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STUDY OF THE NOVEL EUROPEAN SUSTAINABILITY REPORTING STANDARDS (ESRS) – CHANGES AND IMPACT ON THE CASE COMPANY

Master’s thesis
Management in Sustainable Business
Spring 2024
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Management in Sustainable Business | Abstract
Author Maria Koskelainen | Year 2024
Subject Study of the Novel European Sustainability Reporting Standards – changes and impact on the case company
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The main goal of this study is to review the new European Sustainability Reporting Standards (ESRS) mandated by the Corporate Sustainability Reporting Directive (CSRD) and answer the research question. The purpose of the study is to describe the main changes, challenges, and opportunities that have emerged with ESRS in the current sustainability reporting practices of the commissioning company. The structure, core topics, and requirements of the ESRS to be compared with the Global Reporting Initiative (GRI) used by the company. In addition, the study aims to identify the main strategic steps that contribute to the company's transition from one standard to another. In addition, the main benefits of ESRS for the company in question to be presented.

To control business impacts and improve sustainability reporting, the European Commission established the ESRS as an obligatory set of standards. The main goal of the new European Sustainability reporting standards is to enhance comparability and transparency in the sustainability reporting field from the year 2025. Over the past years, many companies have started to publish voluntary sustainability reports to reveal their environmental, social, and governance (ESG) performance. However, a lot of businesses have only used sustainability reports to present the positive aspects of their operations and have avoided addressing the negative ones. Consequently, companies often misrepresent their sustainability impacts, which leads to greenwashing. In the future, companies, such as the case company, will be required rather than encouraged to publish well-structured ESRS sustainability reports with requested information. The company might face several challenges, which include stringent reporting requirements and difficulties in data collection. Together with challenges, there are also upcoming opportunities. These include increasing accountability, engagement in different areas of sustainability, benchmarking, and the possibility of global expansion.

In order to answer the stated research question, the author focused on analyzing standards, related articles, and consultant publications, and conducting semi-structured interviews with specialists in the reporting field. The results of the analysis and interviews indicate that GRI may serve as a suitable stepping stone in the transition to ESRS, as 58% of the requirements are similar to ESRS. However, the affected company needs to prioritize early engagement to successfully shift to ESRS. Senior management involvement and a focus on data collection with double materiality assessments are essential first steps. In addition, to be able to report on time, it is crucial for a company to understand the importance of this topic and to invest resources in this area. By adopting these steps together with suitable strategies, businesses can navigate the complexities of ESRS reporting, and strengthen their internal and external collaboration and capabilities. Moreover, the implementation of ESRS not only promotes accountability and transparency among stakeholders but also lays the foundation for a more resilient and sustainable future in the business sector.

This thesis was commissioned by Sustera, previously called Raksystems, Green Building Services.

Keywords Sustainability Reporting, European Regulations, Sustainability Development, ESRS, GRI, European Commission, Novel Regulations

Pages 70 pages and appendices 26 pages

Content

Figures and tables

Appendices

Abbreviations

CDP	Carbon Disclosure Project
CSRD	Corporate Sustainability Reporting Directive
EFRAG	European Financial Reporting Advisory Group
ESG	Environmental, Social, Governance
ESRS	European Sustainability Reporting Standards
GRI	Global Reporting Initiative
IASB	International Accounting Standards Board
ISSB	International Sustainability Standards Board
IIRC	Integrated Reporting Council
NFRD	Non-Financial Reporting Directive
OECD	Organisation for Economic Co-operation and Development
SASB	the U.S. Sustainability Accounting Standards Board
SFDR	Sustainable Finance Disclosure Regulation
SFAP	The Sustainable Finance Action Plan
SME	Small and Medium-sized Enterprises
TCFD	Task Force for Climate Reporting Disclosure
UNGP	UN Guiding Principles

1 Introduction

1.1 Research Background

Over the last few years, many European businesses have been pushed to make their operations more sustainable. Companies were expected to take environmental, social, and governance (ESG), now to be called ESG considerations, into account in their operations and when making long-term decisions. The most influential initiatives to tackle sustainable development and improve business impacts were the European Green Action Plan and the EU Sustainable Finance Action Plan adopted by the European Commission. The Green Deal, which came into force in December 2019, is a fundamental strategy that sets out highly ambitious sustainable development goals to be achieved by 2050. The main objectives of the European Green Deal included transforming the countries of the European Union into innovative and competitive economic areas. Moreover, the goal of the Green Deal was and remains to achieve zero greenhouse gas emissions and eliminate any waste of resources. Furthermore, a notable step forward in sustainable business operations, especially sustainable finances was the establishment of the EU Sustainable Finance Action Plan. It was primarily driven by the goal of navigating finance towards sustainable investments and incorporating sustainability principles into the financial structure and was established in 2018. (European Commission, 2018; European Commission, 2024b)

Soon after voluntary sustainability reporting standards were created. They were established in order to provide a needed framework for organizations to transparently represent their ESG considerations as well as provide information for stakeholders. It was essential for companies to provide stakeholders with assess to the company’s sustainability impacts and sustainable progress in operational practices. These standards were meant to increase business accountability, enable informed decision-making, and build trust between investors and society in general. However, until the year 2023, the majority of these were optional and did not place any legal obligations on corporations to follow them. Moreover, even though a number of companies have begun to include sustainability reports, more attention has continued to be focused primarily on profitability rather than sustainability dilemmas. Companies also were able to chose what information would be added to their sustainability report and what would not, as the reporting guidelines were wide and flexible. (Dinh et al., 2021)

To increase transparency, improve comparability, and promote sustainability reporting across companies operating within Europe the novel European Sustainability Reporting Standards (ESRS) under the Corporate Sustainability Reporting Directive (CSRD - Directive (EU) 2022/2464) were established. Developed European Sustainability Reporting Standards (ESRS) and Corporate Sustainability Reporting Directive (CSRD), hereafter to be referred to as ESRS and CSRS. Starting next year, many European enterprises will be required to record and report the environmental, social, operational, and supply chain impacts of their activities in their compulsory sustainability reports. (European Commission, 2023a; European Commission, 2024b)

Today, most companies affected by regulation, regardless of whether they have previously published similar reports, are struggling to comprehend what changes this directive and standard will bring to their practices and reporting habits. While the introduction of the new standards represents a significant step forward, it also creates pressure and new responsibilities for affected companies that need to be addressed properly. A new and mandatory set of standards will have a huge impact on what companies report and how they address existing sustainability challenges.

1.2 Mandatory Sustainability Reporting: The Importance of the Shift

Adopting new sustainability regulations and achieving transparency through sustainability reporting are now important steps for many European companies. There are several reasons why these steps are important. First, in the past, the actual influence of the companies often did not match their claims. The company’s statements often emphasized only the positive factors of sustainable business development. Since only the beneficial aspects of the information presented were emphasized and the negative ones remained hidden, the information provided in sustainability reports was not completely truthful. As a result of providing an incomplete picture and inaccurate data, an in-depth study of companies' overall sustainability impact has become impossible. (Moodaley & Telukdarie, 2023)

Additional goals of the new ESRS standards are to increase transparency in business transactions and mitigate the effects of greenwashing. According to the United Nations (n.d.), greenwashing is the act of spreading inaccurate information about the environmental effects of sustainability or deceiving the public by falsely claiming that a company is significantly more environmentally conscious than it actually is (United Nations, n.d.). The neglect of a realistic picture of the businesses' operational impacts and greenwashing has led to a situation where sustainability reporting had to become well-structured and mandatory under European law. (European Commission, 2024a)

Also, although many companies have provided sustainability reports, these standards were done according to various frameworks. As a result of differences, it was difficult to find correlations in the reports regarding companies' impacts, as well as compare them. It happened because each reporting system had slightly different topics and guidelines. The lack of uniform mandatory sustainability reporting standards and too many reporting systems made it difficult to assess the quality and accuracy of reports, as well as compare the real impacts of different companies.

In order to improve the situation in Europe and address various challenges related to sustainable practices in companies, significant focus was given to the creation of novel sustainability reporting standards (United Nations, n.d.). Key goals of new standards were to simplify reporting procedures, reduce clutter and confusion in this area, as well as monitor sustainable operations and practices within the business sector. The creation and adaptation of mandatory sustainability reporting standards can be outlined as important steps to stop greenwashing while increasing fairness and transparency in the European economic sector. (Dinh, et al., 2021; European Commission, 2024a)

The novel standards intend to offer a strong foundation for assessing the real values of corporations and assist in differentiating sustainable organizations from those claiming to be devoted to sustainability. In the future, due to the standards, companies cannot intentionally highlight their strengths without acknowledging their weaknesses. In addition, the collection of all necessary information for the publication of sustainability reports is expected to lead to significant improvements in the environmental and social impacts of the companies. These include, for example, improved well-being of workers and reduced greenhouse gas (GHG) emissions, to be called GHG later in the study. Hence, the benefits of implementing a new mandatory ESRS, both for the environment and for society, are clear. (Dinh, et al., 2021)

It is worth noting that the transition to sustainable development must be carried out not only in accordance with the regulations being developed but also in taking into account the needs of all stakeholders involved. All concerned stakeholders and clients should have the ability to obtain knowledge regarding the environment, ethical business practices, corporate social responsibility, as well as other aspects involved in business operations. (European Commission, 2011)

The author of this study aims to examine the ESRS and find out what makes novel standards different from the previous sustainability reporting initiative used by the company in question. The study also outlines some potential benefits and challenges of transitioning from previously used voluntary Global Reporting Initiative (GRI) sustainability reporting standards, to be called GRI further, to the ESRS. Besides, this report aims to contribute to the knowledge of sustainable business practices of the case company.

1.3 Case Company and Sustainability Reporting

The commissioning company Sustera, previously called Raksysems, was established in 1989 and aims to be one of the leading property wellbeing expert groups in Scandinavia. The business operates in Europe and employs more than 600 experts within Finland and Sweden. The company to be called a case company further focuses mainly on environmental services, green buildings, property evaluations, inspections, certifications, consulting, planning, and project management. The case company wants to be a future-oriented, proactive business that is ready for any changes that may come in the future. Furthermore, the company is interested in becoming more prepared in terms of sustainability reporting and business practices. (Raksystems, n.d.; Raksystems Group, 2022)

The case company aims to ensure that its sustainability efforts meet the wishes and expectations of stakeholders by engaging with them and receiving feedback via surveys and workshops. The organization does not accept greenwashing and is aiming to be as transparent as possible in its operations. In addition, the case company has a collaborative approach that allows the case company to discover areas for possible improvement and put in force effective sustainability measures where needed. (Raksystems, n.d.; Raksystems Group, 2022)

The case company wants to integrate sustainability in all operations from green buildings to project management. The company, to be called further on as case company aims to integrate sustainability into the strategy of their business. The commitment is already visible in the company's core values and long-term goals. Moreover, the case company acknowledges its obligation to promote sustainable development internally and externally and tries to do so. It is familiar with the significance of clarity and accountability in its operations and representation of it in sustainability reports. The published sustainability report outlines the main sustainability-related goals for the coming years and the company's focus areas. These focus areas include three primary topics, the well-being of property, people, and the environment. Worth noting that the published sustainability report was done based on the materiality assessment. This year, the case company will update its sustainability report in compliance with the Global Reporting Initiative, to be referred to as GRI later on. The company plans to release a report based on ESRS the following year. (Raksystems, n.d.; Raksystems Group, 2022)

In addition, the author extends sincere appreciation to Marika Riikonen, the commissioner from the case company, for invaluable guidance and assistance during the entire thesis development process. Marika's insights and contributions have been truly appreciated and will be remembered with great respect and gratitude.

1.4 Research Question and Objectives

The purpose of this study is to take a closer look at the new mandatory ESRS and explore what changes the new standards might bring to the current sustainability reporting practices of the case company. The thesis's main research question is how the implementation of the ESRS will impact the case company's sustainability reporting practices in the coming years, as well as what changes, challenges, and opportunities may arise.

The main objective of this thesis is to learn more about ESRS and study how novel ESRS is going to affect the case company's current sustainability reporting practices and the implications in the future. Firstly, the study will provide a brief overview of the case company's historical sustainability reporting approach. Secondly, the thesis aims to present the structure of the ESRS and GRI reporting standards. Thirdly, the author is going to analyze and compare these standards. The main similarities and differences between the mentioned sustainability reporting frameworks will be presented. Fourth, semi-structured interviews to be conducted with sustainability experts in the field in the spring. Lastly, according to the gathered data, analysis, and interview outcomes, the study aims to outline the main changes and potentially impacted areas of adopting ESRS on the case company's reporting practices. The study will also provide a brief outline of potential challenges and opportunities. The thesis is to take a closer look at the novel ESRS and provide general navigation to ease the case company's transition to it.

2 Theoretical Framework

2.1 Literature Review

This chapter provides a review of the literature used by the author to examine the ESRS and GRI sustainability reporting standards. The author began the study by examining the currently existing drafts and sustainability reporting standards in question. Particular emphasis was placed on the first set of ESRS and GRI Standards. The main sources of information used in the study are mentioned include standards, relevant articles of professionals, journals of consultants and experts, books, and Q&A publications.

At the beginning of the research, only the draft version of ESRS adopted to complement CSRD2022/2464/EU was reviewed. The first set of ESRS was still under development during the beginning of the study process. The first set of standards published in July 2023 provided the author with an understanding of the main goals of the standards itself. In addition, the review of the document in question gave a comprehension of how the European Union aims to shift the economics to be more sustainable via a mandatory and well-organized set of rules for businesses operating within the European Union. In addition, many publicly available articles, publications, and Q&A from the European Commission webpage were reviewed and analyzed to get a better understanding of the novelty behind ESRS. The information published by the European Commission was very valuable and was used as a basis for the study. Relevant European laws, standards, directives, and major steps taken by the European Union to promote sustainability were found there. (European Commission, 2023a; European Commission, 2023c; European Commission, 2023d)

Moreover, to be able to compare the new mandatory European standard in question with the voluntary GRI, it was necessary to understand the GRI itself. The author aimed to understand the structure and main requirements of the GRI initiative and reviewed several publications. Most relevant publications reflecting the GRI initiative are going to be presented below. The GRI study, “A Brief Introduction to the GRI Standards”, was reviewed as it provided an overview of the structure, an explanation of the standards, and guidance regarding the implementation. It provided a solid base for the investigation and helped to obtain valuable information and needed data for standards comparison. Another publication reviewed was “The Past, Present, and Future of the Global Reporting Initiative: Critical Reflections and the Research Agenda on Sustainability Reporting” by Charles de Villiers, Matteo La Torre and Matteo Molinari (2022). The purpose of the publication was to evaluate the development of sustainability reporting practices of GRI. The study provided the author with the study of the initiative's achievements and outlined its place within sustainability reporting practices. Valuable insights were provided on the history and development of the GRI sustainability reporting framework by analyzing the influence of the past. The authors took into account the perspectives of the past, present, and future, however, the future of the GRI might change its direction within Europe due to the novel and mandatory ESRS. (GRI, n.d.)

In addition, the European Financial Reporting Advisory Group (EFRAG) guidelines and reports, as well as Q&A publications, were taken into account. To find similarities and differences between standards “the ESRS-GRI Interoperability Index“ tool, published by EFRAG and GRI, was analyzed. The tool describes the main changes and similarities between both standards in question and gives a solid base for the research. The index also reflects the joint efforts of GRI and EFRAG to provide connectivity and comparability between ESRS and GRI standards. The tool was analyzed and the information found from the study was used for comparison. (European Commission, 2023b; EFRAG & GRI, 2023)

To further understand the structure and main aspects of the new sustainability reporting ESRS, many articles written by experts from consulting companies were analyzed. These include Deloitte, KPMG, EY, Shift, Sunhat, and others. A review of these articles and their analysis helped shed light on the complexities and features of ESRS implementation. Some also offer recommendations for the gradual implementation of new sustainability reporting standards. For example, Deloitte's publication "Sustainability Reporting Strategy: Creating Impact Through Transparency" provided insights on sustainability reporting that were taken into consideration by the author (Deloitte, 2020). In addition, KPMG experts and their publications such as “Comparing Sustainability Reporting Requirements” and “First Set of ESRS Released,” which promote an understanding of the uniqueness and applicability of the ESRS, have provided an overview of this topic (KPMG, 2024; Vaessen, 2023). The EY experts have published a valuable article on the development of sustainability within the European Union, which provides information on the ESRS sustainability reporting requirements and its impact on business (EY, 2023). The article was used to study the impacts and look at the regulation from the exåertäs perspective. The series "Putting the ESRS into Practice" published by Shift specialists in August 2023, has practical guidance for implementing ESRS from a societal perspective. These series, published by Shift, contributed research with practical recommendations for implementing ESRS from a societal perspective and helped to delve into ESRS even more. The seven-part series, written for both company insiders and consultants, aims not only to provide guidance that gives clear interpretation but also to promote the effective application of novel standards. In addition, these publications were made to ensure high-quality sustainability reporting and aim to contribute to the easier shift to ESRS. (Shift, 2023a; Shift, 2023b;Shift, 2023c; Shift, 2023d; Shift, 2023e).

Overall, the literature review provided an in-depth knowledge of the ESRS and GRI sustainability reporting standards, with a particular focus on the novelties of ESRS standards. It should be noted that while this study outlines many aspects of ESRS implementation and information about the transition from GRI to ESRS, the data available for the study was limited due to the newness of the standards. ESRS was adopted only in July 2023 and published on 22 December 2023. Furthermore, the knowledge of the changes in sustainability practices within Europe and the literature has been limited at the beginning of the investigation due to the huge scope and coverage of the new Standards. The ESRS-GRI Interoperability Index appeared to be very useful for the study and analysis of how and where GRI and ESRS frameworks are in contact. It should be noted that the draft version of ESRS was used at the beginning of the study.

2.2 Societal, Regulatory, and Ecological Trends

The case company is influenced by many social, regulatory, and environmental trends that impact its long-term goals and values. This chapter discusses the most important trends currently affecting the case company and how the trends reflect changing environmental and sustainability regulations, as well as the constantly shifting demands of stakeholders.

Firstly, changes in local and European standards should be taken into account. Particularly the introduction of the ESRS demands companies like Case Company to adopt new reporting practices. Also, compliance with new requirements is crucial to avoid penalties and maintain stakeholder trust. (European Commission, 2023)

Secondly, the alignment with sustainable development goals (SDGs) is an important ecological and societal trend that reflects growing awareness. Sustainability within the business environment should have a greater degree of focus on SDGs. (Goswami et al, 2023) Collaboration with the United Nations' Sustainable Development Goals (SDGs) presented in the current sustainability report of the case company outlines its commitment to tackle worldwide dilemmas and challenges like climate change and sustainable urban development. (The Raksystems Group, 2022; United Nations, 2023b, see also United Nations, 2023a).

Thirdly, The Global Environment Outlook highlights key environmental trends driving the necessity for sustainability reporting. These include GHG emissions, market shifts toward low-carbon products, severe weather events, and land conversion. Addressing these trends is going to be important for the case company's sustainability reporting framework. (The UN Environment Programme, 2019)

Fourthly, the integration of Corporate Social Responsibility (CSR) initiatives, further to be called as CSR, and ESG factors is the next notable trend. Integration of them into the daily operations of the business is essential to maintain the company’s reputation. This not only boosts sustainability performance but also attracts investors, and mitigates risks. (Wharton & ESG Initiative, 2023)

Fifthly, the next trend is a renewed the focus on double materiality of the ESRS. It outlines the importance of addressing issues relevant to both business operations and long-term value creation. This trend highlights that by focusing on what truly matters, companies like Case Company can enhance their transparency, ESG performance, and long-term success. (Klein et al., n.d.)

Lastly, an important social trend is changing expectations of stakeholders leading to requests for transparency. Stakeholders, including various investors, employees, customers, and communities, now demand greater commitment to sustainable development from the companies they engage with. Also, the value of transparency and disclosure regarding the societal, environmental, and other impacts of business practices is becoming the most important. (Fung, 2014)

2.3 Background of Sustainability Reporting Practices

Thus far, most of the non-financial information that has been provided in reporting was not mandatory. Moreover, corporate social responsibility (CSR), was only officially required in a limited number of standards and settings (Dinh, et al., 2021). According to the European Union Law, “Corporate social responsibility refers to businesses taking responsibility for their behavior and its impact on society. This can include employment conditions and labor standards, freedom of association, well-being at work, non-discrimination and gender balance, stakeholder engagement, human rights, preventing environmental harm, reducing emissions and pollution, and eliminating bribery and corruption (European Union Law, n.d.).”

This means that in the past, companies often were not required to report non-financial information. This information includes data on how environmentally friendly their operations are or what social projects they're involved in. Even though many companies presented information about their CSR activities, it often happened because they wanted to, not because they had to follow rules or laws. Regarding sustainability reporting, they often cover several topics, such as how a company impacts the environment, what they are doing to assist society, and how they're being managed. Sometimes, certain places or industries might have requirements saying that a company must report on some of these topics, but those rules might not cover everything related to CSR. In other words, companies had the opportunity to choose what non-financial data they wanted to share in their reports. This lets them show off how committed they are to being sustainable and socially responsible, even if they are not legally obligated to. It also meant that some companies were not sharing as much as others, which made comparing them difficult. With a voluntary reporting framework, it was for each company to decide what to share based on their assumption of important subjects, what their stakeholders expect, and what's expected in their industry. (European Union Law, n.d.).

The United Nations Environment Programme (2019) was created in June 1972 and is in charge of coordinating how the UN system responds to environmental problems. It stated that the use of non-financial sustainability reporting frameworks encourages businesses to think about their interactions with society and the environment more. Novel Regulation is going to oblige companies to reveal to stakeholders their full sustainability performance information in a manner that is more transparent. (Goswami et al, 2023; United Nations Environment Programme,2019; see also United Nations Environment Programme, n.d.)

From the year 2018, an exceptional in a way European Non-financial Reporting Directive (Directive 2014/95/EU), further to be called NFRD has been adopted, also presented in Appendix 1. This directive is an amendment to the Accounting Directive (Directive 2013/34/EU). This directive is unique away since it requires European businesses and organizations to share their social and environmental metrics and conditions. Companies with 500 or more employees were required by Directive to publish annual reports containing non-financial information on a "comply or explain" basis (Goswami et al, 2023). This directive's main purpose was to increase corporate transparency as well as sustainability reporting, making it easier for stakeholders, such as investors and others, to assess and monitor an organization's ESG performance. (Hahnkamper-Vandenbulcke, 2021; Dinh et al., 2021). The positive impact of the NFRD directive on sustainable development, as well as a noticeable increase in proactive action among larger companies, were outlined, leading to the additional proposal of the CSRD in 2021. (Dinh et al., 2021; Hák et al., 2016)

According to Goswami (2023), the increasing number of non-financial reporting methods and standards has led to a shift in the way corporate responsibility is seen in terms of incorporating and dealing with sustainability challenges in a company. This increased regulatory attention within Europe to the disclosure of non-financial information led to the development of several sustainability reporting frameworks. Increased attention to environmental factors, such as climate change and the shift of sustainability accounting from impact assessment to risk identification have been important factors that have accelerated the establishment of these sustainability reporting frameworks. (Goswami et al, 2023).

As defined by Deloitte (2020), sustainability reporting, also known as corporate sustainability reporting, can be described as the process of measuring, disclosing, and communicating an organization's economic and ESRS performance. One of the reasons why a variety of sustainable reporting models have been made in recent years is the need to make communication of the ESG performance of organizations more transparent. (Dinh, et al., 2021). Some of the most known established sustainability reporting frameworks are GRI, the Carbon Disclosure Project (CDP), the International Sustainability Standards Board (ISSB), the International Accounting Standards Board (IASB), the U.S. Sustainability Accounting Standards Board (SASB), and the Integrated Reporting Council (IIRC). Previously, the case company chose the GRI initiative for sustainability reporting guidance since it is a well-known voluntary reporting method, and only this initiative will be taken into account and compared in the study. (Goswami et al, 2023; Deloitte, 2020)

GRI is a credible initiative because it aims for a sustainable future achieved through open communication, impact assessment, and transparency (Goswami et al, 2023). The goal of GRI is to support companies in measuring, publishing, and releasing their sustainability performance. GRI offers a thorough set of standards and guidelines for sustainability reporting and was established in 1997 (Sweden Sverige, 2020). However, GRI has not been able to inspire all companies to publish sustainability reports since it is not a mandatory framework. As the GRI is non-compliant, it is challenging to ensure full accountability of all businesses. (Sweden Sverige, 2020; Goswami et al, 2023)

According to the European Commission, European Union legislation requires large and listed companies to disclose how they are affected by social and environmental issues, thereby helping stakeholders evaluate their sustainability efforts. The CSRD, which went into effect on January 5, 2023, as part of the European Green Deal, is going to strengthen these laws. (EY,2023). It aims to extend reporting obligations to more companies, including some non-European firms that are active in the European market. This directive has several main objectives. CSRD requires the provision of sustainability information and introduces a digital taxonomy of sustainability data (EY, 2023). The first goal is to provide stakeholders with the needed information to assess companies' sustainability impacts and financial risks associated with sustainability. The second goal is to reduce reporting costs through standardization. Affected companies must also follow the European Sustainability Reporting Standards ESRS. The CSRD directive aims to expand the scope of current regulations and requires a great number of businesses to disclose their data and actions regarding sustainable development. Reporting on sustainability has the potential to assist significantly in controlling and promoting sustainability within the business sector. (EY, 2023; Dinh et al., 2021)

NFRD, CSRD, and ESRS are amendments to the Accounting Directive. ESRS is intended to complement and support the Accounting Directive 2013/34/EU. Aspects from the CSRD have been integrated into the updated Accounting Directive, which controls the financial reporting requirements for businesses. In connection with this, the ESRS legislation contributes to the previous directives by introducing obligatory standards and requirements that are unique to sustainability reporting. (EY, 2023)

ESRS was put together by the independent advisory body - European Financial Reporting Advisory Group, later called EFRAG, and published in December 2023. Preliminary drafts for the first set of ESRS were released by EFRAG in April 2022. A public consultation continued until August 2022. In November 2022, EFRAG finalized the ESRS after taking stakeholder feedback into account. To minimize the administrative load, reporting requirements have been substantially lowered. Following consultations with Member States and other bodies of the European Union, the European Commission modified the standards to ensure their ease of application and fairness. On June 9, 2023, the revised draft of the standards was released, and 4 weeks after were adopted in June 2023 and published in December 2023 after the scrutiny period. These sustainability reporting standards were developed to contribute to global standardization efforts. (Register of delegated and implementing acts, n.d.; EY, 2023; European Commission 2023f)

ESRS promotes the necessity of transparent reporting on sustainability issues together with the company's implications for both the environment and society. To evaluate each organization's performance and provide readers with in-depth knowledge concerning their impacts, ESRS established obligations for many listed companies to disclose well-structured sustainability reports in compliance with the guidelines. Noteworthy, the GRI standard served as the foundation for the new European standard. (Goswami et al, 2023; European Commission, 2023b)

Many companies that operate inside the European Union find themselves pushed to prepare sustainability reports and reveal requested data by recent regulations (Goswami et al, 2023). The thesis will look at novel ESRS published in 2023 together with GRI. The case company currently uses the GRI standard and intends to transition to ESRS beginning in 2025, as it meets its reporting requirements. Considering this goal, it is essential to look into the differences between GRI and the new ESRS standards. The results of this study are going to assist in simplifying the transition and optimizing the sustainability report documentation. To better understand the regulatory characteristics affecting the case company, the study focuses not only on a theoretical comparison of the GRI and ESRS reporting standards but also on information gathered through semi-structured interviews. (Goswami et al, 2023)

2.4 Importance of Mandatory Sustainability Reporting

Sustainability reporting is an important tool since it allows businesses to highlight the importance of sustainability issues as well as control the business sector's footprint. The main idea behind the novel sustainability standard was to broaden the scope of existing directives and include a wider range of companies in reporting their data and actions on sustainable development. According to the study of the European Parlament, new and improved sustainability reporting regulations have been mandated to reduce earlier mentioned greenwashing while increasing transparency and equity. Proper sustainability reporting policies may result in significant improvements in environmental or social conditions, such as increased employee well-being and reduced GHG emissions. (Dinh, et al., 2021; Directorate-General for Financial Stability, Financial Services and Capital Markets Union, 2023)

In addition, the information in sustainability reports could affect the choices that people who are affected will make in the future. For instance, it can mean the data that can tell us what will happen in the future or confirm what happened in the past (EY, 2023). Moreover, the firms can satisfy the green deal objective and attain sustainable finance by complying with the criteria. (EY, 2023; Dinh, et al., 2021; Directorate-General for Financial Stability, Financial Services and Capital Markets Union, 2023)

2.5 Overview of the GRI Standards

GRI is a widely acknowledged sustainability reporting initiative and is utilized by companies worldwide as a trustworthy framework and guideline in the developing field of sustainability reporting. The GRI is an independent international organization established in 1997 with the help of the Coalition for Environmentally Responsible Economies, an American non-governmental organization, and the United Nations Environment Programme. Initially, its main purpose was to establish the first structured guide to hold organizations accountable for meeting environmental standards. This mission has evolved over time to include a broader scope, including reporting guidelines and standards that also address social, economic, and governance issues. The development of GRI is illustrated in Figure 1. The very first guidelines from the GRI were released in 2000, and the first GRI standards were published in 2016. (GRI, n.d, De Villiers et al., 2022; United Nations Environment Programme,2019)

Figure 1. Timeline of the GRI development. (De Villiers et al., 2022)

Aiming to improve decision-making in the fields of economic, environmental, and social performance, GRI puts a primary focus on collaboration with many different groups of stakeholders. According to a case study on the blended reporting phenomenon, the GRI standard is built around four core components, which are (1) management approach, (2) economic performance, (3) environmental performance, and (4) social performance (Goswami et al, 2023). To comply with GRI, businesses are required to demonstrate their influence and impact along the value chain. Under the GRI, the organization is considered to be financially significant if the activities have the potential to influence sustainable development in either positive or negative ways both in the short and long term. (Goswami et al, 2023)

2.6 Structure of the GRI Standards

The Global Reporting Initiative, now called GRI is a globally recognized and autonomous standard that assists corporations, governments, and other entities in comprehending and reporting their influence on critical matters that include climate change, corruption, and human rights. The GRI initiative includes several disclosures that establish a clear and well-structured framework for businesses. The framework guides how to present information that is up to date regarding the activities of the organization and the impact they have. Disclosures include both recommendations that suggest but do not enforce compliance with information or actions, and compliance with information or actions. In addition, the standards offer guidance, that consists of some background information, explanations, and examples that illustrate the points. (Goswami et al, 2023; see also GRI, n.d.)

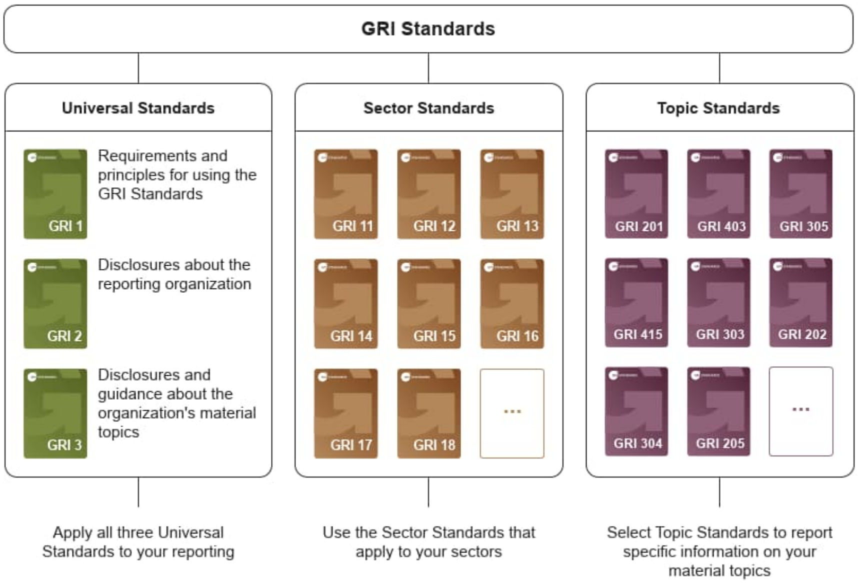

Figure 2. GRI standards. (GRI, n.d.)

The GRI standards can be described a modular system that consists of three series of Standards. The GRI Universal Standards, the GRI Sector Standards, and the GRI Topic Standards are the three components that form the GRI. An explanation of how to use each series of the GRI Standards is provided at the beginning of each series. The modular system of the standard is presented in Figure 2 and explained in the following sub-sections. (GRI, n.d.)

2.6.1 The GRI Universal Standards

As mentioned before, the GRI Universal Standards are divided into three individual series of standards: GRI 1 Foundation 2021, GRI 2 General Disclosures 2021, and GRI 3 Material Topics 2021. Each of these independent standards can be applied to all businesses. (GRI, n.d.)

The aim of the GRI Standards is defined in GRI 1 Foundation 2021, which also offers clarification on important concepts and provides direction on how to use and apply the standards. Basically, it lays forth the conditions that companies have to fulfill in order to report in accordance with the GRI Standards. Furthermore, it highlights fundamental characteristics that are essential for producing reporting of excellent standards, including accuracy, balance, and the need for verifiability. (GRI, n.d.)

The GRI 2 General Disclosures 2021 standard covers details concerning the structure of an organization, such as its reporting procedures, activities, workforce, governance, strategy, policies, practices, and stakeholder involvement. Insights regarding the characteristics, size, and context of the organization provided by these disclosures help to comprehend its impacts. (GRI, n.d.)

In the GRI 3 Material Topics 2021 standard, processes that companies need to employ when selecting the most critical problems to be outlined. These topics are generally referred to as material topics. In addition, it describes how the “GRI Sector Standards” are used to make this decision. This particular standard includes disclosures to report the organization's list of material topics, the processes for identifying those topics, and the manner in which each material topic is tracked. (GRI, n.d.)

2.6.2 The GRI Sector Standards

Sector Standards include forty different standards. These standards are designed to assist companies with identifying potential industry-specific material topics and the disclosure requirements that are related to them. When reporting in accordance with the GRI Standards, businesses are required to employ only those Sector Standards to the extent that they are applicable to the sector in which the company operates. Each Sector Standard gives an overview of the characteristics of the sector, describes significant material concepts, highlights impacts that are specific to the sector, and specifies the disclosures that are necessary for reporting. (GRI, n.d.)

2.6.3 The GRI Topic Standards

The GRI Topic Standards are made up of over 30 separate standards that specify the disclosures that must be included when reporting information about various issues. This includes disclosures about quite many different topics, among which are waste, health, and safety at work, and taxes. A brief introduction to the topic, certain details in the form of disclosures, and instructions for addressing any consequences that are associated with the topic are all provided in each Topic Standard. To fulfill the reporting requirements, organizations select the Topic Standards that correspond with the material topics that they have specified and employ them for their reporting needs. (GRI, n.d.)

2.7 Overview of the ESRS

Adopting the ESRS as part of the CSRD framework was a huge step forward for corporate sustainability reporting practices. ESRS standards were formulated based on technical recommendations and a draft version of the standards from EFRAG, which is an autonomous advisory group primarily funded by the European Union. EFRAG engaged different stakeholders, including investors, companies, auditors, civil society, academia, and national standards bodies, to develop draft standards, which were submitted to the Commission in November 2022 following a public consultation, please see Appendix 1 for the figures of the ESRS landscape and collaboration. (Register of delegated and implementing acts, n.d.; Fenkstatt, 2023; see also European Commission, 2023g)

Before publishing the proposed final ESRS and soliciting public feedback in accordance with the Better Regulation Guidelines, the European Commission, as mandated by the

Accounting Directive, conducted additional consultations with Member States and other EU bodies. This included the European Supervisory Authorities and the European Environment Agency. The European Commission formally adopted the ESRS on July 31 2023, and published them on 11 December 2023 after a 2-month scrutiny period. (Register of delegated and implementing acts, n.d.; Fenkstatt, 2023; see also European Commission, 2023g)

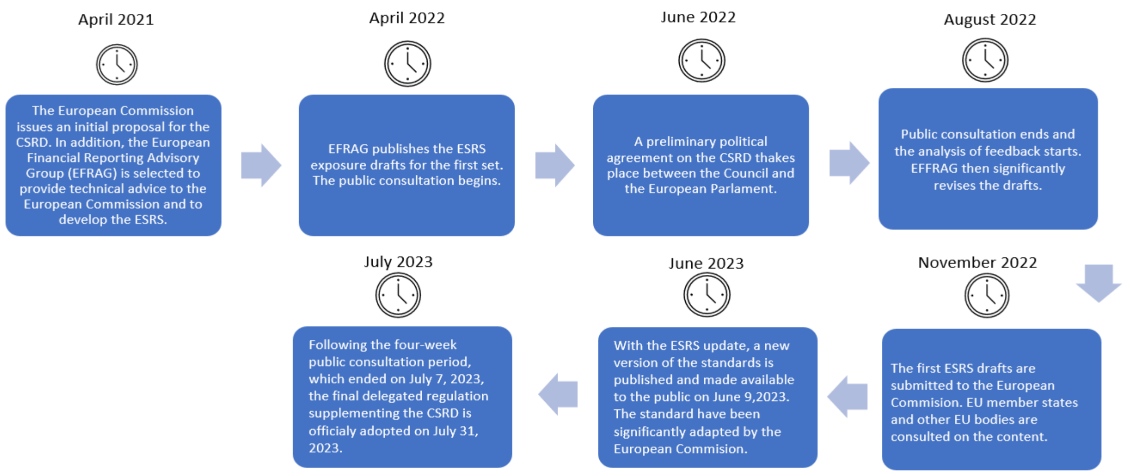

Figure 3. Development of the ESRS standards.

The development process of the ESRS is presented in the figure 3. (Register of delegated and implementing acts, n.d.; Fenkstatt, 2023; see also European Commission, 2023g)

2.8 Structure of the ESRS Standards

ESRS stands for Environmental, Social, and Governance Reporting Standards. These standards are separated into groups, and each one has its own number. Each standard categorizes a variety of aspects that are crucial to maintaining social and environmental commitment through business operations (Fenkstatt, 2023). The structure of the ESRS standards is presented in the following chapter. The first set of the ESRS consists of 12 standards, please see Figure 4. These standards are under one of 3 categories of standards, which include:

(1) Cross-cutting,
(2) Topical, which are Environmental, Social and Governance Standards,
(3) and Sector-specific. (European Commission, 2023d)

These standards' purpose is to take into consideration ESG matters. In the future, an additional set of reporting standards is going to be created to cover the reporting needs of third-country entities with a main focus on sustainability reporting at the group level for non-European parent companies. (EY, 2023; European Commission, 2023d)

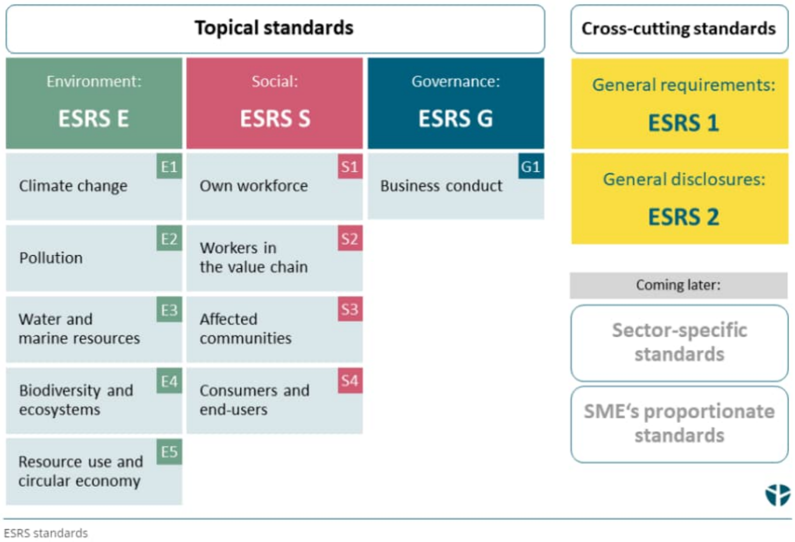

Figure 4. Structure of ESRS Standards. (Fenkstatt, 2023)

The first set of ESRS's general design is built on the following framework of four main reporting areas and aims to display sustainability data in an understandable manner.

These reporting areas are outlined in the ESRS 2, Disclosure requirement and should include outlined topics:
(1) Strategy;
(2) Governance;
(3) Impact Management;
(4) Metrics and Objectives.

The first topic should cover how the project's (1) strategy and business model affect its material impacts, as well as risks, and opportunities. In addition, the information on future plans and how to deal with them. The second topic, (2) governance, must include the processes, controls, and procedures utilized for monitoring, managing, and supervising opportunities, risks, and impacts of the company. The third topic (3) should cover impacts, risks, and opportunities in management which refers to the steps taken by a business to determine the nature and scope of potential effects, risks, and opportunities. Also, the implementation of the policies and related procedures to address any sustainability concerns that may arise should be outlined. The topic number (4) should outline how the business evaluates its objectives and targets and the company's success. Please, see Figure 5 below. These areas include the procedures, controls, and strategies that businesses use to monitor, manage, and direct their key impacts, risks and opportunities. The reporting framework also includes three main topical standards, presented in Figure 4 and listed below. (European Commission, 2023d; GX Newsletter, 2023)

Three main topical standards are:
(1) Environmental
(2) Social
(3) Governance. (European Commission, 2023d)

Cross-cutting and topical standards are included in the currently published ESRS standards and are shown in the table. Currently, ESRS only contains standards that are not specific to any industry. To comply with the ESRS, businesses must include in their sustainability reports the requested information specified in the standards. Sector-specific and small and medium-sized enterprises (SMEs), later to be called SMEs, proportionate standards will be published later and are currently under development. (European Commission, 2023d)

The first standard of ESRS "ESRS 1 - General Requirements" sets universal reporting principles, guiding companies on reporting standards. At the same time, the second standard "ESRS 2 - General Disclosures" aims to mandate specific disclosures to all companies within the CSRD scope. All other ESRS standards and their specific disclosure requirements demand a materiality assessment. (European Commission, 2023d)

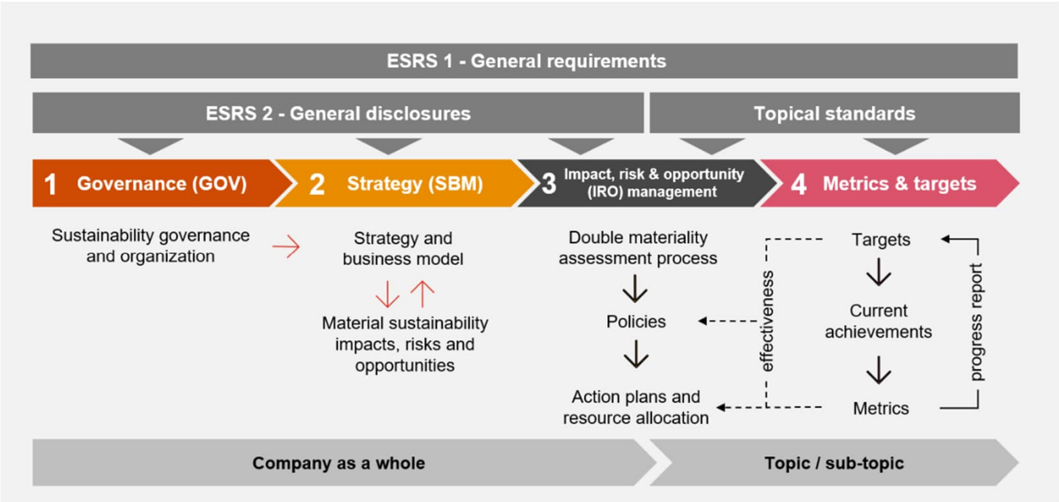

Figure 5. ESRS cross-cutting standards and 4 main topics. (GX Newsletter, 2023)

The materiality assessment applies to all standards outlined below except ESRS 1 and ESRS 2, as well as the specific disclosure obligations and data points included. Due to the materiality assessment, the business will only share information that is relevant to its business activities and may leave out information that is not relevant. Environmental E1 to E5 groups include climate change, pollution, water and marine resources, biodiversity and ecosystems, and resource use and circular economy subjects. Social responsibilities comprise the S1-S4 groups; and lastly, ESRS considers the G1 group - business conduct under governance. The utilization of these topics and categories provides corporations with a methodical structure through which they can disclose their environmental footprint, social involvement, and governance protocols. As a result, sustainability reporting endeavors are more transparent and accountable. (European Commission, 2023d)

2.8.1 Cross-cutting Standards

Cross-cutting standards ESRS 1 and ESRS 2 apply to every aspect of sustainability reporting. A brief overview of the two cross-cutting standards is presented in the following section.

The ESRS 1 - General Requirements - establish comprehensive reporting principles that serve as a guide for organizations in their reporting operations. It consists of required principles that must be followed when developing and submitting sustainability statements under the CSRD. (European Commission, 2023e)

While the standard does not mandate particular report contents, it establishes the fundamental structure for the preparation of the report. In addition to establishing methods for data collection and delivery, it contains an array of reporting topics and requires the use of double materiality assessments for sustainability collection in all standards with the exception of ESRS 2. Following the principle of materiality assessment, the materiality assessment in ESRS 1 has an obvious parallel with the GRI, which also includes a materiality assessment at the core of its requirement. By supporting the identification and documentation of impacts, risks, and opportunities following specific ESRS criteria, it serves as a central tool within the CSRD. (European Commission, 2023e; Fenkstatt, 2023)

The ESRS 2 - General Disclosures - mandates specific disclosures applicable to all companies within the CSRD scope. The standard outlines fundamental characteristics and information, such as details, encompassing policies, measures, and objectives, mandating reporting irrespective of materiality assessment outcomes. Moreover, it specifies the framework and substance for the topical standards within ESRS. It organizes disclosure into 4 pillars, which include (1) governance, (2) strategy, and (3) managing impacts, risks, and opportunities together with (4) indicators and targets for specific topics. These four areas are represented by the Task Force for Climate Reporting Disclosure (TCFD) and earlier mentioned ISSB principles, and as a result, harmonize with established global sustainability reporting frameworks. TCFD is an international organization formed to develop a comprehensive framework of recommended climate-related disclosures. These disclosures are intended to enhance the understanding of investors, shareholders, and the general public on the financial risks associated with climate change. (European Commission, 2023c; Fenkstatt, 2023; Task Force on Climate-related Financial Disclosures. n.d.)

2.8.2 Topical Standards

The disclosure criteria for environmental, social, and governance aspects comprise the topical standards, which are intended to be applicable across different sectors. The objective of these sector-agnostic standards is to enhance comprehension of the methods by which an organization's impact, risks, and opportunities in various fields affect its value-creation capability. The ESRS 2 – General disclosures - defines the four areas in which these standards mandate the disclosure of information: governance; strategy; managing impacts, risks, and opportunities; and indicators and targets for specific topics. There are in total 10 topical standards which are environmental, social, and governance, presented separately below. (European Commission, 2023d; Fenkstatt, 2023)

2.8.3 Environmental Topical Standards

Companies are mandated by the Environmental Standards ESRS E1-E5 to report on a number of environmental topics, such as pollution, biodiversity, water and marine resources, climate change, ecosystems, and resource usage. These guidelines are also intended to assist organizations in comprehending an organization's targets as well as their capacity to adjust their business practices to ensure sustainability in the economy. On top of that, they emphasize how the business supports the environmental objectives outlined in the European Green Deal and other EU frameworks. The following is a summary of each of these standards. (European Commission, 2023d; EY, 2023)

The first outlined Environmental topic standard ESRS E1 - Climate Change - was designed to evaluate and disclose a company's involvement in and potential risks related to climate change. These potential risks include factors such as GHG emissions, efforts to reduce them, and strategies for adapting to the changing climate. Secondly, the corporation's impact on air, water, and soil pollution should be addressed with the next standard ESRS E2 - Pollution. It mainly highlights the company's commitment to reducing pollution levels through the implementation of sustainable practices and technologies. The Next Standard ESRS E3 - Water and Marine Resources - focuses on the company's water usage together with conservation efforts and impacts on marine ecosystems. This standard outlines very relevant issues related to water pollution and depletion. In addition, it aims to ensure responsible practices as well as minimize negative effects. Next, the company has to implement the ESRS E4 - Biodiversity and Ecosystem - standard in order to assess the company's impact on biodiversity, habitat destruction, and conservation efforts. The main objective of this standard is to mitigate any adverse impacts on ecosystems and species. Lastly, the Standard ESRS E5 - Resource Use and Circular Economy - emphasizes the importance of resource efficiency, waste reduction, recycling initiatives, and the transition towards a circular economy model that promotes the reuse and regeneration of resources. (European Commission, 2023d; Fenkstatt, 2023)

2.8.4 Social Topical Standards

Social Topical Standards ESRS S1-S4 were established by the ESRS as specific guidelines for organizations to report on various social aspects, including their workforce members of the communities affected by their operations, those involved in the value chains, and the final customers of their goods and services. (EY, 2023) An overview of these standards is provided below.

The Social ESRS S1 - Own Workforce - the standard was designed to address the company's policies and practices related to employee rights, workplace safety, diversity, and inclusion, as well as to employee well-being. The second social standard ESRS S2 - Workers in the Value Chain - examines the treatment and rights of workers throughout the company's supply chain, including labor conditions, fair salaries, and human rights. The Next Standard ESRS S3 - Affected Communities - looks at how the organization interacts with local communities, such as community development programs, stakeholder participation, and social impact assessments. The third standard named - ESRS S4 - Consumers and End-Users - is mainly concerned with consumer rights, product safety, quality, and transparency, especially in marketing and labeling. (European Commission, 2023d)

2.8.5 Governance Topical Standards

There is one governance topical standard ESRS G1, that was established to disclose regulations designed to improve stakeholders' comprehension of a company's strategy, approach, operations, processes, and outcomes regarding its business conduct (EY, 2023). This particular standard ESRS G1 - Business Conduct - covers many valuable topics, such as the company's governance structure, compliance with laws and regulations, anti-corruption efforts, ethical business practices, and transparency in decision-making processes. (European Commission, 2023c; EY, 2023)

2.9 Companies Affected by the ESRS

Currently, large and publicly traded companies are required by CSRD to publish detailed and well-structured sustainability reports according to ESRS starting in 2025. New standards require information and earlier unreleased sensitive data regarding the manner in which the company operates and its impacts. Especially impacts on social and environmental matters, as well as information about how the business affects people and biodiversity. (European Commission, 2023b; European Commission, 2023c)

With limited exclusions, the CSRD and ESRS apply to all big publicly traded and unlisted enterprises that fulfill a minimum of two of the specific parameters. One criterion is whether or not the company's balance sheet amount is more than €20 million; The second condition is whether the company's net turnover is more than €40 million. Third, whether the mean number of employees for the specified year exceeded 250. Please, see the summary Figure 6 below:

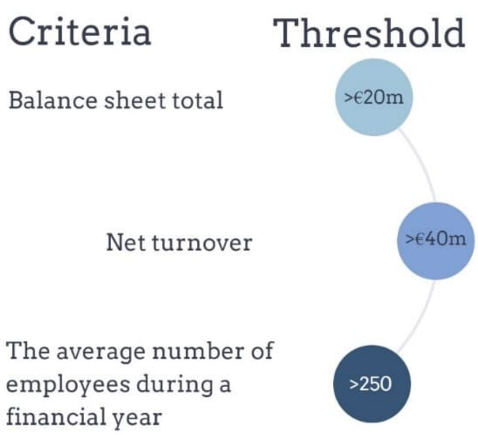

Figure 6. Criteria for Applicability for the year in question. (Ray, 2023)

2.9.1 Implementation of ESRS

Companies of different sizes and types will be affected by the ESRS's implementation timeline, which extends from this year 2024 to 2028 (European Commission, 2023b). There are going to be several implementation phases when it comes to the shift. Those large listed enterprises, insurance firms, and banks with 500 or more employees that are already obligated to the Non-Financial Reporting Directive are going to be the first organizations that are accountable to the standards from the beginning of January 2024. Large businesses that are not already bound by the regulation will be impacted by the standards in January 2025. Large companies from third-world countries are going to be subject to the standards on 1 January 2028. (Ray, 2023; European Commission, 2023b) Please, see the summarizing Table 1 below.

Reporting Phase	Description
01.01.2024	Companies Subject to Non-Financial Reporting Directive
	(Reporting in 2025 on 2024 data)
01.01.2025	Large companies not under the Non-Financial Reporting Directive
	(Reporting in 2026 on 2025 data)
01.01.2026	Listed SMEs and other undertakings
	(Reporting in 2027 on 2026 data)
01.01.2028	Non-EU companies with significant undertakings in the EU
	(Reporting in 2029 on 2028 data)

Table 1. The compliance timeline for ESRS under CSRD is based on the organization's profile. (Ray, 2023)

2.9.2 Special Provision for SMEs

Sector-specific and SME’s corresponding ESRS standards are going to be published later and are currently under development. The CSRD directive acknowledges that SME companies may have different resources and opportunities to fulfill the requirements of ESRS. This recognition prompted the creation of a simplified version of ESRS standards. In addition, some small and medium-sized enterprises will benefit from an adaptation period as SMEs have the opportunity to opt-out until 2028 and are allowed an extra three years to comply with standards under the directive. The upcoming standards of the regulation are going to make the requirements easier and straightforward. Table 2 below outlines three main company categories and the criteria for appliances. Staff numbers and turnover or financial sheet total determine if a firm is an SME. (European Commission, 2023d; European Commission, 2023h; Ray, 2023)

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Table 2. SME’s company categories by the amount of employees, turnover, or total balance sheet. (European Commission, 2023h)

2.10 Double materiality assessment in ESRS

A materiality assessment combined with disclosure criteria, ensures that the company discloses only relevant information on its operations and business strategy, leaving out unnecessary data. This assessment process is important because it helps companies determine the relevance of data to their operations and business models. According to the Accounting Directive, the information considered relevant must be reported; moreover, the materiality evaluation process is externally validated. Businesses must carry out double materiality assessments to guarantee accurate disclosure of sustainability data. (European Commission, 2023b; European Commission, 2023d)

Under the amended Accounting Directive, the ESRS introduces a novel sustainability reporting “double materiality” approach. This approach requires companies to disclose their impact on society and the environment and to clearly represent the financial risks and opportunities arising from social and environmental issues. The main benefit is that by using this approach it entails transparency in determining both the social and environmental impacts of activities. In addition, under the regulation companies must evaluate how factors such as climate change and human rights impact their financial performance. Integration of financial and non-financial information is encouraged to provide stakeholders with a comprehensive understanding of the company’s performance. Ultimately, following the principles of CSRD promotes accountability and sustainable development within companies. (European Commission, 2023b; European Commission, 2023d)

According to ESRS 1, "double materiality" comprises the impact materiality and the financial materiality. Each of them affects the other, and any effect that is known is considered a "principal material impact", which must be listed in sustainability statements (European Commission, 2023b). Simply put, double materiality in the ESRS looks at two things at the same time: impact materiality and financial materiality. Impact materiality is how a company's actions affect people and the environment, and financial materiality is how those effects affect the company's finances. (European Commission, 2023b; European Commission, 2023d) Please, see Table 3 represents definitions of both dimensions of Double Materiality:

Dimension	Definition
Impact Materiality	Pertains to significant actual or potential effects on people or the environment over various time horizons. Includes direct and indirect impacts across operations, products, services, and business relationships.
Financial Materiality	Concerns triggering or potential triggering of material financial consequences, affecting cash flows, development, performance, position, cost of capital, or access to finance. Evaluates past and future risks and opportunities over different time horizons.

Table 3. Definitions of Impact and Financial Materiality. (European Commission, 2023d)

In fact, any sustainability issue is considered material if it fulfills the requirements for either impact materiality, financial materiality, or both. Moreover, the ESRS standards emphasize that impacts on people and the environment can be financially significant from the outset or develop over time, highlighting their interconnection. The evolving nature of this relationship is sometimes referred to as "dynamic materiality". It is essential to assess both historical and prospective risks and opportunities over short, medium, and long-term periods. Sustainability issues considered when assessing materiality are presented in Appendix 3. (European Commission, 2023d; Shift, 2023b)

2.11 New Cooperation Agreement between ESRS and GRI

Many companies globally favor the GRI standards for their in-depth coverage of sustainability aspects and its future-oriented approach, integrating its methodology into their reporting procedures. This was the main reason why GRI was chosen as a reliable basis for ESRS reporting and was put as a base for the ESRS draft proposal as well. Although the ESRS standards were created with a referral on GRI, the standards are not identical. Many differences in the standards create expected difficulties for affected companies when switching from one framework to another. (European Commission, 2023b; Kelo, 2023)

In an effort to harmonize GRI and ESRS sustainability reporting practices, GRI and EFRAG recently entered into a cooperation agreement. The purpose of the agreement was to guide companies reporting under GRI, affirming their capability to smoothly integrate their existing reporting procedures with the ESRS. For a smooth transition, an understanding of the dynamics between GRI and ESRS is a key factor. (European Commission, 2023b; Kelo, 2023)

2.11.1 Joint Statement of Interoperability EFRAG-GRI

EFRAG and GRI published a joint statement in September 2023, emphasizing the ESRS's high conformity with the GRI Standards. This statement aimed to simplify impact reporting for affected companies. This collaboration minimizes the need for independent reporting, making the shift from GRI to ESRS reporting more straightforward and less difficult. In accordance with the dual materiality approach of the CSRD and taking into account existing GRI standards, ESRS has adopted a definition of impact materiality similar to GRI. This decision guarantees consistency in terminology, concepts, and impact disclosures. In other words, this alignment and shared disclosures make the transition from GRI to ESRS reporting more convenient. (EFRAG & GRI, 2023)

Even Eelco van der Enden, CEO of the GRI, highlighted the benefits for businesses and GRI reporters, underlining the comparable nature of ESRS and GRI standards. Additionally, he pointed out that, in accordance with GRI standards, ESRS reporters have the chance to make use of current reporting procedures and tackle other subjects not covered by the standards. (EFRAG, 2023)

According to the EFRAG-GRI Joint Statement of Interoperability, ESRS enables organizations to incorporate disclosures from other standards, such as GRI, into their sustainability statements, resulting in full reporting that meets both ESRS and GRI requirements. Looking ahead, EFRAG and GRI intend to strengthen their technological collaboration to improve reporting processes, including the creation of a digital taxonomy and multi-tagging system for their standards. The purpose of this collaborative initiative is to simplify digital reporting and increase the efficiency of its preparers. (EFRAG & GRI, 2023)

2.12 Double Reporting Concerns and Compliance with Requirements

One of the key concerns among sustainability experts was how ESRS would implement double reporting requirements. GRI standards already include materiality assessment, hence companies already adhering to GRI standards can easily incorporate their established processes into ESRS. (Kelo, 2023; European Commission, 2023b)

On the one hand, while GRI is actively working with the European Commission to ease the transition with additional requirements, Concerns over the heavier reporting load brought on by the new rules are also acknowledged. The strategy of the European Commission is consistent with the intention of only building on currently present sustainability standards, but not copying an entire existing model. (Kelo, 2023; European Commission, 2023b)

On the other hand, companies adopting GRI reporting standards can be confident since their current processes are well aligned with novel ESRS. The GRI standards may be used as a valuable preparation tool and connecting step throughout the transformation process. (Lotta Kauppinen, 26.03.2024) Also, those GRI practices considered to be valuable resources may be included in Sustainability reporting under ESRS. (Kelo, 2023)

2.12.1 From Impact to Double Materiality

On the one hand, when discussing materiality in the GRI initiative, material topics are defined in a way that goes beyond the traditional financial materiality typically used in business. GRI's emphasis on impact materiality means that it identifies material topics based on an organization's impact, mainly on the environment, people, and human rights. GRI presents materiality as an organization's external impact on the socio-economic structures with which it interacts. With GRI Sector standards in place, organizations find useful references and guidance on significant topics relevant to specific sectors(Kelo, 2023). The universal standard, GRI 3: Material Topics 2021, focuses entirely on recognizing and reporting material topics. (European Commission, 2023d; Kelo, 2023)

On the other hand, the ESRS’s Approach to impact materiality distinguishes between negative and positive effects caused by an organization. This means that the ESRS considers both negative as well as positive consequences that an organization can have on the environment, society, or other significant variables. Following GRI standards, impact materiality describes both existing and potential negative impacts and emphasizes their severity based on scale, scope, and irreversible nature. (European Commission, 2023d; Kelo, 2023)

The ESRS brings a significant novelty by combining impact and financial materiality viewpoints, known as double materiality. ESRS further evaluates the impact of sustainability-related subjects on the financial aspects of the organization, signifying a holistic approach to disclosure. Also, to enhance the materiality assessment and provide information for assessing risks, impacts, and possibilities, the ESRS introduced due diligence. The mentioned process was carried out using international frameworks and guidelines with a main concentration on business and human rights. Hence, ESRS can be called more reliable, since it includes a due diligence process and is referred to internationally known norms and recommendations. (Kelo, 2023; European Commission, 2023e)

2.12.2 Assessing Materiality Methods

While assessing materiality methods the primary focus should be on impact materiality, because in fact, the company's notable and tangible effects on people, the environment, and the planet lead to most of the significant sustainability-related financial risks and future possibilities (Shift, 2023b). Hence, evaluating the significance of material impacts aligns with the first step of conducting human rights diligence. The process of materiality is connected to due diligence as defined by UN Guiding Principles (UNGPs) and the Organisation for Economic Co-operation and Development (OECD) guidelines. Moreover, the new standard acknowledges that organizations should be able to refer to a variety of guidance on specific topics as a comprehensive checklist to identify significant issues. For example, when dealing with social concerns, the impact assessment should be given to the full range of potentially affected stakeholders. This may also include company personnel and impacted communities, both surrounding operations and within the value chain, as well as customers and consumers. (Shift, 2023b; European Commission, 2023d)

The Shift outlines that ESRS 1 also specifies sustainability concerns that can have a significant impact, regardless of its source. This influence can be related to different areas, for example to the company's operations, products, or services, as well as its business connections both upstream and downstream. The concern can be either current or potential, and it may have positive or negative effects. Additionally, the impact can occur over short, medium, or long periods of time. (Shift, 2023b; European Commission, 2023d)

Worth noting that the evaluation of impact materiality represents the same requirements as the initial step of due diligence of the international standards on responsible business practices. The step is also very closely aligned with the GRI requirement. Therefore, companies already engaged in human rights due diligence following the UNGPs will have identified the social impacts crucial for their reporting within the ESRS standards. For organizations yet to adopt international standards, conducting the impact materiality assessment will guarantee the completion of the first step of the due diligence process. (Shift, 2023b; Kelo, 2023; European Commission, 2023d)

When the material assessment is done its impacts serve as the foundation for the novel financial materiality assessment. the assessment establishes how material impacts can translate into significant risks or opportunities affecting a company's financial position, which also includes performance, revenue stream, and financial resources availability. Companies must consider how their business model may contribute to these impacts and the potential for financial risks to arise. Additionally, systemic issues such as inequality may also pose material risks or opportunities. (Kelo, 2023; European Commission, 2023d)

By positioning the impact materiality assessment as the starting point in the double materiality process and aligning it with the initial step of due diligence, the ESRS promotes a cohesive and integrated relationship between impact materiality and financial materiality. This strategy guarantees that the dedication businesses put into thorough human rights due diligence also adds value to comprehensive reporting within the ESRS, and conversely. (Shift, 2023b; European Commission, 2023d)

3 Methodology and Research Process

The methodology applied in the study is a mixed research method. The combination of qualitative and quantitative approaches helped to effectively find and outline similarities, differences, and challenges in developing sustainability reporting practices based on different data collection methods. The research methodology outlined was also used to investigate and analyze the novel ESRS and compare them with the GRI, with both analysis and semi-structured interviews. Using mixed research methods together with philosophical issues aimed to take into account various essential considerations and ensure the validity and relevance of the outcomes of the study (Creswell & Creswell, 2018; Zelenkov, 2011)

3.1 Philosophical Considerations

In addition to the importance of defining a methodology to achieve an understanding of the new sustainability reporting requirements, it is important to consider philosophical issues. The philosophical considerations discussed below are some of the themes that have influenced this study, understanding, and workflow of the research of sustainability reporting standards.

First of all, the fundamental philosophical issue taken into account is ontology. Defining and understanding the nature of existence is the central issue of ontology. Ontology is concerned with most general terms. This philosophical consideration takes into account definitions, meanings, and rules of inference. One of the questions related to the topic of the study is how accurately and carefully the units of measurement and assessment of reporting were chosen in the first place. In addition, another question is whether sustainability reporting is perceived as a reflection of the organization's performance or whether these indicators are based more on a socially adjusted perception. These perceptions could be influenced by different points of view, and also by different stakeholders. Understanding the ontological foundations of sustainability reporting can help understand the main roots of the existence and transition from voluntary to mandatory sustainability reporting standards. The questions may help to determine whether the transition to reporting standards only reflects changes in organizational practices or stands for more significant changes in reporting requirements on a higher level. (University of Idaho, n.a; Goertz & Mahoney, 2012)

Moreover, when it comes to comparing sustainable reporting standards, the general theory of reflexivity may help the study be more trustworthy and unbiased. Reflectivity aims to take into account ideas, prejudices, and, principles. It is essential to understand reflexivity and to pay attention to how the personal views of researchers influence how the data is perceived. Understanding that our perspective is subjective allows us to think critically about various reporting issues and reduces the chance that our analysis will be biased. Thinking about different aspects from multiple perspectives helps to be more open-minded, and careful, and to pay close attention to all minor details. Semi-structured interviews were used to complement the study in order to obtain different opinions on the research issue. Discussion and findings of the interviews provided author with the insights that helped to reflect and critically analyze findings, rethink the conclusions, and avoid prejudices. (Zelenkov, 2011)

3.2 Methodology

According to Creswell & Creswell (2018), research approaches are strategies and processes that range from general assumptions to specific methodologies for collecting, analyzing, and interpreting data. The methodology of this study is a mixed method, which is a combination of two approaches, including qualitative and quantitative research methods. The author of this study implemented several semi-structured qualitative interviews with professionals from different companies to collect unique information for the research. Therefore, a mixed method was used to collect data from various sources including existing GRI and ESRS standards, journals, articles, and information available on the European Commission webpage, and semi-structured interviews and observations. (Creswell & Creswell 2018)

Comparing standards of sustainability reporting methods has become easier with quantitative approaches such as analysis of the standards. The combination of both approaches helped to effectively find the differences and challenges in moving toward reporting standards. Both methods are going to be described below.

3.2.1 Mixed Method: Analysis of Standards and Literature

The first step of the research used a quantitative research approach with a comprehensive analysis of available standards, literature, and articles. The quantitative method was used to compare the two sustainability reporting standards and the topics they cover in order to identify similarities and differences. The study and analysis of previously published works concerning sustainability reporting requirements of ESRS and GRI was the essential first step. At the beginning of the study, only a draft version of the novel ESRS was available. Hence, the primary sources included an overview of the draft standards and publications of experts in the subject matter available at the beginning of the study. Therefore, at first, the author concentrated on publicly accessible materials provided by consulting firms, subject-matter publications, and forecasts. (Creswell & Creswell 2018)

A mixed-method approach was used to examine the fundamental characteristics, novelty, and applicability of ESRS standards. In addition to the ESRS, the GRI framework was analyzed for the study. Also, the requirements and content of these two standards were reviewed and compared with the comparative analysis methodology. The comparative method analyzes and compares two different topics, and the approach can be quantitative or qualitative. This was done to identify parallels as well as major differences and seek answers to the research question and objectives. Standards and literature published after approval of the first set of ESRS Standards were used as the basis for the analysis. An overview of standards and applicable materials provided a basis for understanding the situation on sustainability standards. Publications and opinions of legal and sustainable development experts were also taken into account. (Creswell & Creswell, 2018; Norwegian Institue of International Affairs. n.d.)

3.2.2 Mixed Method: Qualitative Interviews and Observations

Qualitative research methods such as semi-structured interviews and observations were also used to gather important information from experts on the topic and find needed information. The second method complemented the previously collected data in the study with the quantitative method and provided more diverse and in-depth insights on the issue. (Creswell & Creswell, 2018; Zelenkov, 2011)

The specialists interviewed were primarily involved in sustainability reporting frameworks. Semi-structured interviews allowed freedom in discussions through replies and individual viewpoints of the specialists. Semi-structured interviews are commonly used and require respondents to answer pre-set open-ended questions. Semi-structured interviews are in-depth interviews commonly conducted with a group of people or individually. Typically the interview lasts from half an hour to an hour and is performed once. Notes are essential for the analysis, however, handwritten notes could be untrustworthy because the researcher might miss important details. Hence, the recording of interviews was used to collect all interview data. The recording aimed to assist the researcher to focus on the subject matter of the interview. It also allowed the creation of a "transcript of records" and re-investigation of the answers afterward. (Jamshed, S. 2014)

The list of questions, published in Appendix 7, had been developed before interviews and had 8-10 questions, including open questions to leave space and opportunity for discussion. The interview questions were slightly modified according to the interviewee's background; nevertheless, they were mainly similar or identical. All of the questions and discussions were done in English, and one was in Finnish. The experts had the opportunity to skip questions as well as add their unique viewpoints.

All interviews were held online and the majority of interviewers were from Europe. These qualitative interviews were carried out to complement the findings of the previously started regulatory research and comparison. The candidates needed to fulfill selection criteria to ensure that they had sufficient experience and understanding of sustainability reporting. It was essential since a majority of the interview questions targeted specific topics. Also, to determine who was suitable for the interview, the interviewer looked through the proficient profiles of the candidates beforehand and checked their experience. Only the candidates within relevant fields or titles emphasizing their proficiency with sustainability and sustainability standards, such as GRI and ESRS were considered. Following that, the selected experts were invited on the date and time of their choice. The questions were selected after detailed consideration by the commissioner and the manager was sent to the interviewers beforehand. Five out of the sixteen interview invitations extended to chosen candidates were accepted. These interviews were scheduled and conducted during March and April 2024, precise times are presented in Appendix 8.

The author of the thesis aimed to get a comprehensive understanding of the topic by investigating it from multiple angles, including corporate law, regulations, business, and consulting services. The experts interviewed had relevant expertise and background. Candidates for interviews came from various sectors, such as environmental engineering, sustainable management, sustainable consulting, and corporate law related to corporate governance and specific legislative initiatives. Each interview was recorded or transcribed into text format in English or in Finnish language. Interviewees' names and brief presentations are presented in Appendix 8. Several representatives from the case company, consulting firms, and regulatory and legal experts were interviewed to obtain qualitative information associated with sustainability reporting processes, challenges, and possible shifts. (Creswell & Creswell, 2018; Zelenkov, 2011)

The data examination, audio recording review, and record transcription were essential elements of the interview process. All experts who were interviewed agreed to have their names published, hence the study does not contain any sensitive information. The HAMK data management strategy was followed in handling the data safely and appropriately. Throughout the interview data collection process, participants approved ethical standards. The requestion for permission to record the interviews for transcription purposes was done at each meeting. The interviews were conducted in a private and confidential manner, hence no participant names, titles, or company names were disclosed without their permission. The interview data and transcript of records will be deleted one year after this master's thesis is published, as per the HAMK data management strategy. Please, see more detailed information on data management in Appendix 9. (HAMK, 2024)

4 Analysis and Findings of the Interviews

The purpose of the chapter is to represent the analysis and to outline the most important and valuable findings of the semi-structured interviews. Each interview was conducted with specialists and leading experts in environmental, sustainability, law, and corporate governance and leading experts regarding during springtime. A total of 5 semi-structured interviews were conducted with experts and consultants. Interviews lasting from 30 to 60 minutes were conducted once with each specialist. The questions included in the interviews were regarding the research question and objectives. The first interview was conducted using the first set of questions presented in Appendix 7. Subsequent four interviews were conducted using the second set of questions that can be found in Appendix 7 as well. An overview of interview questions is presented in chapter 4.1. The list of questions was provided to the experts beforehand. The data collection and analysis method of the interviews is presented in chapter 4.2. The findings of interviews on research-related topics, such as the sustainability practices of the case company, the purpose, and novelty of the ESRS, general changes in reporting practices, upcoming challenges, opportunities, and strategies of ESRS integration were collected, combined and outlined in chapter 4.3.

4.1 Overview of Interview Questions

The first interview was conducted with the case company's expert and with the first set of questions. The purpose of the first interview was to learn more about the case company's sustainability operations and find answers to the questions related to the case company's sustainability reporting practices. The purpose of the interview was also to find out what changes in sustainability reporting practices have occurred in the company over the past 3 years. Questions also aimed at identifying the main motivation for adopting reporting standards in the first place. The factors and timeline of sustainability reporting standards and GRI were discussed. Next, the most relevant achievements of the case company's sustainability reporting practices and main challenges were identified and discussed. The question regarding the accuracy and reliability of the data collected and reported also was discussed. The methods used by the company to ensure the accuracy and reliability of the sustainability data provided have been outlined by the expert. Moreover, stakeholder engagement and strategies used by the company to engage all parties in the sustainability reporting process were also taken into consideration. There was an interview question that focused on the key sustainability performance indicators that the company focuses on and the methods used to track progress in these areas. Also, the company's plans on how to address future challenges and opportunities in sustainability reporting were included. Measures and strategies implemented by the case company to address or mitigate problems associated with the implementation of ESRS reporting were raised in the interview as well.

The following four interviews used the second set of questions to understand the ESRS and its connection with GRI. Also, the questions aimed to find out the opinions of the experts on the novel ESRS's core requirements. One of the questions aimed to address the anticipated influence of ESRS implementation on companies' sustainability reporting practices in the coming years. During interviews, experts have provided their advice to companies planning to implement ESRS for sustainability reporting as soon as possible, for instance, this year. The next question aimed to outline suggestions from experts in the field for ESRS implementation for the companies. Also, the purpose of the interviews was to find out experts' opinions about the differences and similarities between the new ESRS and GRI. Potential ESRS implementation challenges that organizations may face due to the novel mandatory standards were also discussed. In addition, the experts who participated in the interviews provided their recommendations on how to address emerging problems and devise strategies for their resolution or mitigation. In addition, the interviews discussed methods for ensuring the accuracy and reliability of the data provided within the ESRS. Opportunities related to the standard's implementation were also taken into consideration. The last question gave space for discussion, final thoughts, or additional points that the interviewee would like to share regarding ESRS or sustainability reporting.

4.2 Data Collection and Thematic Analysis

All interviews and answers were recorded via teams and had a transcript of records to organize proper data collection and avoid possible errors during the next stage. Next, the data collected was studied and reorganized, and the text of each interview was checked and cleaned and the types were corrected by the author. After this step, the author selected the most important findings and collected them together in a separate document for further comparison and connection. Thematic analysis of the common themes and patterns was identified in the interview data. Next, the author analyzed and combined answers to similar questions and formed the main findings.

Themes identified in the first interview data included relevant information on the case company’s sustainability reporting practices, accountability and reliability of the data presented, common challenges, strategies on how the challenges are addressed, stakeholder engagement, and arising opportunities. For instance, the company already released its first sustainability report to show its commitment to sustainability development. Also, the company is making efforts to comply with GRI sustainability reporting standards and is aiming to comply with the new EU reporting directive. The case company has its sustainability reporting experts that handle the organization's sustainability reporting and external consultants are not involved in the process. This demonstrates the company's keen interest in not only external but also internal sustainable practices and the organization's proactive approach towards incorporating sustainability into its operations. The current sustainability report already uses materiality assessment which helps to prioritize relevant topics of sustainability report and is similar to ESRS. (Marika Riikonen, 21.03.2024)

Moreover, the main challenges, strategies, and opportunities of the case company were analyzed. For instance, the main challenges include the difficulties of aligning international standards with local requirements, the challenge of understanding novel requirements, and recognizing what is important for the case company. In addition, there is a challenge to understand what must be followed and reported, as well as to recognize what is not relevant for the business. (Marika Riikonen, 21.03.2024)

Relevant topics identified in the next four interviews included discussion on the purpose of ESRS, benefits of the ESRS, difference of ESRS from GRI, upcoming challenges and opportunities as well as strategy that companies should implement to comply with novel standards. In addition, stakeholder engagement, accountability, and reliability of the data presented in the report and arising opportunities were taken into account in interview questions. Responses of the interviewees were compared and the main similarities and differences were highlighted and analyzed. There were also limitations in the analysis process, such as the size of the text samples chosen by the author, potential errors in the analysis, and limitations in data collection since all presented data was processed from the author's point of view. To potential errors, the results of the analysis of the interview were also provided to the interviewed experts for final check and approval.

4.3 Findings of the Interviews

4.3.1 Sustainability Practices of the Case Company

The findings of the first interview consist of relevant information about sustainability reporting practices within the case company. It was stated the case company is making efforts to comply with GRI standards and aiming soon to comply with the ESRS. It is worth noting that the company's sustainability experts handle the organization's sustainability reporting; external consultants are not involved, which demonstrates the company’s keen interest in not only external but also internal sustainable practices. The current owner of the organization - "Trill Impact" highly prioritizes and emphasizes the publicly available representation of their operational activities and is eager to move together to a sustainable society. Hence, transparent communication of the impacts and reliable sustainability reporting is essential for the company. (Marika Riikonen, 21.03.2024)

Sustainability performance indicators are categorized into three main themes, which include environmental development, human well-being, and property well-being. There are three focus areas of yearly tracked indicators. They are recognized in the materiality assessment as most important for the case company. The sustainability report details progress and areas for improvement and aims to mitigate business impacts through the ESR framework, which will also make a positive impact on the planet, society, and stakeholders. For a case company, maintaining a profitable business and ensuring economic growth is essential. Monitoring of tax rates and turnover is conducted to sustain the business and support employment. (Marika Riikonen, 21.03.2024)

Stakeholder engagement involves internal collaboration in sustainability reporting, conducting surveys for materiality analysis, and openly publishing reports. Moreover, the Board of the case company is engaged in sustainability reporting; it reads and gives comments on the sustainability report, ensuring the engagement of the upper and management levels. (Marika Riikonen, 21.03.2024)

4.3.2 The Purpose and Novelty of the ESRS

The goal of both the CSRD directive and the ESRS standards is to increase the consistency and comparability of sustainability reports. Through the EU directive, a broader common reporting framework for sustainability information or non-financial information is now being defined for the first time. The ESRS focuses on both financial and non-financial impacts, unlike other standards. It is essential for companies, that they must prioritize sustainability reporting with the same commitment as financial reporting. (Hannu Ylänen, 3.4.2024; Ina Dimitrieva, 02.04.2024)

One of the main goals of CSRD is expanding the non-financial reporting directive to create the sustainability reporting directive to ensure that companies' sustainability reports are based on more detailed and comprehensive binding legislation. However, the non-financial reporting directive is ultimately quite narrow, and now, through ESR standards, these reporting obligations have been expanded and detailed accordingly. Another significant goal was to increase the consistency and comparability of these sustainability reports. (Hannu Ylänen, 3.4.2024)

The practices of the reporting will not only affect European companies but also global companies that operate in Europe. So, the effect will have a spillover on the reporting practices outside Europe, mostly in the US companies. It's already visible that other jurisdictions could follow the example of the ESRS in Europe. For example, China is already taking requirements out of the ESRS. So, there will be a positive effect also on other continents and regions for the reporting practices. The implementation of the ESRS is already reshaping sustainability reporting practices. It necessitates significant resources and integration of sustainability into core company strategies. It prompts a shift from the responsibility of just sustainability teams to broader organizational involvement, acknowledging the importance of compliance with a framework like CSRD shaped by the European Green Deal. (Ina Dimitrieva, 02.04.2024; Zinyat Gurbanova, 29.03.2024)

The distinguishing characteristic of the novel standard is comprehensiveness. It must be noted that the ESRS is based, as almost all other frameworks, on the TCFD (Task Force for Climate Reporting) disclosure, and it goes much beyond climate. It encompasses all of the topics in one, so it's very comprehensive from that perspective. ESRS requires companies to report their carbon emissions in a very detailed way, including their other indirect emissions through their value chain. This means that companies need to obtain this information from their suppliers, and suppliers need to report that data to the companies requested to report through ESRS. So it will impact many companies, including those not required to report through ESRS. (Ina Dimitrieva, 02.04.2024; Lotta Kauppinen, 26.03.2024)

4.3.3 Changes in Reporting Practices

One of the future changes is that this sustainability report will be part of the company's annual report. So, the legal status of this sustainability report is changing. Previously, companies were able to decide whether the report was separate or presented as a part of the annual report. Now, the law dictates that the report is going to be a part of the annual report and thus more prominently part of the official financial material of the company. Therefore, it may also be more strongly under the responsibility of the board. Of course, the board has always been responsible for these reports, but now that the report is part of the official financial material, its status has changed. (Hannu Ylänen, 3.4.2024)

Moreover, the distinguishing characteristic of the novel standard is comprehensiveness. Particularly, the standards are highly detailed, as they are mostly binding, and this will likely have a significant impact on companies' reporting practices. In the ESRS for the published standards alone, there are over 1000 data points, meaning that companies will need to assess very thoroughly what information they can derive from these reporting details. (Hannu Ylänen, 3.4.2024; Ina Dimitrieva, 02.04.2024)

According to the interviews, another major change due to the implementation of the ESRS under the CSRD directive will lead to more specific reporting practices, especially in relation to carbon emissions, scope 3. Before ESRS, it was much easier for companies to omit some material topics and much easier to leverage their opportunities, providing less concrete information. Now, with the double materiality assessment, companies should report on their impacts, risks, and opportunities comprehensively, either on the financial side or the impact side. It is fascinating about this approach that companies must make very smart decisions on what they want to report now because it requires a lot of time to decide whether they are ready or not to report on these issues and how they can back up their claims. (Zinyat Gurbanova, 29.03.2024; Lotta Kauppinen, 26.03.2024)

Another notable change is the obligation to follow the standard. The introduction of the ESRS establishes clear requirements for sustainability reporting, which will address the previous lack of standardized guidance. Before companies were able to choose what they report, but they are not able to do it the same way anymore. The CSRD directive and ESRS standards will provide companies with a structured framework to follow, which will make it easier to compare results between different companies and ensure more specific and consistent reporting practices. (Lotta Kauppinen, 26.03.2024; Hannu Ylänen, 3.4.2024; Ina Dimitrieva, 02.04.2024; Zinyat Gurbanova, 29.03.2024)

4.3.4 Challenges

According to Hannu Ylänen (3.2.2024), many companies have already outlined in discussions with the expert the following question – “How are these ESRS interpreted?”.Understanding and aligning with ESRS standards is indeed challenging. How are actual reports constructed based on these new reporting requirements is a common question for the majority of affected companies. When preparing reports based on the directive and the standards, it is challenging to understand what kind of information should be included in the report. It's a significant task, and companies have to invest a lot of money into it, for instance, for training. Implementing reporting standards involves significant study, investigation, and resource allocation by the companies. Despite the detailed specifications of reporting obligations in ESRS standards, Finnish companies face a practical challenge in interpreting what each obligation entails in practice. The lack of clarity on how to interpret and implement specific reporting obligations poses a significant challenge for companies due to the absence of direct answers to these questions. According to the interview, various commercial organizations offer interpretations on how to implement or report according to these standards, but there is no singular correct approach. The Commission's forthcoming detailed guidance on compliance with reporting obligations is expected to somewhat alleviate companies' difficulties in interpreting these standards. (Hannu Ylänen, 3.4.2024)

The practical challenge remains in managing the numerous reporting requirements and how to effectively handle them. Navigating numerous data points is common for challenges to arise when new legislation comes into force, and the first year of practicing reporting may involve trial and error as companies learn how to navigate the requirements. Reporting evolves as companies gain practical experience and learn from each other's practices, interpretations, and approaches. However, the early stages of interpretation and implementation pose significant challenges. (Hannu Ylänen, 3.4.2024; Lotta Kauppinen, 26.03.2024)

Another common challenge organizations face is setting materiality thresholds and prioritization of impacts. It is not an easy task for companies to establish a minimum threshold, especially since they don't have any benchmarks or blueprints to stick to since it is something new. On the positive side, ESRS provides flexibility for companies to decide on what kind of thresholds they want to establish. (Zinyat Gurbanova, 29.03.2024)

In addition, a big challenge is data collection and the needed data may not be available. So basically, companies need to outline how to collect all the data they need to report. With so many data points, they must have a clear roadmap of what to report and how to collect that data. Companies must not only report on their impact on a sub-topic but also explain how they located, evaluated, assessed, and mitigated the given impact, risk, and opportunities (Lotta Kauppinen, 26.03.2024; Ina Dimitrieva, 02.04.2024; Zinyat Gurbanova, 29.03.2024)

Moreover, it might be a challenge to integrate sustainability into decision-making and core company strategy. It is essential for a sustainability report not to stand alone as a “good-to-have initiative”, which was the case with the GRI. Overcoming these challenges requires internal collaboration, knowledge transfer, and awareness-raising at all levels of the company. (Zinyat Gurbanova, 29.03.2024)

According to Hannu Ylänen, it is worth mentioning that the European Commission recently recognized that these reporting obligations are a vast and challenging undertaking for companies. The Commission decided to postpone the release and implementation of the next ESRS by a year or even two so that companies would not face such a huge burden from new reporting requirements. So, even the Commission has realized the need for adaptation, observation, and giving companies more time. (Hannu Ylänen, 3.4.2024)

4.3.5 Strategy of Integration of ESRS

First of all, it is worth mentioning that strategies of the case company to address challenges associated with the new ESRS standards include ongoing learning, internal collaboration, and client engagement to familiarize themselves with the standard's requirements. The significance of sustainability reporting is recognized. (Marika Riikonen, 21.03.2024)

Companies that previously did not engage in sustainability reporting at all will now be required to provide extensive reporting, which will significantly impact their operations. Many companies that have not reported anything related to sustainability will now have to report quite a lot of things starting in 2025. Smaller companies, although not required to report under ESRS, will still be required to provide relevant data that affects their relationships with customers and suppliers. Companies should begin by mapping their resources and conducting a gap assessment to identify areas for improvement. Starting early and dedicating resources to data collection and internal control systems are crucial steps in preparing for compliance with ESRS. (Lotta Kauppinen, 26.03.2024; Zinyat Gurbanova, 29.03.2024)

Moreover, companies aiming to report in accordance with the CSRD and ESRS should start from the initial steps. The first step is conducting a double materiality analysis. It should be done because all reporting needs to be based on it. The second step for the companies is a stakeholder survey since CSRD and ESRS require that stakeholders ar involved in this reporting. These initial steps are critical to understanding reporting requirements and identifying appropriate data points. Additionally, companies must begin the reporting process promptly to avoid delays and ensure they meet upcoming deadlines. To be ready on time, companies may require assistance in conducting a double materiality analysis and developing strategies for data collection to address these challenges effectively. (Lotta Kauppinen, 26.03.2024)

Also, to overcome resource constraints and inadequate data availability the companies must prioritize sustainability within the organization and establish robust data management processes. Of course, acquiring knowledge and undergoing training are crucial for companies. In each one, it's essential to assess what these standards mean in their industry and which of these standards are relevant for the business. Not all standards of the ESRS are mandatory for all companies. There are mandatory topics, however, what the company is going to report depends on the outcome of the double materiality assessment. The preparation for reporting must begin once it's determined which standards are essential for the business according to the above-mentioned assessment. This involves familiarizing oneself with the data points in the reporting standards, preparing for data collection, and coordinating collaboration at the functional level within the company. (Ina Dimitrieva, 02.04.2024; Hannu Ylänen, 3.4.2024)

According to Ina Dmitrieva, overcoming challenges to maximize the benefits of standardized sustainability reporting involves prioritizing sustainability within the organization's governance structure. Establishing a Chief Sustainability Officer role can drive transformative efforts. Addressing resource constraints may require tapping into external expertise and resources while investing in training and knowledge transfer enhances internal capabilities. To address challenges associated with reporting under the novel standard, organizations must prioritize the establishment of a sustainability strategy as the core focus. Sustainability reporting needs to serve as a supporting function. Emphasis should be placed on data collection and quality to support strategic decision-making. (Ina Dimitrieva, 02.04.2024)

For sure, companies intending to implement ESRS for sustainability reporting should prioritize conducting a double materiality analysis and engaging stakeholders. These initial steps are crucial for understanding reporting requirements and identifying relevant data points. Additionally, companies should promptly begin the reporting process to avoid delays and ensure compliance with upcoming deadlines. However, strategies to address challenges associated with reporting under the ESRS standards need to not only take into account conducting a double materiality analysis, engaging stakeholders, and developing clear data collection plans but also the importance of understanding risks related to ESG topics. (Lotta Kauppinen, 26.03.2024; Zinyat Gurbanova, 29.03.2024)

4.3.6 Transition from GRI to ESRS

According to Hannu Yänen, ESRS has been developed in collaboration with the GRI organization, but that doesn't necessarily make it easy for companies to shift from one standard to another. They are entirely new standards, and there is still a lot to learn. There is a collaboration between ESRS and the GRI organization, but this is an entirely new reporting standard and a very comprehensive one, which will cause a lot of work for companies. However, the binding nature and comprehensiveness are perhaps generally seen as the most significant differences compared to GRI. (Hannu Ylänen, 3.4.2024)

In addition, woth noting that ESRS differs from previous reporting practices by incorporating various reporting guidelines into a unified, complex framework. The four-pillar approach is similar to GRI, but here there's more emphasis on governance, strategy, impact, risk, and opportunity management. Without one piece of the pillar, the picture is not holistic anymore and the company may be not compliant with the ESRS anymore. ESRS emphasizes a double materiality assessment, a structured approach to reporting, and transparency in methodology, distinguishing it from previous standards like GRI. (Zinyat Gurbanova, 29.03.2024)

Moreover, it should be noted that companies adopting GRI reporting standards can be confident that the transition is going to be smoother since their current processes are well aligned with novel ESRS. GRI standards can serve as a useful preparatory tool and linking step during transition. In addition, about 80% of the standards of GRI have similar requirements to the ESRS. (Lotta Kauppinen, 26.03.2024; Ina Dimitrieva, 02.04.2024)

4.3.7 Data Accuracy

Based on the interview with Ina, companies verify data accuracy in sustainability reports by prioritizing primary data sources and establishing partnerships for data exchange. Despite difficulties, companies have to establish connections to data sources that use primary data, meaning data from companies directly, not from estimations, averages, or databases. It is essential to look for data errors, understand them, and consider them in decision-making. This means that if you know that a data point is not entirely accurate, make some assumptions about the level of ambiguity in the data and be careful when interpreting the data point to make decisions. (Ina Dimitrieva, 02.04.2024)

Moreover, according to the the Auditing Act (1141/2015) auditors are required to provide assurance. As part of this assurance, the auditor ensures that the content of the report meets its intended purpose as determined by the auditor or sustainability reporting auditor. Verification is not necessarily an exhaustive process. It is a level of assurance regarding the report, but another way to verify the data in sustainability reporting is through the increased responsibility placed on the corporation itself. The company needs also to be aware that the content of its report must be carefully and appropriately prepared. On one hand, the company itself ensures the content of the report by being meticulous in reporting the information. On the other hand, to ensure the reliability of the data a more general verification of the report is to be provided by a sustainability reporting verifier following the auditing law. (Hannu Ylänen, 3.4.2024; see also Ministry of Economic Affairs and Employment, Finland, 2016).

To verify the accuracy of data in sustainability reports and prevent greenwashing, companies must include sustainability reporting as part of their financial reporting. Also, it is essential to ensure third-party verification of data. This verification process is going to help maintain credibility and transparency in reporting practices. (Lotta Kauppinen, 26.03.2024)

Moreover, according to Zinyat Gurbanova, companies verify the accuracy of sustainability data through transparent methodologies and prevent greenwashing by sticking to reporting standards and avoiding misleading statements. Transparency, honesty, and a methodological approach to reporting reduce the risk of greenwashing. It also increases the credibility of reported information. (Zinyat Gurbanova, 29.03.2024)

4.3.8 Opportunities and Benefits

First of all, the adoption of the ESRS standards presents opportunities for companies to explore new themes, for instance, biodiversity and circular economy providing opportunities to improve sustainability practices. Companies like Sustera can use these opportunities to develop services that support clients in meeting ESRS requirements and improving sustainability performance. (Lotta Kauppinen, 26.03.2024)

The benefit for the case company is an enhanced understanding and attraction of the clients. As a result of awareness, the case company may offer improved services to the clients, and improve data quality, transparency, and reliability. This will enhance the company's reputation. The process presents an opportunity to improve the company's reputation and communication with clients and stakeholders, positioning the company as a more reliable partner for future projects. In the evolving landscape of sustainability reporting, being able to provide such sustainability data is becoming increasingly essential for companies to operate effectively. (Marika Riikonen, 21.03.2024)

In addition, opportunities arising from the adoption of ESRS standards include increased comparability, clearer identification of sustainable companies, and integration of sustainability into business models. The directive also presents opportunities for software development companies, consultants, and individuals passionate about sustainability. (Zinyat Gurbanova, 29.03.2024)

Also, according to Ina Dmitrieva, opportunities emerging from the adoption of ESRS include increased transparency and as a result, increased transparency in reporting can improve access to capital, refinancing, and markets for sustainable products or services. Benchmarking with industry leaders allows for learning from their sustainability practices and transformation efforts, as data is available in reports of industry leaders. (Ina Dimitrieva, 02.04.2024)

The inclusion of a standardized format and digital data tagging for later will help a lot to compare companies, but also to aggregate data. It is because if you want to see the effect of the global economy, you need to be able to aggregate data across companies. Therefore, for companies operating in Europe, being able to compare the impact of other companies will be a huge advantage. (Ina Dimitrieva, 02.04.2024)

To conclude, high-quality reporting will certainly become a competitive advantage for companies in the future. However, whether these ESRS will create a consistent and comparable reporting framework from which such benefits can be derived is a different matter altogether. Time will tell how investors and other stakeholders receive these reports. There have been concerns raised that the reported information is too detailed and of a nature that, despite these standards, comparability may not be achieved. But time will tell whether comparability is achieved and whether this new legal sustainability report is effective for a company's competitiveness and market value development. If successful, this novel regulation undoubtedly benefits companies, but initially, it also entails work, costs, and other administrative burdens associated with reporting. (Hannu Ylänen, 3.4.2024)

4.3.9 Advice for the Company – Overcoming the Challenges

Overcoming challenges associated with standardized sustainability reporting requires a clear understanding of the directive's objective: to promote more sustainable practices in companies. According to Lotta Kauppinen, to encourage and coordinate companies, consultants aim to simplify processes for the clients, such as double materiality analysis and data collection. Another advice for companies looking to adopt ESRS for sustainability reporting includes initiating the reporting process promptly and avoiding unnecessary complexity. Starting early might allow sufficient time for compliance preparation. Also, a straightforward approach is going to help ensure clarity and effectiveness in reporting efforts. (Lotta Kauppinen, 26.03.2024)

Moreover, the best way is to include sustainability in the strategy and use reporting to help you implement it, not the other way around. This means that business needs to focus on data collection and data quality from the very beginning because strategic decision-making needs to start at the very beginning. The company cannot make strategic decisions every year. Therefore, assessing materiality is important, so the company can collect data for it and report on key performance indicators. (Ina Dimitrieva, 02.04.2024)

As advice for the companies implementing ESRS: businesses should develop a strategic roadmap for the gradual enhancement of reporting. Prioritize data quality and establish partnerships for data exchange with stakeholders. Avoid relying solely on estimations or secondary data sources. (Ina Dimitrieva, 02.04.2024)

According to Hannu Ylänen, functions within the company where cooperation may be needed are the finance department and the sustainability department. Additionally, legal functions and possibly investor relations functions are crucial. When sustainability reporting cuts across so many functions, it's essential for companies to establish cooperation. It's not just good, it's crucial because there are significant implications for the company's management and board responsibilities. Therefore, learning to coordinate this cooperation is essential. Also, it's necessary to evaluate the entire current reporting process and assess whether the current reporting systems are adequate to produce the required information and how they should be updated or changed in the future. Should external assistance be sought for this? It might be one of the solutions. (Hannu Ylänen, 3.4.2024)

To conclude, companies looking to adopt ESRS for sustainability reporting efforts include starting early and involving top management in the process. Focus on data collection and materiality assessment to define reporting scope efficiently. Embrace a sustainability mindset shift and aim to become pioneers in sustainable business practices for long-term success.(Ina Dimitrieva, 02.04.2024)

5 Comparing GRI and ESRS Reporting Requirements

The main purpose of the following chapter is to compare GRI and ESRS reporting requirements and analyze and outline similarities and differences between these standards. The GRI-ESRS Interoperability Index tool was used for the comparison. The purpose and the structure of the GRI-ESRS Interoperability index, its analysis, and its main findings of the analysis are presented in the sub-chapter 5.1 below and in Appendices 4,5, and 6. The main differences between standards from the ESRS point of view are presented in detail in sub-chapter 5.2. In addition, societal factors and the novelty of the human-focused approach of the ESRS are outlined and described in sub-chapter 5.3.

5.1 GRI-ESRS Interoperability Index

5.1.1 Purpose of the GRI-ESRS Interoperability Index

One of the main goals of GRI and EFRAG is to provide sustainability experts with needed guidance on the transition from GRI to ESRS. Aiming to guide companies in understanding and implementing the narrative of the new ESRS, the specially designed GRI-ESRS interoperability index was presented as a tool for mapping. Its main purpose is to assist affected companies in understanding the shared aspects of the two sustainability reporting standards by outlining how each set of standards' data points and disclosure criteria relate to one another. The Index is presented in the Appendix 2. (Kelo, 2023; EFRAG & GRI, 2023)

At the end of November of the year 2023 GRI and EFRAG published a publicly accessible draft version of the GRI-ESRS Compatibility Index, which is a tool with mapping of the existing data from both standards that have been collected to help companies understand the differences and similarities between the GRI and ESRS. (Kelo, 2023)

Even though the GRI initiative was used as a baseline for novel ESRS standards, they differ from one another. GRI and EFRAG have acknowledged the need to support sustainability specialists in their transition from GRI to ESRS. To give the essential assistance, a structured document was created that compares the standards and makes recommendations on the mapping. In November 2023, a draft version of the GRI-ESRS Interoperability Index was released, making it easier to understand the two frameworks' differences and similarities. It is also worth mentioning the good compatibility of GRI and ESRS, which makes the sustainability reporting process simpler and does away with the need for double reporting. (Kelo, 2023)

The index provides information on the relationship and connections between the disclosure requirements and the data within each framework. It also may strengthen the company's ability to adopt GRI standards as a framework in ESRS reporting. It aims to support in application of ongoing reporting initiatives to construct novel ESRS sustainability reports and also creates a solid base for mutual digital taxonomy. (Kelo, 2023)

5.1.2 Overview of the GRI-ESRS Interoperability Index

The primary goal of the Interoperability Index is to demonstrate the strong connectivity gained between ESRS and GRI standards, notably in terms of impact reporting. This index acts as a mapping tool from an EU viewpoint, assisting in understanding the similarities between the two reporting standards and recognizing the close collaboration between EFRAG and GRI during the preparation of the ESRS proposal. According to the draft version of the index, companies reporting under ESRS can be deemed reporting 'with reference' to GRI standards due to the established comparability. (EFRAG & GRI, 2023)

Furthermore, it has the potential to assist ESRS reporters in identifying matters and disclosures that are not covered by ESRS but have been covered in GRI standards and can be reported as entity-specific disclosures (Kelo, 2023). The index also helps reporters who aim to report “in compliance” with the ESRS Standards by making them include in their sustainability statements more GRI requirements that are not addressed by ESRS. It should be mentioned that EFRAG and GRI are working on a digital correspondence table to further simplify reporting processes and enable digital interoperability between ESRS and GRI Standards. (EFRAG & GRI, 2023; Kelo, 2023)

5.1.3 Instructions for using the GRI-ESRS Interoperability Index

Appendix 2 presents the Interoperability Index, which is organized in a columnar style and compares GRI standard disclosures to ESRS disclosure criteria. It has columns called "Notes" and "Explanation" to identify variations at the data level. Notably, these differences do not preclude companies using the ESRS from successfully harmonizing their sustainability statements with the GRI Standards, enabling reports to be "referenced" to them. (EFRAG & GRI, 2023)

Empty D and E columns indicate no stated distinctions, implying that both standards meet the same requirements. In addition, the corresponding number of the standard can be found in the table. Column D categorizes detected differences based on granularity, data type, scope, and definition. Column C identifies situations where GRI standards disclosures extend beyond ESRS sustainability considerations, particularly addressing CSRD obligations such as tax transparency, denoted in a light grey color. (EFRAG & GRI, 2023)

5.1.4 Similarities of the Standards According to the Interoperability Index

There are a significant number of GRI standards that correspond to novel ESRS standards, as indicated by the summary table that was provided before. To begin with, almost all, except one, of the material and management topics covered by all GRI standards do not have highlighted differences outlined; hence, almost all of them are equivalent. There are no distinctions that are emphasized in the standards: GRI 3 Material Topics, GRI 308 Supplier Environmental Assessment, GRI 404 Training and Education, GRI 406 Non-Discrimination, GRI 414 Supplier Social Assessment, and GRI 415 Public Policy. Taking into account all presented disclosures, six out of thirty-four GRI standards do not have any specified differences. The table highlights 82 of the total 142 disclosures without any changes. To summarize the findings of the analysis, 58 percent of all disclosures are comparable to those required by the ESRS. (EFRAG & GRI, 2023)

Please see the comparison table with the list of GRI standards that can be used in ESRS without any major changes presented in Appendix 4. Please refer to the GRI-ESRS Interoperability Index presented in Appendix 2 for more detailed information on each standard.

5.1.5 Differences of the Standards According to the Interoperability Index

In total, according to the analysis and findings, 48 topics have differences identified across all of the 143 categories. An overview of the topics based on the types of differences is combined in one table and can be found in Appendix 5. For additional data, please refer to the GRI-ESRS Interoperability Index presented in Appendix 2. (EFRAG & GRI, 2023)

When it comes to the definition of non-employees, it differs in one standard. According to the Imperability index, the definitions of non-employees in GRI 2-8 and ESRS S1-7 are not identical, which is going to affect the coverage of workers who are not considered to be employees. (EFRAG & GRI, 2023)

Granularity varies between the nine currently present disclosures and requirements. GRI standards typically require additional breakdown or detail compared to ESRS standards. This difference in granularity is observed in several standards:
2-27: Compliance with laws and regulations; 301-1: Materials are used by weight or volume; 304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas; 306-5: Waste directed to disposal; 401-3: Parental leave; 403-9: Work-related injuries; 403-10: Work-related ill health; 405-1: Diversity of governance bodies and employees; and 418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data. (EFRAG & GRI, 2023)

Additionally, thirty standards vary regarding their scope. The GRI and ESRS disclosures share the same reporting objective, but they formulate data points differently. The standards with differences in scope are: 2-28 Membership associations; 202-1 Ratios of the standard entry-level wage by gender compared to the local minimum wage; 202-2: Proportion of senior management hired from the local community; 203-1: Infrastructure investments and services supported; 204-1: Proportion of spending on local suppliers; 301-3 Reclaimed products and their packaging materials; 302-2: Energy consumption outside of the organization; 303-3: Water withdrawal 302-4: reduction of energy consumption; 302-5: Reductions in energy requirements of products and services; 303-2 Management of water discharge-related impacts; 303-3: Water withdrawal, 303-4: Water discharge; 305-5: Management of material topics and GRI 305 1.2; 305-6: Emissions of ozone-depleting substances (ODS); 306-3: Waste generated; 402-1: Minimum notice periods regarding operational changes; 403-3: Occupational health services; 403-4: Worker participation, consultation, and communication on occupational health and safety; 403-5: Worker training on occupational health and safety; 403-6: Promotion of worker health; 403–8: Workers covered by an occupational health and safety management system; 403-9: Work-related injuries; 403-10: Work-related ill health; 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk; 408-1 Operations and suppliers at significant risk for incidents of child labor; 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor; 410-1 Security personnel trained in human rights policies or procedures; 416-1 Assessment of the health and safety impacts of product and service categories; and 417-1 Requirements for product and service information and labeling. (EFRAG & GRI, 2023)

Moreover, the twelve standards differ in the type of data that is required: GRI requires quantitative disclosure, whereas ESRS requires qualitative disclosure. This is observed in standards such as 205-1: Operations assessed for risks related to corruption; 205-2 Communication and training about anti-corruption policies and procedures; 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations; 305-4 GHG emissions intensity; 306-3 Waste generated; 306-4 Waste diverted from disposal; 306-5 Waste directed to disposal; 411-1 Incidents of violations involving the rights of indigenous peoples; 413-1 Operations with local community engagement, impact assessments, and development programs; 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services; 417-2 Incidents of non-compliance concerning product and service information and labeling; and 417-3 Incidents of non-compliance concerning marketing communications. (EFRAG & GRI, 2023)

Lastly, the scope of the five standards in GRI is either more extensive or more specific than the scope of ESRS. This is seen in the following standards: 302-4 Reduction of energy consumption; 302-5 Reductions in energy requirements of products and services; 305-4 GHG emissions intensity; 408-1 Operations and suppliers at significant risk for incidents of child labor; and 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor. (EFRAG & GRI, 2023)

5.1.6 GRI Disclosures and Standards not covered by the ESRS

There are thirteen topics from the GRI standards that are not covered by the ESRS. These topics involve areas related to governance, economic performance, anticompetitive behavior, and tax responsibilities. Two standards are not covered completely by the ESRS: GRI 206: Anticompetitive Behavior 2016 and GRI 207: Tax 2019. However, this information can be used in the reporting as additional information. Please see the list of GRI standards that are not covered by the ESRS outlined in Appendix 6. For additional information, please refer to the Interoperability Index presented in Appendix 2. (EFRAG & GRI, 2023)

5.2 Main differences between Standards from the ESRS point of view

Although EFRAG has intended to align the ESRS with GRI standards wherever possible, the previous chapter outlined that there are notable differences between the two frameworks. These differences cover data detail, scope, and some definitions. Moreover, the novelties introduced by ESRS encompass a wider range of ESG data points, which are the result of the double materiality assessment previously described. (Kelo, 2023) The following chapter is going to delve deeper into the ESRS standards and outline the main differences from their perspective. In addition, the main characteristics and requirements will be briefly presented. Below, the key differences between ESRS and GRI standards are listed. (Kelo, 2023; European Commission, 2023d) Please see Table 4 for examples of the main differences between ESRS and GRI standards below.

5.2.1 ESRS E1 Climate Change & GRI 305 Emissions

According to Kelo (2023), ESRS E1-6 mandates the reporting of the intensity ratio encompassing total GHG Emissions, which includes Scopes 1, 2, and 3. Conversely, GRI 305-4 necessitates the reporting of the intensity ratio, whereby Scope 1 and Scope 2 GHG Emissions are reported separately from Scope 3. (Kelo, 2023; European Commission, 2023d)

5.2.2 ESRS S1 Own Workforce & GRI 403 Occupational Health and Safety

There is a difference in the demands between ESRS S1 and GRI 401. GRI 403-1a necessitates the inclusion of details concerning the legal requirements and management system standards upon which the occupational health and safety system is based. Conversely, the ESRS does not mandate this information, as it is governed by regulations established by the European Union. (Kelo, 2023)

5.2.3 ESRS S3 Affected Communities & GRI 411 Rights of Indigenous Peoples

In comparison to ESRS S3, the GRI 414-1 requires quantitative data regarding new supplier screening criteria of a social nature, whereas ESRS G1-2 mandates a narrative-style disclosure instead. (Kelo, 2023; European Commission, 2023d)

5.2.4 ESRS G1 Business Conduct & GRI 414 Supplier Social Assessment

The difference between standards is that GRI 414-1 necessitates numerical, or in other words, quantitative data concerning the screening of new suppliers using social criteria, while ESRS G1-2 calls for a narrative-style disclosure. (Kelo, 2023; European Commission, 2023d)

ESRS / GRI Comparison	Aspect of Comparison	Description of difference
ESRS 1 General Requirements **GRI 1** Foundation	Reporting Format	ESRS has more prescriptive requirements compared to GRI regarding the reporting format.
	Materiality Assessment	ESRS necessitate a double materiality assessment, incorporating both impact and financial perspectives, whereas GRI focuses solely on impact materiality.
	Materiality Levels	ESRS mandates materiality consideration at various levels (topics, sub-topics, impacts, etc.), while GRI addresses materiality at a topic level.
ESRS E1 Climate Change **GRI 302** Energy	Energy Consumption Data	Differences in data aggregation and disaggregation methods exist between ESRS E1-5 and GRI 302-1, both dealing with energy consumption data.
ESRS E1 Climate Change **GRI 305** Emissions	GHG Emissions Intensity Ratios	ESRS E1-6 requires reporting of intensity ratio for total GHG emissions (Scopes 1, 2, and 3) while GRI 305-4 requires separate reporting for Scopes 1+2 and Scope 3.
ESRS S1 Own Workforce **GRI 403** Occupational Health and Safety	Legal Requirements and Management System Standards	GRI 403-1a necessitates reporting on legal requirements and management system standards, whereas ESRS doesn't require this information due to EU regulation compliance.
ESRS S3 Affected Communities **GRI 411** Rights of Indigenous Peoples	Reporting Requirements	GRI 411-1 requires quantitative data on the number of incidents, whereas ESRS S3 necessitates narrative disclosures.
ESRS G1 Business Conduct **GRI 414** Supplier Social Assessment	Supplier Screening	GRI 414-1 demands quantitative data on new supplier screening, while ESRS G1-2 requires disclosure in narrative format.

Table 4: Overview of the differences in reporting requirements between ESRS and GRI. (Kelo, 2023)

5.3 The Human-Focused Design of ESRS

Instead of using complicated reporting methods, ESRS's people-centered design puts people and their effects first. Businesses have been disclosing their social sustainability initiatives for a long time, often incorrectly labeling or grouping a wide range of social topics. Different methods of categorizing social issues resulted in overlapping headings and an unorganized collection of human rights disclosures. (Shift, 2023c; European Commission, 2023d)

The new ESRS offers a more formalized framework for social disclosures, focusing primarily on the four core stakeholder groups affected by company operations. This method strives to include stakeholders while emphasizing the value of people, and the four groups are the following:

1. The company's workforce consists of direct employees, third-party workers, and contractors.
2. Employees across the company's value chain, both upstream and downstream.
3. Community impacts from corporate activities or the value chain.
4. Customers or end users of the company's products or services. (Shift, 2023c)

With this clarification, the ESRS aims to avoid misleading formulations and highlight the importance of the human dimension of sustainable development. By doing so, they ensure that all key stakeholder groups are considered during materiality assessments. (Shift, 2023c; European Commission, 2023d)

Furthermore, the organized approach may help assurance providers examine firm evaluations, avoid blind spots, and promote comprehensive research on social repercussions and interdependence. Overall, the ESRS social standards emphasize the need to address the human dimension of sustainability, allowing for a systematic examination of impacts and the identification of actual social issues for reporting. The figure below describes the structure of the ESRS. (Shift, 2023c)

5.3.1 Affected Stakeholders

Also, the data presented in sustainability reports may influence the future decisions of affected stakeholders, as shown in Figure 7. For instance, it refers to data that might validate prior findings or forecast future outcomes. Affected stakeholders and users of sustainability reporting are the two types of stakeholders that the organization can influence or affect. It is essential to note that, while some stakeholders may fall into both categories, not all stakeholders do. (EY, 2023)

Figure 7. Categories of stakeholders in ESRS. (Smarthead n.d.)

On the one hand, the first group is the one that includes affected stakeholders. These individuals or organizations may have their interests impacted, either favorably or unfavorably, by the actions and financial interactions of the business across its value chain. For example, it could be creditors, suppliers, employees, and investors; please see Figure 8. The ESRS definition of affected stakeholders is the same as the definition of stakeholders in GRI 1 2021. An organization's actions affect or could affect the interests of people or groups known as stakeholders. (EY, 2023; GRI, n.d.)

Figure 8. Most important shareholders. (Borregaard, 2023)

On the other hand, the second group that includes users of sustainability reporting consists of stakeholders who are interested in appreciation for the organization, such as main users of financial reporting (investors, lenders, and creditors), as well as other affected stakeholders such as trade unions, governments, business partners, analysts, and academics. Users of sustainability reporting make up this category. (EY, 2023; Smarthead (n.d.).

5.3.2 Risk-Based Approach in ESRS

Another change is that the ESRS advocates a risk-based approach to addressing environmental impacts together with human rights throughout the whole value chain (Shift, 2023d). The outlined ESRS definition of the value chain is “the full range of activities, resources, and relationships related to the undertaking’s business model and the external environment in which it operates (European Commission, 2023d).”

Worth noting, a risk-based approach is a strategy that involves finding and ranking possible and real effects on people and the environment, with a major focus on areas with higher risks. By doing so, corporations are encouraged to map their whole value chain as well as target various spheres where negative consequences are most noticeable. As a result, companies can focus on critical risk areas, informed by industry insights and relevant data sources, rather than doing extensive due diligence across the whole supply chain. The real benefit of this approach is that companies that use it can manage the complexity of their value chains more efficiently while also meeting their ESRS reporting obligations at the same time. Hence, this approach makes it easy to spot important problems and rank the steps needed to fix them in order of importance. (Shift, 2023d; European Commission, 2023d)

Additionally, as businesses get a better understanding of high-risk areas, they strengthen their reporting. Sustainability reporting procedures can be continuously improved as they gain a better understanding of material consequences and risks. As a result, the risk-based approach provides a flexible framework that allows businesses to continually improve their reporting while adhering to the ESRS's core values and answering stakeholder demands for truthful and transparent reporting. (Shift, 2023d; European Commission, 2023d)

5.3.3 ESRS - Navigating Governance, Strategy, and Business Models

In the past few years, sustainability reporting standards have primarily focused on high-level disclosures regarding the governance of sustainability issues. Thus, “sustainability” as a term has historically been closely associated with climate and environmental challenges, with no strong connection to social issues such as diversity and inclusion. However, the landscape has evolved significantly. (Shift, 2023e)

There are four essential disclosure requirements outlined in the ESRS related to social matters governance:

(1) Governing bodies' expertise
(2) The escalation, or lack thereof, of issues to governing bodies.
(3) Incorporating incentives
(4) Relationship between impacts and a company's business model. (Shift, 2023e; European Commission, 2023d).

The following chapters will provide a more detailed description of these four disclosures.

5.3.4 Expertise of Governing Bodies

The novelty of the European standard is that ESRS 2 delves deeper into the governance, strategy, and business models of companies, providing detailed insight into not only the role but also the experience and responsibilities of governing bodies in overseeing sustainability issues. To effectively address sustainable development issues, these bodies must carefully disclose how they determine the availability and development of necessary skills and knowledge. A governance review includes a detailed examination of whether management has in-house sustainability expertise or relies on external resources, and how that expertise aligns with the company's capabilities, significant impacts, and possible risks. (Shift, 2023e; European Commission, 2023d)

It is important to note that the ESRS links a company's impact, risks, and opportunities to its sustainability experience. This is done because demands and action on human rights issues, as opposed to environmental issues, are often lacking in governance. (Shift, 2023e; European Commission, 2023d)

This requirement will prompt companies to involve their governing bodies in addressing human impacts and motivate them to organize necessary and up-to-date training. At the very least, leadership and boards must understand and follow global standards concerning human rights and ethical business practices. The most favorable outcome would be to have at least one member with proficiency in both business operations and human rights issues. (Shift, 2023e; European Commission, 2023d)

5.3.5 Escalation of Issues to Governing Bodies

Secondly, ESRS 2 GOV-2 requires companies to be transparent about how their governing bodies are informed about sustainability issues and how those issues have been addressed during the reporting period. It is worth noting that the ESRS itself has well-structured guidance on social standards, and the failure to address social issues will be very noticeable and indicative, especially in situations where significant risks are known. (Shift, 2023e; European Commission, 2023d)

Besides, while summarizing high-level material impacts discussed by boards is necessary, it may lack specificity. Hence, companies should provide detailed insights into issues considered by boards within strategic and risk management frameworks, aligning with UNGP Reporting Framework guidance on human rights discussions. (Shift, 2023e; European Commission, 2023d)

5.3.6 Integration of Incentives

Thirdly, the ESRS Gov-3 standard emphasizes the importance of integrating sustainability performance into business frameworks for members of governing bodies, such as board members and senior management. This is done because the increased awareness that comes from promoting agreement with the principles of sustainable development can promote active participation in solving social and environmental problems. (Shift, 2023e; European Commission, 2023d)

5.3.7 Relationship between Impacts and a Company's Business Model

It is important to note that ESRS 2 SBM-3 requires organizations to report material impacts on individuals and a company's business model. This novel requirement acknowledged that elements of a business model can have material sustainability impacts, which frequently result in financial risk as well, and that sustainability concerns like climate change or systemic inequality can jeopardize a business model. (Shift, 2023e)

For example, several factors may influence a company's social impact. These include its revenue model, value proposition, cost structure, and value chain. By sharing these links, the company can demonstrate that their business is taking social action seriously. In addition, addressing social risks provides valuable information for internal audits and future efforts to meet legal requirements. (Shift, 2023e; European Commission, 2023d)

As a result of this comprehensive approach, businesses will be prepared to handle and deal with any future social risks. Using this approach will make it easier for businesses to be more environmentally friendly and act responsibly. Sustainable frameworks, tactics, and business models will help lower risk and increase resilience. Such actions have long-lasting benefits for all involved. Also, strong management systems are more essential nowadays because the world is changing so quickly. (Shift, 2023e; European Commission, 2023d)

6 Discussion and Conclusions

6.1 Main Requirements and Purpose of ESRS

One of the main goals of expanding the NFRD directive and establishment of CSRD and ESRS was to create the sustainability reporting directive and standards to ensure that sustainability reports of companies are based on more detailed and comprehensive binding legislation. Another significant goal was to increase the consistency and comparability of sustainability reports. Until now, companies have generally reported using various voluntary standards with different structures, which has made comparison quite difficult. Hence, the goal of both the CSRD directive and ESRS standards is to increase consistency and comparability. It can be stated that for the first time, a broader and more common reporting system for sustainability or non-financial information has been established at the European level. (European Commission, 2023b; European Commission, 2023d)

Ensuring transparency about a company's impact on environmental and social factors, including related risks and opportunities, is another main goal of the ESRS (European Commission, 2023b). In addition, the standards aim to prevent greenwashing issues. Moreover, the ESRS is needed and going to benefit a broad spectrum of stakeholders from investors to civil society organizations, by making sustainability information easily accessible and comprehensible. (European Commission, 2023b; European Commission, 2023d)

6.2 ESRS and GRI – Main Differences

ESRS is a complex and unified framework that incorporates various reporting guidelines. It differs from previous standards by emphasizing governance, strategy, impact, risk, and opportunity management. The key differences between GRI and ESRS are their regulatory frameworks, reporting requirements, and approaches to assessing materiality.

One of the main differences is that the ESRS is mandatory for a significant number of companies operating in the European Union, while the GRI standards are voluntary. According to EY (2023), the ESRS applies to more than 50,000 businesses, providing a wide range of reporting obligations. However, GRI standards are voluntarily adopted by different organizations around the world. (EY 2023; GRI n.d.)

Another difference is that ESRS introduces the concept of double materiality. It takes into account both the internal and external impacts of a company's activities. This approach requires companies to consider the consequences of their actions on stakeholders and the broader community, together with the traditional materiality of the impact. In contrast, GRI standards primarily focus on impact materiality, with a main focus on identifying major economic, environmental, and social impacts on the business itself.

Moreover, while both ESRS and GRI include similar requirements, they differ in scope and methodology. According to the analysis, almost 60% of the requirements of GRI do not have any highlighted differences from the ESRS. However, ESRS requires comprehensive double materiality analysis and should also engage stakeholders through regulatory surveys. The GRI Standards, on the other hand, provide guidance on stakeholder engagement and materiality determinations, but their methodology primarily focuses on identifying impacts on the organization. External factors are not considered in GRI in such a detailed manner.

In addition, ESRS sets out specific reporting requirements. These included the disclosure of anticipated social and environmental risks and impacts and the measures taken to address them. The GRI standards offer a broader framework for sustainability reporting, covering economic, environmental, and social aspects, but companies have greater flexibility in choosing which standards to apply and how to report under the GRI than under ESRS.

Overall, while the GRI framework can serve as a baseline for the transition to the ESRS due to similarities, there are notable differences between the two standards. It is also important to note, that together with the GRI-ESRS Impermeability index, reporting can be prepared with reference to the GRI. However, ESRS is introducing new features such as double materiality assessment and broader ESG data to reflect the evolving regulatory environment and growing focus on sustainability reporting standards, as well as risk assessment and a focus on stakeholder engagement.

6.3 Implementation of ESRS – changes, challenges, and opportunities

The ESRS is a set of comprehensive reporting standards that requires companies to consider multiple topics and prepare in advance for reporting. The establishment of the ESRS is a significant step towards united and well-structured standards and requirements for sustainability reporting, addressing the lack of standardized guidance. Under the CSRD directive, ESRS standards provide companies with a structured framework to follow, making it easier to compare results between different businesses and ensure more specific and consistent reporting practices. The preperation involves familiarizing oneself with the data points in the standards, preparing for data collection, and coordinating collaboration at the functional level within the company. Cooperation between finance, sustainability, legal, and investor relations functions is crucial for sustainability reporting, as it cuts across multiple functions. Main changes, challenges, and opportunities, along with key suggestions gathered during analysis and interviews, are going to be presented below.

6.4 Main Changes

First, the main change is that ESRS reporting standards will become mandatory for publication for listed companies as well as for the case company. The implementation of European reporting standards shall involve significant study, investigation, and resource allocation by affected companies.

Second, the introduction of double materiality will be a major change in reporting practices, even for companies that have already submitted their sustainability reports under GRI. To adapt to the ESRS for sustainability reporting, companies should prioritize conducting a double materiality analysis and engaging stakeholders. Companies also need to obtain information from their suppliers, who must report the data requested through ESRS. Starting early with double materiality and dedicating resources to data collection and internal control systems are crucial steps in preparing for compliance with ESRS.

Third, another change is that the data in reports should be not only accurate but also verified. To verify the accuracy of data in sustainability reports and prevent greenwashing, companies are going to and must include sustainability reporting as part of their financial reporting and ensure third-party verification of data. Moreover, the Auditing Act requires auditors to provide assurance, which includes verifying the content of the report by being meticulous in reporting the information. Hence, the content of the report must be carefully and appropriately prepared by the company itself. High-quality reporting Is a challenge now, but it will become a competitive advantage for companies in the future, whether these ESRS are going to create a consistent and comparable reporting framework. However, only time will tell whether comparability is achieved and whether this new legal sustainability report is effective for a company's competitiveness and market value development.

6.5 Main Challenges

First, one of the main challenges is extensive reporting requirements. The transition to ESRS mandates sustainability reporting, especially impacting companies previously not engaged in such practices. This shift might require a fundamental reconstruction of the reporting processes and operations of many companies, creating significant challenges. For instance, the case company and other Finnish businesses are going to face a practical challenge in interpreting the specific reporting obligations in ESRS standards due to the lack of clarity on how to interpret and implement specific reporting obligations.

Also, companies that previously did not engage in sustainability reporting at all will now be required to provide extensive reporting, which might notably impact their operations. Smaller companies, although not required to report under ESRS straight away, still are going to be required to provide relevant data that affects their relationships with customers and suppliers.

Another challenge is that while the standardized ESRS framework aims to simplify reporting processes, it may also introduce challenges related to the interpretation and implementation of the requirements. To overcome the challenges associated with it, companies should understand the directive's objective: to promote more sustainable practices in companies. Managing the numerous reporting requirements and effectively handling them is challenging. The first year of practicing reporting is going to be especially hard and may involve trial and error as companies learn how to navigate the requirements. However, reporting is going to evolve as companies gain practical experience. In addition, organizations are going to learn from each other's practices, interpretations, and approaches too.

Identification of sustainability risks and opportunities requires careful consideration. Hence, one of the critical challenges for companies is identifying and mitigating sustainability risks. Failure to address these risks not only undermines sustainability objectives but also hampers investor decision-making and compliance with regulatory requirements. It could be challenging to identify the sustainability risks each company faces, which makes it challenging for investors to make wise choices. However, it should be noted that ESRS provides flexibility for companies to decide what kind of thresholds they want to establish.

The following difficulties include internal collaboration and knowledge transfer. Both actions are essential when integrating sustainability into core business strategies and require constant effort. Ensuring that stakeholders across all levels of the organization are aligned with sustainability objectives and have the necessary expertise could be a notable organizational challenge. To address challenges it's important to map resources, conduct gap assessments, appoint sustainability champions within companies, and encourage people inside the company to work together. All of it must come from upper levels. Internalizing the reporting process and ensuring transparency are essential measures to make sustainability reporting more effective but might be difficult.

Finally, navigating the collection of data needed for ESRS reporting presents another challenge. Companies must develop specific data collection strategies; otherwise, the necessary data may not be available. It is essential to start as early as possible and think beforehand about what kind of data is required for the reporting. In addition, companies face the challenge of establishing materiality thresholds and prioritizing impacts effectively. This involves making informed decisions about which sustainability issues to address.

6.6 Main Opportunities

Companies embracing ESRS for sustainability reporting can unlock various opportunities that contribute to their long-term success and competitiveness in the market. The adoption of ESRS standards is going to positively influence reporting practices not only inside the European Union but also beyond, which will drive the global adoption of sustainable business practices. This expansion is going to open new markets and investment opportunities for companies operating in various regions in the future.

Man opportunity is that ESRS adoption fosters increased transparency, which can enhance access to capital, refinancing opportunities, and broader markets for sustainable products or services. In addition, transparent reporting builds trust among stakeholders and attracts socially responsible investors.

In addition, Adopting ESRS enables companies to benchmark their sustainability performance against industry leaders, facilitating learning from best practices and driving continuous improvement efforts. Learning from successful sustainability initiatives can inspire innovation and drive positive transformation within organizations.

Lastly, ESRS adoption encourages companies to explore emerging new sustainability themes such as biodiversity, ecosystems, and circular economy practices. The extension of themes presents opportunities for company innovation and differentiation. It might enable businesses to develop new products or services that align with evolving market demands and positively affect competitiveness and profitability.

6.7 Key Strategies for Successful ESRS Adoption

One of the key steps to be included in the company strategy for the successful adoption of new standards would be to start early and involve top management. The ESRS implementation process requires the participation of senior management to ensure the organization's commitment and alignment with strategic goals. Embracing sustainability as a core component of organizational strategy is the only way to be successful in the future. Early engagement might ease the data collection process, and the transition from GRI and enhance stakeholders.

It is important to prioritize data collection as soon as possible and the double materiality assessment process. Being transparent and honest about impacts and methodologies are essential actions. Data collection must be prioritized since data-driven decision-making improves the accuracy and relevance of sustainability reporting. Moreover, a double materiality assessment is essential to define the reporting scope efficiently and identify key sustainability impacts, risks, and opportunities.

Moreover, investing in the training of the employees and knowledge transfer initiatives and dedicating sufficient resources is a very important step to make sure that specialists have the right skills and experience to handle the complexities of ESRS reporting effectively. Building internal capacity strengthens reporting processes and ensures compliance with regulatory requirements. In addition, it is important to train all the employees to broaden their awareness of the matter. Compliance with ESRS will eventually pay off, positioning companies favorably in the evolving landscape of sustainable business practices.

6.8 Conclusion

In conclusion, the adoption of ESRS is an important step toward more consistent and transparent ways of reporting for the case company. The case company, as well as other affected companies, must now follow more detailed and comprehensive reporting standards after the CSRD and ESRS were put in force. The goal of ESRS standards is to ensure that sustainable reporting is uniform and easy to compare. Hence, it makes it easier for affected parties to see and represent the manner in which their actions affect people and the environment, as well as the risks and chances they meet.

In addition, many companies face challenges and chances when they implement ESRS. Challenges include having to report a great deal of data, facing trouble collecting data, deciding what information is important, managing reporting standards, collaborating internally, and having difficulties with standardizing reports and the challenge to understand what to report. In the future, the European Commission's forthcoming detailed guidance on compliance with reporting obligations is expected to alleviate companies' difficulties in interpreting these standards, which might ease the burden.

In order to successfully adopt ESRS, the case company must prioritize early engagement and involvement by senior management. In addition, it is essential to focus on data collection and double materiality assessment, as well as invest resources in training and knowledge transfer programs. Integration of sustainability into the core strategy is going to ease sustainability operations and sustainability reporting. Proactive companies implementing sustainability into their strategy today have all the chances to become top leaders in environmentally friendly business practices. In other words, businesses laying the groundwork for a better tomorrow are those who prioritize sustainability in their business strategy and take advantage of ESRS. With proper actions, the case company can get through the complicated and comprehensive ESRS reporting process as well as improve the firm’s internal operations.

Moreover, adopting the ESRS is an important step toward uniform and well-organized sustainable reporting that encourages all affected companies and stakeholders to be accountable and reliable. Transparent reporting fosters trust among stakeholders and appeals to investors with a commitment to social responsibility. In addition, increased transparency can enhance access to capital, as well as refinancing opportunities, and broader markets for sustainable products or services.

Companies embracing ESRS for sustainability reporting can find many opportunities that contribute to their long-term success and competitiveness in the market. Adopting ESRS enables companies to benchmark their sustainability performance against industry leaders, facilitating learning from best practices and driving continuous improvement efforts. Learning from successful sustainability initiatives can inspire innovation and drive positive transformation within organizations.

Even so there are challenges, the novel regulation also provides possibilities for businesses to become more transparent, and sustainable, learn from, and set an example for other companies. ESRS adoption encourages affected companies to explore emerging new sustainability themes such as biodiversity, ecosystems, and circular economy practices. The extension of themes presents opportunities for company innovation and differentiation. The case company has the opportunity to learn and expand services and the global market. Moreover, extension of themes might enable the business to develop new products that align with evolving market demands and positively affect competitiveness and profitability.

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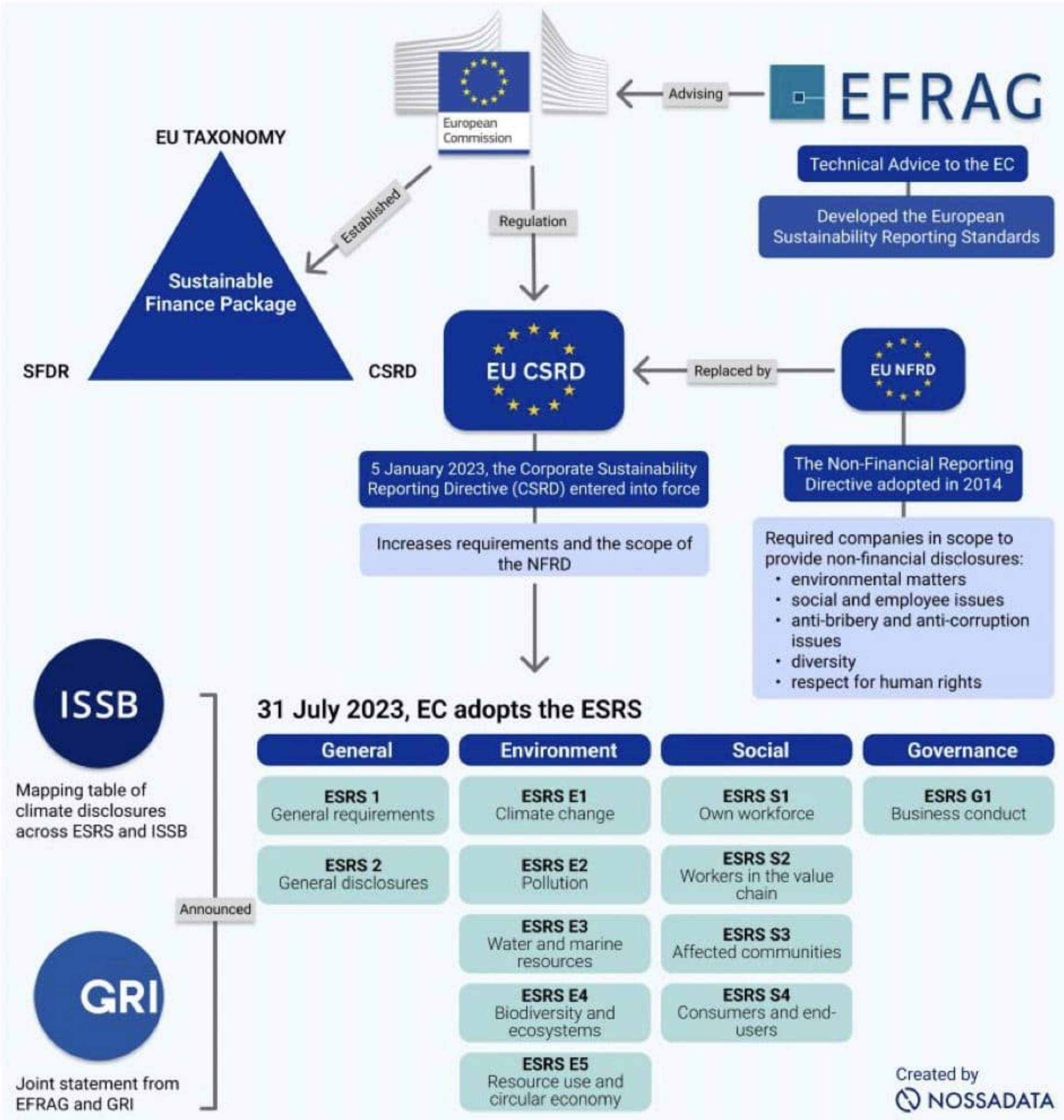
Appendix 1. Analysis of the ESRS Landscape as of 2023. **(Thomson & Chembezi, 2023)**



Appendix 2. The GRI-ESRS Interoperability Index. (EFRAG & GRI, 2023)

GRI STANDARDS	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURE REQUIREMENTS	NOTES	EXPLANATION
GRI 2: General Disclosures 2021	2-1 Organizational details	See requirements of Directive 2013/34/EU		
	2-2 Entities included in the organization's sustainability reporting	**ESRS 1** 5.1; **ESRS 2** BP-1 §5 (a) and (b) i		
	2-3 Reporting period, frequency and contact point *(2-3-a and 2-3-b)*	**ESRS 1** §73		
	2-4 Restatements of information	**ESRS 2** BP-2 §13, §14 (a) to (b)		
	2-5 External assurance	See external assurance requirements of Directive (EU) 2022/2464		
	2-6 Activities, value chain and other business relationships	**ESRS 2** SBM-1 §40 (a) i to (a) ii, (b) to (c), §42 (c)		
	2-7 Employees	**ESRS 2** SBM-1 §40 (a) iii; **ESRS S1** S1-6 §50 (a) to (b) and (d) to (e), §51 to §52		
	2-8 Workers who are not employees	**ESRS S1** S1-7 §55 to §56	(3)	GRI 2-8 covers workers who are not employees and whose work is controlled by the organization. ESRS S1-7 covers non-employee workers: people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78).
	2-9 Governance structure and composition *(2-9-a [for public-interest entities only], 2-9-b, 2-9-c-i, c-ii, c-v to c-viii)*	**ESRS 2** GOV-1 §21, §22 (a), §23; **ESRS G1** §5 (b) See also corporate governance statement requirements of Directive 2013/34/EU for public-interest entities		
	2-10 Nomination and selection of the highest governance body	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-11 Chair of the highest governance body	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-12 Role of the highest governance body in overseeing the management of impacts	**ESRS 2** GOV-1 §22 (c); GOV-2 §26 (a) to (b); SBM-2 §45 (d); **ESRS G1** §5 (a)		
	2-13 Delegation of responsibility for managing impacts	**ESRS 2** GOV-1 §22 (c) i; GOV-2 §26 (a); **ESRS G1** G1-3 §18 (c)		
	2-14 Role of the highest governance body in sustainability reporting	**ESRS 2** GOV-5 §36; IRO-1 §53 (d)		
	2-15 Conflicts of interest	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-16 Communication of critical concerns	**ESRS 2** GOV-2 §26 (a); **ESRS G1** G1-1 AR 1 (a); G1-3 §18 (c)		
	2-17 Collective knowledge of the highest governance body	**ESRS 2** GOV-1 §23		

2-18 Evaluation of the performance of the highest governance body	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
2-19 Remuneration policies *(2-19-a [for listed undertakings only] and 2-19-b)*	**ESRS 2** GOV-3 §29 (a) to (c); **ESRS E1** §13 See also remuneration report requirements of Directive (EU) 2017/828 for listed undertakings		
2-20 Process to determine remuneration *[for listed undertakings only]*	**ESRS 2** GOV-3 §29 (e) See also remuneration report requirements of Directive (EU) 2017/828 for listed undertakings		
2-21 Annual total compensation ratio *(2-21-a and 2-21-c)*	**ESRS S1** S1-16 §97 (b) to (c)		
2-22 Statement on sustainable development strategy	**ESRS 2** SBM-1 §40 (g)		
2-23 Policy commitments *(2-23-a-i and a-iv; 2-23-b, 2-23-d, 2-23-e, 2-23-f)*	**ESRS 2** GOV-4; MDR-P §65 (b) to (c) and (f); **ESRS S1** S1-1 §19 to §21, and §AR 14; **ESRS S2** S2-1 §16 to §17, §19, and §AR 16; **ESRS S3** S3-1 §14, §16 to §17 and §AR 11; **ESRS S4** S4-1 §15 to §17, and §AR 13; **ESRS G1** G1-1 §7 and §AR 1 (b)		
2-24 Embedding policy commitments	**ESRS 2** GOV-2 §26 (b); MDR-P §65 (c); **ESRS S1** S1-4 §AR 35; **ESRS S2** S2-4 §AR 30; **ESRS S3** S3-4 §AR 27; **ESRS S4** S4-4 §AR 27; **ESRS G1** G1-1 §9 and §10 (g)		
2-25 Processes to remediate negative impacts	**ESRS S1** S1-1 §20 (c); S1-3 §32 (a), (b) and (e), §AR 31; **ESRS S2** S2-1 §17 (c); S2-3 §27 (a), (b) and (e), §AR 26; S2-4 §33 (c); **ESRS S3** S3-1 §16 (c); S3-3 §27 (a), (b) and (e), §AR 23; S3-4 §33 (c); **ESRS S4** S4-1 §16 (c); S4-3 §25 (a), (b) and (e), §AR 23; S4-4 §32 (c)		
2-26 Mechanisms for seeking advice and raising concerns	**ESRS S1** S1-3 §AR 32 (d); **ESRS S2** S2-3 §AR 27 (d); **ESRS S3** S3-3 §AR 24 (d); **ESRS S4** S4-3 §AR 24 (d); **ESRS G1** G1-1 §10 (a); G1-3 §18 (a)		
2-27 Compliance with laws and regulations	**ESRS 2** SMB-3 §48 (d); **ESRS E2** E2-4 §AR 25 (b); **ESRS S1** S1-17 §103 (c) to (d) and §104 (b); **ESRS G1** G1-4 §24 (a)	(1a)	GRI 2-27 covers all significant non-compliance with laws and regulations, and breakdowns by types of incidents of non-compliance. ESRS requirements cover information on current financial effects, non-compliance with regards to pollution, anti-corruption and anti-bribery, and severe human rights incidents, in a number of topical standards.
2-28 Membership associations	'Political engagement' is a sustainability matter for G1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
2-29 Approach to stakeholder engagement	**ESRS 2** SMB-2 §45 (a) i to (a) iv; **ESRS S1** S1-1 §20 (b); S1-2 §25, §27 (e) and §28; **ESRS S2** S2-1 §17 (b); S2-2 §20, §22 (e) and §23; **ESRS S3** S3-1 §16 (b); S3-2 §19, §21 (d) and §22; **ESRS S4** S4-1 §16 (b); S4-2 §18, §20 (d) and §21		
2-30 Collective bargaining agreements	**ESRS S1** S1-8 §60 (a) and §61		

GRI 3: Material Topics 2021	3-1 Process to determine material topics	**ESRS 2** BP-1 §AR 1 (a); IRO-1 §53 (b) ii to (b) iv		
	3-2 List of material topics	**ESRS 2** SBM-3 §48 (a) and (g)		
	3-3 Management of material topics	**ESRS 2** SBM-1§ 40 (e); SBM-3 §48 (c) i and (c) iv; MDR-P, MDR-A, MDR-M, and MDR-T; **ESRS S1** S1-2 §27; S1-4 §39 and AR 40 (a); S1-5 §47 (b) to (c); **ESRS S2** S2-2 §22; S2-4 §33, §AR 33 and §AR 36 (a); S2-5 §42 (b) to (c); **ESRS S3** S3-2 §21; S3-4 §33, §AR 31, §AR 34 (a); S3-5 §42 (b) to (c); **ESRS S4** S4-2 §20, S4-4 §31, §AR 30, and §AR 33 (a); S4-5 §41 (b) to (c) See below for additional linkages to specific topics.		
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	201-2 Financial implications and other risks and opportunities due to climate change	**ESRS 2** SBM-3 §48 (a), and (d) to (e); **ESRS E1** §18; E1-3 §26; E1-9 §64		
	201-3 Defined benefit plan obligations and other retirement plans	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	201-4 Financial assistance received from government	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	**ESRS S1** S1-10 §67-71 and §AR 72 to 73	(2b)	GRI 202-1 requires information on the ratio of the entry level wage by gender at significant locations of operation to the minimum wage. ESRS S1-10 requires information on whether all its employees are paid an adequate wage, in line with European Union regulation and applicable benchmarks.
	202-2 Proportion of senior management hired from the local community	'Communities' economic, social and cultural rights' is a sustainability matter for S3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	'Communities' economic, social and cultural rights' is a sustainability matter for S3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	203-2 Significant indirect economic impacts	**ESRS S1** S1-4 §AR 41; **ESRS S2** S2-4 §AR 37; **ESRS S3** S3-4 §AR 36		
GRI 204: Procurement Practices 2016	3-3 Management of material topics	**ESRS G1** G1-2 §12		
	204-1 Proportion of spending on local suppliers	'Communities' economic, social and cultural rights' is a sustainability matter for S3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed	(2b)	

		according to ESRS 1 §11 and pursuant to MDR-M.		
GRI 205: Anti-corruption 2016	3-3 Management of material topics	**ESRS G1** G1-1 §7; G1-3 §16 and §18 (a) and §24 (b)		
	205-1 Operations assessed for risks related to corruption	**ESRS G1** G1-3 §AR 5	(1b)	GRI 205-1 requires quantitative data on the extent of the risk assessment. ESRS G1-3 §AR 5 is a narrative disclosure.
	205-2 Communication and training about anti-corruption policies and procedures	**ESRS G1** G1-3 §20, §21 (b) and (c) and §AR 7 and 8	(1b)	See GRI 205-1.
	205-3 Confirmed incidents of corruption and actions taken	**ESRS G1** G1-4 §25		
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
GRI 207: Tax 2019	207-1 Approach to tax	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	207-2 Tax governance, control, and risk management	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	207-3 Stakeholder engagement and management of concerns related to tax	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	207-4 Country-by-country reporting	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
GRI 301: Materials 2016	3-3 Management of material topics	**ESRS E5** E5-1 §12; E5-2 §17; E5-3 §21		
	301-1 Materials used by weight or volume	**ESRS E5** E5-4 §31 (a)	(1a)	GRI 301-1 requires a breakdown by non-renewable and renewable materials used.
	301-2 Recycled input materials used	**ESRS E5** E5-4 §31 (c)		
	301-3 Reclaimed products and their packaging materials	'Resource outflows related to products and services' and 'Waste' are sustainability matters for E5 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 302: Energy 2016	3-3 Management of material topics	**ESRS E1** E1-2 §25 (c) to (d); E1-3 §26; E1-4 §33		
	302-1 Energy consumption within the organization *(302-1-a, b, c, e and g)*	**ESRS E1** E1-5 §37; §38; §AR 32 (a), (c), (e) and (f)	(2b)	Differences exist between the two in how energy consumption data is aggregated and disaggregated.
	302-2 Energy consumption outside of the organization	'Energy' is a sustainability matter for E1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	302-3 Energy intensity	**ESRS E1** E1-5 §40 to §42	-	
	302-4 Reduction of energy consumption	'Energy' is a sustainability matter for E1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed	(2a)	-

		according to ESRS 1 §11 and pursuant to MDR-M.		
	302-5 Reductions in energy requirements of products and services	'Energy' is a sustainability matter for E1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2a)	-
GRI 303: Water and Effluents 2018	3-3 Management of material topics	**ESRS E2** §AR 9 (b); E2-1 §12; E2-2 §16 and §19; E2-3 §20; **ESRS E3** E3-1 §9; E3-2 §15, §17 to §18; E3-3 §20	-	-
	303-1 Interactions with water as a shared resource	**ESRS 2** SBM-3 §48 (a); MDR-T §80 (f); **ESRS E3** §8 (a); §AR 15 (a); E3-2 §15, §AR 20	-	-
	303-2 Management of water discharge-related impacts *(303-2-iv)*	**ESRS E2** E2-3 §24	(2b)	GRI 303-2 refers to minimum standards in water quality discharges. ESRS E2-3 refers to the consideration of ecological thresholds in setting pollution targets.
	303-3 Water withdrawal	'Water withdrawals' is a sustainability matter for E3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	303-4 Water discharge	'Water discharges' is a sustainability matter for E3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	303-5 Water consumption	**ESRS E3** E3-4 §28 (a), (b), (d) and (e)		
GRI 304: Biodiversity 2016	3-3 Management of material topics	**ESRS E4** E4-1 §AR 1 (b) and (d); E4-2 §20 and §22; E4-3 §25 and §28 (a); E4-4 §29		
	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas *(304-1-a-iv and v)*	**ESRS E4** §16 (a) i; §19 (a); E4-5 §35	(1a)	GRI 304-1-a-v requires reporting the size for each operational site. ESRS E4-5 requires an aggregated figure for all sites.
	304-2 Significant impacts of activities, products and services on biodiversity *(304-2-a-i, ii, iii, iv, v and vi; 304-2-b)*	**ESRS E4** E4-5 §35, §38, §39, §40 (a) and (c)		
	304-3 Habitats protected or restored *(304-3-a and b)*	**ESRS E4** E4-3 §28 (b) and §AR 20 (e); E4-4 §AR 26 (a)		
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	**ESRS E4** E4-5 §40 (d) i	(1b)	GRI 304-4 requires quantitative data on the number of species affected by each level of extinction risk. ESRS E4-5 §40 (d) i is a narrative disclosure.
GRI 305: Emissions 2016	3-3 Management of material topics and GRI 305 1.2	**ESRS E1** E1-2 §22; E1-3 §26; E1-4 §33 and §34 (b); E1-7 §56 (b) and §61 (c); **ESRS E2** §AR 9 (b); E2-1 §12; E2-2 §16 and §19; E2-3 §20	(2a)	GRI 305 requirement 1.2 requires reporting the type and scheme of which offsets are part.

	305-1 Direct (Scope 1) GHG emissions	**ESRS E1** E1-4 §34 (c); E1-6 §44 (a); §46; §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; AR §43 (c) to (d)		
	305-2 Energy indirect (Scope 2) GHG emissions	**ESRS E1** E1-4 §34 (c); E1-6 §44 (b); §46; §49; §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; §AR 45 (a), (c), (d), and (f)		
	305-3 Other indirect (Scope 3) GHG emissions	**ESRS E1** E1-4 §34 (c); E1-6 §44 (c); §51; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 46 (a) (i) to (k)		
	305-4 GHG emissions intensity	**ESRS E1** E1-6 §53; §54; §AR 39 (c); §AR 53 (a)	(1a)	GRI 305-4 requires reporting the intensity ratio for Scope 3 GHG emissions separately from Scope 1 and Scope 2. ESRS requires reporting the intensity ratio for the total GHG emissions.
	305-5 Reduction of GHG emissions *(305-5-a, c and 2.9.5)*	**ESRS E1** E1-3 §29 (b); E1-4 §34 (c); §AR 25 (b) and (c); E1-7 §56		
	305-6 Emissions of ozone-depleting substances (ODS)	'Pollution of air' is a sustainability matter for E2 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	**ESRS E2** E2-4 §28 (a); §30 (b) and (c); §31; §AR 21; §AR 26		
GRI 306: Waste 2020	3-3 Management of material topics	**ESRS E5** §AR 7 (a); E5-1 §12; E5-2 §17; E5-3 §21		
	306-1 Waste generation and significant waste-related impacts	**ESRS 2** SBM-3 §48 (a), (c) ii and iv; **ESRS E5** E5-4 §30		
	306-2 Management of significant waste-related impacts *(306-2-a and c)*	**ESRS E5** E5-2 §17 and §20 (e) and (f); E5-5 §40 and §AR 33 (c)		
	306-3 Waste generated	**ESRS E5** E5-5 §37 (a), §38 to §40	(1b)	GRI 306-3 requires quantitative data (i.e, a breakdown of the composition of the waste in metric tons). ESRS E5-5 §38 requires a narrative disclosure.
	306-4 Waste diverted from disposal *(306-4-a, b, c, e)*	**ESRS E5** E5-5 §37 (b), §38 and §40	(1b)	See GRI 306-3.
	306-5 Waste directed to disposal *(306-5-a, b, c, e)*	**ESRS E5** E5-5 §37 (c), §38 and §40	(1a) (1b)	GRI 306-4 requires a breakdown between incineration with energy recovery and incineration without energy recovery. See also GRI 306-3.
GRI 306: Effluents and Waste 2016	306-3 Significant spills	'Pollution of air', 'Pollution of water', and 'Pollution of soil' are sustainability matters for E2 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 308: Supplier Environmental Assessment 2016	3-3 Management of material topics	**ESRS G1** G1-2 §12 and §15 (a)		
	308-1 New suppliers that were screened using environmental criteria	**ESRS G1** G1-2 §15 (b)	(1b)	GRI 308-1 requires quantitative data on the extent of new suppliers screened based on environmental criteria. ESRS G1-2 requires a narrative disclosure.

	308-2 Negative environmental impacts in the supply chain and actions taken *(308-2-c)*	**ESRS 2** SBM-3 §48 (c) i and iv		
GRI 401: Employment 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	401-1 New employee hires and employee turnover *(401-1-b)*	**ESRS S1** S1-6 §50 (c)	(1a)	GRI 401-1-b requires breakdowns by age group, gender, and region.
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees *(401-2-a-ii, a-iii, a-iv, a-v and b)*	**ESRS S1** S1-11 §74; §75; §AR 75		
	401-3 Parental leave *(401-3-a and b)*	**ESRS S1** S1-15 §93	(1a)	GRI 401-3 covers parental leave. ESRS S1-15 covers family-related leave. Parental leave is one of the types of family-related leave. GRI 401-3-a requires a breakdown by gender for the parental leave.
GRI 402: Labor/Management Relations 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	402-1 Minimum notice periods regarding operational changes	'Social dialogue' and 'Collective bargaining' are sustainability matters for S1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 403: Occupational Health and Safety 2018	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	403-1 Occupational health and safety management system *(403-1-a)*	**ESRS S1** S1-1 §23	(1a)	GRI 403-1-a requires reporting the legal requirements and management system standards on which the system is based. This information is not required in ESRS as this is regulated within the European Union.
	403-2 Hazard identification, risk assessment, and incident investigation *(403-2-b)*	**ESRS S1** S1-3 §32 (b) and §33		
	403-3 Occupational health services 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety	'Health and safety' and 'Training and skills development' are sustainability matters for S1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	

	403-6 Promotion of worker health	'Social protection' is a sustainability matter for S1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	**ESRS S2** S2-4 §32 (a)		
	403-8 Workers covered by an occupational health and safety management system *(403-8-a and b)*	**ESRS S1** S1-14 §88 (a); §90	(2c)	
	403-9 Work-related injuries *(403-9-a-i, a-iii, b-i, b-iii, c-iii, d, e)*	**ESRS S1** S1-4, §38 (a); S1-14 §88 (b) and (c); §AR 82	(1a) (2c)	GRI 403-9-c-iii and d require reporting on the use of the hierarchy of controls.
	403-10 Work-related ill health *(403-10-a-i, a-ii, b-i, b-ii, c-iii)*	**ESRS S1** S1-4, §38 (a); S1-14 §88 (b) and (d); §89; §AR 82	(1a) (2c)	See GRI 403-9.
GRI 404: Training and Education 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	404-1 Average hours of training per year per employee	**ESRS S1** S1-13 §83 (b) and §84		
	404-2 Programs for upgrading employee skills and transition assistance programs *(404-2-a)*	**ESRS S1** S1-1 §AR 17 (h)		
	404-3 Percentage of employees receiving regular performance and career development reviews	**ESRS S1** S1-13 §83 (a) and §84		
GRI 405: Diversity and Equal Opportunity 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	3-3 Management of material topics	**ESRS S1** §24 (a)		
	405-1 Diversity of governance bodies and employees *(405-1-a-i and iii, 405-1-b)*	**ESRS 2** GOV-1 §21 (d); **ESRS S1** S1-6 §50 (a); S1-9 §66 (a) to (b); S1-12 §79	(1a)	GRI 405-1-b requires breakdowns by employee category.
	405-2 Ratio of basic salary and remuneration of women to men	**ESRS S1** S1-16 §97 and §98		
GRI 406: Non-discrimination 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); §24 (a) and (d); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c); **ESRS S4** §10 (b); S4-1 §13; §16 (c); S4-2 §20; S4-4 §31; §32 (a) and (b); §35; §AR 30; §AR 33 (a); S4-5 §38; §41 (b) and (c)		
	406-1 Incidents of discrimination and corrective actions taken	**ESRS S1** S1-17 §97, §103 (a), §AR 103		

GRI 407: Freedom of Association and Collective Bargaining 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	'Freedom of association' and 'Collective bargaining' are sustainability matters for S1 and S2 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 408: Child Labor 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); §22; S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); §18; S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	408-1 Operations and suppliers at significant risk for incidents of child labor *(408-1-a-i, b, c)*	**ESRS S1** §14 (g); S1-1 §22 **ESRS S2** §11 (b); S2-1 §18	(2a)	GRI 408-1-b-i requires reporting the types of suppliers at risk.
GRI 409: Forced or Compulsory Labor 2016	3-3 Management of material topics	**ESRS S1** S1-1 §17; §20 (c); §22; S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); **ESRS S2** §11 (c); S2-1 §14; §17 (c); §18; S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	**ESRS S1** §14 (f); S1-1 §22 **ESRS S2** §11 (b); S2-1 §18	(2a)	See GRI 408-1.
GRI 410: Security Practices 2016	3-3 Management of material topics	**ESRS S3** §9 (b); S3-1 §12, and §16 (c); S3-2 §21; S3-4 §32 (a) to (d), §33 (a) and (b), §35, 36; §AR 31, §AR 34 (a); S3-5 §39, §43		
	410-1 Security personnel trained in human rights policies or procedures	'Security-related impacts' is a sustainability matter covered for S3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
GRI 411: Rights of Indigenous Peoples 2016	3-3 Management of material topics	**ESRS S3** §9 (b); S3-1 §12, §15 and §16 (c); S3-2 §21; S3-4 §32 (a) to (d), §33 (a) and (b), §35, 36; §AR 31, §AR 34 (a); S3-5 §39, §43		
	411-1 Incidents of violations involving rights of indigenous peoples	**ESRS S3** S3-1 §16 (c), AR 12; S3-4 §30, §32 (b), §33 (b), §36	(1b)	GRI 411-1 requires quantitative data on the number of incidents. ESRS S3 requires narrative disclosures.
GRI 413: Local Communities 2016	3-3 Management of material topics	**ESRS S3** §9 (b); S3-1 §12, and §16 (c); S3-2 §21; S3-4 §32 (a) to (d), §33 (a) and (b), §35, 36; §AR 31, §AR 34 (a); S3-5 §39, §43		
	413-1 Operations with local community engagement, impact assessments, and development programs	**ESRS S3** S3-2 §19; S3-3 §25; S3-4 §AR 34 (c)	(1b)	GRI 413-1 requires quantitative data on operations with implemented local community engagement, impact assessments, and/or development programs. ESRS S3 includes narrative disclosures.

				compliance. ESRS S4-4 requires a narrative disclosure.
GRI 417: Marketing and Labeling 2016	3-3 Management of material topics	**ESRS S4** §10 (b); S4-1 §13, §16 (c); S4-2 §20; S4-4 §31; §32 (a) and (b), §35, §AR 30, §AR 33 (a); S4-5 §38, §41 (b) and (c)		
	417-1 Requirements for product and service information and labeling	'Information-related impacts for consumers and end-users' is a sustainability matter for S4 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	417-2 Incidents of non-compliance concerning product and service information and labeling	**ESRS S4** S4-4 §35	(1b)	GRI 417-2 requires quantitative data on the number of incidents and breakdowns by types of incidents of non-compliance. ESRS S4-4 requires a narrative disclosure.
	417-3 Incidents of non-compliance concerning marketing communications	**ESRS S4** S4-4 §35	(1b)	See GRI 417-2.
GRI 418: Customer Privacy 2016	3-3 Management of material topics	**ESRS S4** §10 (b); S4-1 §13 and §16 (c); S4-2 §20; S4-4 §31, §32 (a) and (b), §35, §AR 30, §AR 33 (a); S4-5 §38, §41 (b) and (c)		
	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	**ESRS S4** S4-3 §AR 23; S4-4 §35	(1a)	GRI 418-1 requires further granularity on the type of complaints and the number of identified leaks, thefts, or losses of customer data.
	413-2 Operations with significant actual and potential negative impacts on local communities *(413-2-a-ii)*	**ESRS 2** SBM-3 48 (c); **ESRS S3** §9 (a) i and (b)		
GRI 414: Supplier Social Assessment 2016	3-3 Management of material topics	**ESRS G1** G1-2 §12 and §15 (a)		
	414-1 New suppliers that were screened using social criteria	**ESRS G1** G1-2 §15 (b)	(1b)	GRI 414-1 requires quantitative data on the extent of new suppliers screened based on social criteria. ESRS G1-2 requires a narrative disclosure.
	414-2 Negative social impacts in the supply chain and actions taken *(414-2-c)*	**ESRS 2** SBM-3 §48 (c) i and iv		
GRI 415: Public Policy 2016	3-3 Management of material topics	**ESRS G1** G1-5 §27		
	415-1 Political contributions	**ESRS G1** G1-5 §29 (b)		
GRI 416: Customer Health and Safety 2016	3-3 Management of material topics	**ESRS S4** §10 (b); S4-1 §13, §16 (c); S4-2 §20; S4-4 §31; §32 (a) and (b), §35, §AR 30, §AR 33 (a); S4-5 §38, §41 (b) and (c)		
	416-1 Assessment of the health and safety impacts of product and service categories	'Personal safety of consumers and end-users' is a sustainability matter for S4 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	(2b)	
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	**ESRS S4** S4-4 §35	(1b)	GRI 416-2 requires quantitative data on the number of incidents and breakdowns by types of incidents of non-

"Notes legend

(1a) Differences in granularity: GRI requires further breakdowns or granularity.
(1b) Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
(2a) Differences in scope: GRI disclosure is broader and/or more specific than ESRS.
(2b) Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
(2c) Differences in scope: GRI 403 covers employees and workers who are not employees but whose work and/or workplace is controlled by the organization. ESRS S1-14 covers employees and non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)). For fatalities, ESRS S1-14 covers workers working on the undertaking's sites.
(3) Difference in definition of non-employees: GRI 2-8 covers workers who are not employees and whose work is controlled by the organization. ESRS S1-7 covers non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)). (EFRAG & GRI, 2023)"

Appendix 3: Sustainability matters that should be considered in materiality assessment and covered in topical ESRS standards (European Commission, 2023d)

Topical ESRS	Sustainabilitymatters covered in topial ESRS		
	Topic	Sub-topic	Sub-sub-topics
ESRS E1	Climate Change	• Climate change adaptation • Climate change mitigation • Energy	
ESRS E2	Pollution	• Pollution of air • Pollution of water • Pollution of soil • Pollution of living organisms and food resources • Substances of concern • Substances of very high concern • Microplastics	
ESRS E3	Water and marine resources	• Water • Marine resources	• Water consumption • Water withdrawals • Water discharges • Water discharges in the oceans • Extraction and use of Marine resources
ESRS E4	Biodiversity and ecosystems	• Direct impact drivers of biodiversity loss	• Land-use change fresh water-use change and sea-use change • Direct exploitation • Invasive alien species • Pollution • Others
		• Impacts on the state of species	Examples: • Species population size • Species global extinction risk
		• Impacts on the state of species	Examples: • Land degradation • Desertification • Soil sealing
		• Impacts on the extent and condition of ecosystems	
ESRS E5	Circular economy	• Resources inflows including resource use • Resource outflows related to products and services • Waste	

ESRS S1	**Own workforce**	• Working conditions	• Secure employment • Working time • Adequate wages • Social dialogue • Freedom of association the existence of works councils and the information consultation and participation rights of workers • Collective bargaining including rate of workers covered by collective agreements • Work-life balance • Health and safety
		• Equal treatment and opportunities for all	Gender equality and equal pay for work of equal value • Training and skills development • Employment and inclusion of persons with disabilities • Measures against violence and harassment in the workplace • Diversity
		• Other work-related rights	Child labour • Forced labour • Adequate housing • Privacy
ESRS S2	**Workers in the value chain**	• Working conditions	• Secure employment • Working time • Adequate wages • Social dialogue • Freedom of association including the existence of work councils • Collective bargaining • Work-life balance • Health and safety
		• Equal treatment and opportunities for all	• Gender equality and equal pay for work of equal value • Training and skills development • The employment and inclusion of persons with disabilities • Measures against violence and harassment in the workplace • Diversity
		• Other work-related rights	• Child labour • Forced labour • Adequate housing • Water and sanitation • Privacy

ESRS S3	**Affected communities**	• Communities' economic, social and cultural rights	• Adequate housing • Adequate food • Water and sanitation • Land-related impacts • Security-related impacts
		• Communities' civil and poli	• Freedom of expression • Freedom of assembly • Impacts on human rights defenders
		• Rights of indigenous peopl	• Freedom of expression • Freedom of assembly • Impacts on human rights defenders
ESRS S4	**Consumers and endusers**	• Information-related impacts for consumers and/or endusers	• Privacy • Freedom of expression • Access to (quality) information
		• Personal safety of consumers and/or endusers	• Health and safety • Security of a person • Protection of children
		• Social inclusion of consumers and/or endusers	• Non-discrimination • Access to products and services • Responsible marketing practices
ESRS G1	**Business conduct**	• Corporate culture • Protection of whistleblowers • Animal welfare • Political engagement • Management of relationships with suppliers including payment practices	
		• Corruption and bribery	• Prevention and detection including training Incidents

Appendix 4. GRI standards, disclosures, and requirements without significant differences from ESRS.

GRI standards and disclusures with no highlighted differences:
GRI 2: General Disclosures
2-1 Organizational Details
2-2 Entities included in the organization's sustainability reporting
2-3 Reporting period, frequency and contact point
2-4 Restatements of information
2-5 External assurance
2-6 Activities, value chain and other business relationships assurance
2-6 Emplyees
2-9 Governance structure and composition
2-12 Role of the highest governance body in overseeing the management of impacts
2-13 Delegation of responsibility for managing impacts
2-14 Role of the highest governance body in sustainability reporting
2-16 Communication of critical concerns
2-17 Collective knowledge of the highest governance body
2-19 Remuneration policies
2-20 Process to determine remuneration
2-21 Annual total compensation ratio
2-22 Statement on sustainable development strategy
2-23 Policy commitments
2-24 Embedding policy commitments
2-25 Processes to remediate negative impacts
2-26 Mechanisms for seeking advice and raising concerns
2-29 Approach to stakeholder engagement
2-30 Collective bargaining agreements
GRI 3: Material Topics 2021
3-1 Process to determine material topics
3-2 List of material topics
3-3 Management of material topics
GRI 201: Economic Performance 2016
201-2 Financial implications and other risks and opportunities due to climate change
GRI 203: Indirect Economic Impacts 2016
203-2 Significant indirect economic impacts
GRI 204: Procurement Practices 2016
3-3 Management of material topics

GRI 205: Anticorruption 2016
3-3 Management of material topics
205-3 Confirmed incidents of corruption and actions taken
GRI 301: Materials 2016
3-3 Management of material topics
301-2 Recycled input materials used
GRI 302: Energy 2016
3-3 Management of material topics
302-3 Energy intensity - no highlighted differences
GRI 303: Water and Effluents 2018
3-3 Management of material topics
303-1 Interactions with water as a shared resource
303-5 Water consumption
GRI 304: Biodiversity 2016
3-3 Management of material topics
304-2 Significant impacts of activities, products and services on biodiversity
304-3 Habitats protected or restored
GRI 305: Emissions 2016
305-1 Direct (Scope 1) GHG emissions
305-2 Energy indirect (Scope 2) GHG emissions
305-3 Other indirect (Scope 3) GHG emissions
305-5 Reduction of GHG emissions -
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
GRI 306: Waste 2020
3-3 Management of material topics emissions
306-2 Management of significant waste-related impacts emissions
GRI 308: Supplier Environmental Assessment 2016
3-3 Management of material topics
308-1 New suppliers that were screened using environmental criteria
308-2 Negative environmental impacts in the supply chain and actions taken
GRI 401: Employment 2016
3-3 Management of material topics
401-1 New employee hires and employee turnover
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees
GRI 402: Labor/Management Relations 2016
3-3 Management of material topics
GRI 403: Occupational Health and Safety 2018
3-3 Management of material topics
403-1 Occupational health and safety management system
403-2 Hazard identification, risk assessment, and incident investigation
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

GRI 404: Training and Education 2016
3-3 Management of material topics
404-1 Average hours of training per year per employee
404-2 Programs for upgrading employee skills and transition assistance programs
404-3 Percentage of employees receiving regular performance and career development reviews
GRI 405: Diversity and Equal Opportunity 2016
3-3 Management of material topics
405-2 Ratio of basic salary and remuneration of women to men
GRI 406: Non-discrimination 2016
3-3 Management of material topics
406-1 Incidents of discrimination and corrective actions taken
GRI 407: Freedom of Association and Collective Bargaining 2016
3-3 Management of material topics
GRI 408: Child Labor 2016
3-3 Management of material topics
GRI 409: Forced or Compulsory Labor 2016
3-3 Management of material topics
GRI 410: Security Practices 2016
3-3 Management of material topics
GRI 411: Rights of Indigenous Peoples 2016
3-3 Management of material topics
GRI 413: Local Communities 2016
3-3 Management of material topics
413-2 Operations with significant actual and potential negative impacts on local communities
GRI 414: Supplier Social Assessment 2016
3-3 Management of material topics
414-1 New suppliers that were screened using social criteria
414-2 Negative social impacts in the supply chain and actions taken
GRI 415: Public Policy 2016
3-3 Management of material topics
415-1 Political contributions
GRI 416: Customer Health and Safety 2016
3-3 Management of material topics
GRI 417: Marketing and Labeling 2016
3-3 Management of material topics
GRI 418: Customer Privacy 2016
3-3 Management of material topics

Appendix 5. GRI standards with differences from the ESRS in terms of the covered topics.

GRI standards and disclosures with differences from the ESRS covered topics:	
GRI Standards/ Disclosures and requirements	Main differences
GRI 2: General Disclosures	
2-8 Workers who are not employees	The difference in definition of non-employees: GRI 2-8 covers workers who are not employees and whose work is controlled by the organization. ESRS S1-7 covers non-employee workers (people with contracts with the undertaking to supply labor ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)).
2-27 Compliance with laws and regulations	Differences in granularity: GRI requires further breakdowns or granularity
2-28 Membership associations	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 202: Market Presence 2016	
202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
202-2 Proportion of senior management hired from the local community	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 203: Indirect Economic Impacts 2016	
203-1 Infrastructure investments and services supported	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 204: Procurement Practices 2016	
204-1 Proportion of spending on local suppliers	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 205: Anticorruption 2016	
205-1 Operations assessed for risks related to corruption	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
205-2 Communication and training about anti-corruption policies and procedures	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
GRI 301: Materials 2016	
301-1 Materials used by weight or volume	Differences in granularity: GRI requires further breakdowns or granularity
301-3 Reclaimed products and their packaging materials	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 302: Energy 2016	
302-1 Energy consumption within the organization	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
302-2 Energy consumption outside of the organization	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
302-4 Reduction of energy consumption	Differences in scope: GRI disclosure is broader and/or more specific than ESRS.
302-5 Reductions in energy requirements of products and services	Differences in scope: GRI disclosure is broader and/or more specific than ESRS.

GRI 303: Water and Effluents 2018	
303-2 Management of water dischargerelated impacts	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
303-3 Water withdrawal	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
303-4 Water discharge	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 304: Biodiversity 2016	
304-1 Operational sites owned, leased,managed in, or adjacent to, protected areas and areas of high biodiversityvalue outside protected areas(304-1-a-iv and v)	Differences in granularity: GRI requires further breakdowns or granularity
304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
GRI 305: Emissions 2016	
3-3 Management of material topics and GRI 305 1.2	Differences in scope: GRI disclosure is broader and/or more specific than ESRS.
305-4 GHG emissions intensity	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative
305-6 Emissions of ozone-depleting substances (ODS)	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 306: Waste 2020	
306-3 Waste generated	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
306-4 Waste diverted from disposal	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
306-5 Waste directed to disposal	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure. Differences in granularity: GRI requires further breakdowns or granularity
GRI 306: Effluents and Waste 2016	
306-3 Significant spills	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 401: Employment 2016	
401-3 Parental leave	Differences in granularity: GRI requires further breakdowns or granularity
GRI 402: Labor/Management Relations 2016	
402-1 Minimum notice periods regarding operational changes	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 403: Occupational Health and Safety	
403-3 Occupational health services	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
403-4 Worker participation, consultation, and communication on occupational health and safety	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
403-5 Worker training on occupational health and safety	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
403-6 Promotion of worker health	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.

403-8 Workers covered by an occupational health and safety management system	Differences in scope: GRI 403 covers employees and workers who are not employees but whose work and/or workplace is controlled by the organization. ESRS S1-14 covers employees and non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)). For fatalities, ESRS S1-14 covers workers working on the undertaking's sites.
403-9 Work-related injuries	Differences in granularity: GRI requires further breakdowns or granularity.
	Differences in scope: GRI 403 covers employees and workers who are not employees but whose work and/or workplace is controlled by the organization. ESRS S1-14 covers employees and non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)). For fatalities, ESRS S1-14 covers workers working on the undertaking's sites.
403-10 Work-related ill health	Differences in granularity: GRI requires further breakdowns or granularity.
	Differences in scope: GRI 403 covers employees and workers who are not employees but whose work and/or workplace is controlled by the organization. ESRS S1-14 covers employees and non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)). For fatalities, ESRS S1-14 covers workers working on the undertaking's sites.
GRI 405: Diversity and Equal Opportunity 2016	
405-1 Diversity of governance bodies and employees	Differences in granularity: GRI requires further breakdowns or granularity
GRI 407: Freedom of Association and	
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 408: Child Labor 2016	
408-1 Operations and suppliers at significant risk for incidents of child labor	Differences in scope: GRI disclosure is broader and/or more specific than ESRS.
GRI 409: Forced or Compulsory Labor 2016	
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Differences in scope: GRI disclosure is broader and/or more specific than ESRS.
GRI 410: Security Practices 2016	
410-1 Security personnel trained in human rights policies or procedures	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
GRI 411: Rights of Indigenous Peoples 2016	
411-1 Incidents of violations involving rights of indigenous peoples	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative
GRI 413: Local Communities 2016	
413-1 Operations with local community engagement, impact assessments, and development programs	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
GRI 416: Customer Health and Safety 2016	
416-1 Assessment of the health and safety impacts of product and service categories	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.

GRI 417: Marketing and Labeling 2016	
417-1 Requirements for product and service information and labelling	Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.
417-2 Incidents of non-compliance concerning product and service information and labelling	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
417-3 Incidents of non-compliance concerning marketing communications	Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.
GRI 418: Customer Privacy 2016	
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Differences in granularity: GRI requires further breakdowns or granularity

Appendix 6. GRI topics not covered by the ESRS.

These topics are not covered by the list of sustainability matters in ESRS 1 AR §16:
GRI 2: General Disclosures:
2-10 Nomination and selection of the highest governance body
2-11 Chair of the highest governance body
2-15 Conflicts of interest
2-18 Evaluation of the performance of the highest governance body
GRI 201: Economic Performance 2016
201-1 Direct economic value generated and distributed
201-3 Defined benefit plan obligations and other retirement plans
201-4 Financial assistance received from government
GRI 206: Anticompetitive Behavior 2016
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices
GRI 207: Tax 2019
207-1 Approach to tax
207-2 Tax governance, control, and risk management
207-3 Stakeholder engagement and management of concerns related to tax
207-4 Country-by-country reporting
GRI 207: Tax

Appendix 7. Interview Questions.

The first set of questions:

1. Can you provide an overview of the case company's current sustainability reporting practices? How has it changed over the past 3 years?
2. What motivated your company to adopt sustainability reporting standards such as GRI in the first place?
3. Can you highlight some key milestones or achievements in your company's sustainability reporting history?
4. What are the major challenges your company has faced in implementing sustainability reporting standards?
5. How does your company ensure the accuracy and reliability of the data reported in sustainability reports?
6. In what ways does your company engage stakeholders in the sustainability reporting process?
7. What are the key sustainability performance indicators your company focuses on, and how do you track progress in those areas?
8. How does your company plan to address future challenges and opportunities in sustainability reporting?
9. What strategies or measures has your organization implemented to address or mitigate the challenges associated with reporting under the ESRS standard?
10. Is there anything you would like to add to the matter?

The second set of questions:

1. What do you see as the key requirements of the European Sustainability Reporting Standards (ESRS)?

2. How do you see that the implementation of the European Sustainability Reporting Standards (ESRS) affects the sustainability reporting practices of companies in the next years?
3. What advice would you give to companies looking to implement ESRS for sustainability reporting this year?
4. What is your opinion on how ESRS differs from previous reporting practices e.g. the Global Reporting Initiative GRI?
5. What are some common challenges organizations face when adopting ESRS for sustainability reporting?
6. Do you have a recommendation for the organizations on what strategies must be implemented to address or mitigate the challenges associated with reporting under the ESRS standards?
7. How the accuracy and reliability of the data reported in sustainability reports can be ensured?
8. Looking ahead, what opportunities do you see emerging from the adoption of ESRS standards?
9. What advice would you give to companies looking to adopt ESRS for their sustainability reporting efforts? Is there anything you would like to add?

Appendix 8: Specialists involved in the study and interviews.

1. Marika Riikonen, serves as the commissioner of the thesis and holds the role of a leading environmental specialist at the case company “Sustera”, previously called Raksystems, Green Building Partners. Marka is a Master of Science in Water and Environmental Engineering and specializes in sustainability within the construction sector. With expertise in carbon footprint calculations, sustainability certifications, and corporate social responsibility, she has been involved in internal sustainability initiatives at the case company since the year 2020. The interview took place on 21 March 2024.
2. Lotta Kauppinen is a leading specialist and manager in the sustainability department at Sustera, previously called Raksystems, Ecoreal with expertise in several sustainability-related fields, including internal and external sustainability reporting practices. The interview took place on 26 March 2024.
3. Zinyat Gurbanova is a sustainability consultant focusing on ESRS, GRI, and TCFD. The interview took place on 29 March 2024.
4. Ina Dimitrieva is a sustainability advisor with a focus on ESG regulatory compliance, ESG Risk Management, and Opportunities. Ina provides end-to-end consulting in the field of sustainability: from a single data point to a strategic decision, including the implementation of a sustainable market strategy and the development of sustainability (financial) products. The interview took place on 2 April 2024.
5. Hannu Ylänen is a lead expert at the Confederation of Finnish Industries whose responsibility areas include corporate law, corporate governance, and specific legislative initiatives concerning sustainability. He is currently involved in the preparation of the sustainability reporting directive, as well as its predecessor, the non-financial reporting directive, in the EU context, and is also engaged in the national implementation of these directives. The interview took place on 3 April 2024.

Appendix 9. Thesis data management plan.

Research data will be stored and accessed on a restricted device during the writing of the dissertation. All gathered data will be stored within a designated folder on the device. The data includes answers to questions, interview transcripts, videos, and notes. Access to the folder will be restricted to ensure data privacy and security. This includes restricting access to the data on the computer to authorized persons only and encrypting it. There is no confidential information in this study. It is agreed that data from external sources will be used by the terms of use and properly cited following the HAMK reference manual. The project does not plan to process confidential or proprietary data.

Once the study is completed, personal information will not be shared with anyone else without their permission. Individuals who participated in the study and interviews were informed about the transcript of the recordings and that it would not be public. In addition, the data from interviews is going to be deleted one year after the study is done. The experts who were interviewed agreed to be revealed in the study. The author owns the data and results of the study, and the company that ordered the work has the right to use the results. It will be discussed and agreed upon with all relevant parties regarding ownership and use.