi-faceted concept. While environmental stewardship is crucial, the social and governance aspects are equally important.

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has been validated by various interviews with industry experts and continuous check-ins with SIX, the team was able to come up with three tool suggestions on how SIX can support their listed companies with sustainability reporting. The following people have contributed to the research and the findings in this white paper:

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