

How can CSRD move companies strategically toward sustainability?

Thao Nguyen

Kristiana Stoyanova

Mohammed-Elhabib Ferehate

Lorenzo Elia Camagni



Blekinge Institute of Technology
Karlskrona, Sweden
2024

Examiner: Henrik Ny Ph.D.

Primary advisor: Patricia Lagun Mesquita

Secondary advisor: Pierre Johnson

How can CSRD move companies strategically toward sustainability?

Thao Nguyen

Kristiana Stoyanova

Mohammed-Elhabib Ferehate

Lorenzo Elia Camagni

Blekinge Institute of Technology
Karlskrona, Sweden
2024

Thesis submitted for completion of Master of Strategic Leadership towards Sustainability,
Blekinge Institute of Technology, Karlskrona, Sweden.

Abstract:

A significant portion of responsibility for the global socio-economic crisis referred by the authors as the "sustainability challenge" lies within the private sector. Hence to initiate a global transformation towards sustainability the participation of companies is essential. One way to engage the private sector to do that is through public policy. The European Union takes this approach with the European Green Deal and more specifically - the Corporate Sustainability Reporting Directive (CSRD) - which is the main focus of this research. The directive aims to enhance transparency, raise awareness and increase responsibility of the corporate societal and environmental impact.

This thesis investigates the potency of CSRD to drive transformation. For this purpose this research employs a Strategic Sustainable Development (SSD) lens to evaluate the CSRD, identifying its strengths and weaknesses. The research is divided into two parts: the first assesses the frameworks' design using the SSD lens, while the second involves interviews to gain deeper insights and pinpoint design and implementation gaps. The study also presents an overview of the challenges encountered during the implementation of the CSRD and proposes potential solutions. The thesis concludes with recommendations and suggests directions for future research.

Keywords: CSRD, sustainability reporting, non-financial reporting, Strategic Sustainable Development (SSD)

Statement of Contribution

Our team demonstrated exceptional dedication to understanding the Corporate Sustainability Reporting Directive (CSRD) and its strategic role in driving corporate sustainability. In the earlier months of our Master's programme, when the sustainability challenge weighed heavy on us with its complexity and lack of clear solution, we were introduced to the CSRD – a beam of light and a potential solution to drive sustainability change in our society at large. That early exposure inspired us to choose CSRD as our thesis topic. This is how our team was formed. Our team is very diverse in terms of countries of origin (4), continents (3), and even religion (3). Even though we consider ourselves open-minded we were faced with cultural and gender biases and stereotypes, however, we found a way to be complimentary to each other and work as a team. Cumulatively we speak nine languages, and we leveraged our backgrounds in corporate sustainability, engineering, international relations, politics and even teaching English. Over four months we weaved all of this into an extremely enriching experience and friendships that will hopefully last a lifetime.

In terms of working style, we were driven by our curiosity and willingness to learn. We balanced intense work periods with necessary breaks, ensuring each member could step back when needed, even if that meant ten days in silence for some of us. Regular check-ins and feedback sessions proved to be invaluable, and navigating the inevitable conflicts of groupwork encouraged us to grow as individuals but also as a team. In the first weeks of May, a field trip to Brussels, recharged us for the final stages of our research. Without our intentional planning, it coincided with Europe's Day celebrations which provided us with more inspiration on our topic and valuable insights from EU policymakers and sustainability experts.

Individual contributions were as follows:

Thao is a hard worker with razor sharp insights. She demonstrated unparalleled determination and vitality. She maintains a holistic perspective, whilst also ensuring attention to detail. Her tireless work ethic guided our efforts, ensuring thoroughness and precision in our work.

Kristiana took care of our physical and emotional well-being, mediated conflicts if needed, and facilitated personal growth within the team. At the same time, she ensured we kept the line of work by providing structure, clarity, and asking critical questions.

Mohammed has proved to have excellent organisational and IT skills through which he made tasks easier with efficient technological solutions. His people-oriented approach fostered a supportive team environment, making sure to keep the work-life balance in check for our team.

Lorenzo holds a strong sense of responsibility and his persistence proved to be crucial for our research. His thorough approach and insistence to fully understanding details deepened our collective insight. He was instrumental in securing interviewees and invaluable at pushing through initial challenges.

Overall, this collaborative effort has made our Master’s programme a uniquely transformative and expansive life experience for all of us.

Karlskrona,

24th of May 2024



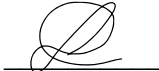
Thao



Kristiana



Mohammed



Lorenzo

Acknowledgements

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.” - **Margaret Mead**

First of all, we want to express our appreciation for freedom and democracy, where citizens can determine the world that they want to live. In a year marked by a record number of elections worldwide, the EU's role as a beacon of democracy is more needed than ever. We hope that the EU will continue to uphold values such as unity, diversity, human rights, and environmental stewardship. We look forward to seeing the EU remain a significant advocate for sustainability on the global stage even after the elections for the European Parliament this June.

Deep gratitude to all of our interviewees for their willingness to share their insights and experiences, which have been crucial to our research. Additionally, we are thankful for the meetings we had in Brussels and the opportunity to visit the European Commission and the European Parliament where we gained an invaluable insider perspective on the EU legislative process.

We wish to thank our primary advisor Patricia Lagun Mesquita. Tita, thank you for the mentorship, guidance, and for the faith you had in us. Pierre Johnson, our secondary advisor, thank you for your feedback and support in this process.

We want to extend this gratitude to everyone in the Department of Strategic Sustainable Development at BTH and the creators of the MSLS programme, especially as it celebrates its 20th anniversary this year. Your vision, dedication, and support have made this journey possible and profoundly impactful. Without this pioneering programme, we would not have the strategic lens to understand the complexity of the sustainability challenge and its potential solutions.

We are also grateful for the opportunity to study in Sweden, particularly for the natural beauty and tranquillity of Karlskrona. This unique environment has significantly contributed to our motivation and creativity throughout our research.

Our heartfelt thanks go to our classmates. Your willingness to listen and your feedback have enriched our learning experience. It has been a great pleasure to navigate the challenges of this academic journey together.

Lastly, we would like to thank our families, friends, and loved ones. Your support and understanding have been of great importance for us. Without your encouragement and belief in us, this achievement would not have been possible. Thank you for standing by us every step of the way.

With deep gratitude,

Thao, Kristiana, Mohammed and Lorenzo.

List of abbreviations

CDSB - Climate Disclosure Standards Board

CS - Corporate Sustainability

CSDDD - Corporate Sustainability Due Diligence Directive

CSRD - Corporate Sustainability Reporting Directive

CSR - Corporate Social Responsibility

DMA - Double Materiality Assessment

EC - European Commission

EFRAG - European Financial Reporting Advisory Group

ERP - Enterprise Resource Planning

ESG - Environmental, Social, Governance

ESRS - European Sustainability Reporting Standards

EU - European Union

FSSD - Framework for Strategic Sustainable Development

GDPR - General Data Protection Regulation

GHG - Green House Gasses

GRI - Global Reporting Initiative

IASB - International Accounting Standards Board

IFRS - International Financial Reporting Standard

IIRC - International Integrated Reporting Council

IPCC - Intergovernmental Panel on Climate Change

IR - Integrated Reporting

ISSB - International Sustainability Standards Board

IT - Information Technology

MDGs - Millennium Development Goals

NFR - Non-Financial Reporting

NFRD - Non-Financial Reporting Directive

NGO - Non-Governmental Organization

PIEs - Public Interest Entities

PTF-ESRS - Project Task Force on European Sustainability Reporting Standards

SASB - Sustainability Accounting Standards Board

SDGs - Sustainable Development Goals

SFDR - Sustainable Finance Reporting Directive

SMEs - Small and Medium-sized Enterprises

SQ1 - Sub Question 1

SQ2 - Sub Question 2

SSD - Strategic Sustainable Development

TCFD - Task Force on Climate-Related Financial Disclosures

UN - United Nations

UNEP - United Nations Environmental Programme

VRF - Value Reporting Foundation

Glossary

Assurance: refers to the process of control by third parties responsible for assessing and verifying the accuracy and completeness of an organisation's financial or non-financial information.

Double Materiality: It is a concept that includes the two perspectives of materiality: impact (inside-out) materiality and financial(outside-in) materiality.

Due diligence: The activity of investigating and assessing information relating to the subject matter of a negotiation. / It is the thorough investigation of a business or individual before a transaction to assess risks and verify all pertinent information.

ESG: It means environmental, social and governance topics. It represents the three main criteria used to measure sustainability in a company.

Feedback loop: It is a process in which the output of a system is returned to its input, influencing future outputs. This mechanism helps regulate and adjust the system's behaviour, often aiming to maintain stability or achieve desired outcomes.

Financial Materiality or Outside-in approach: This perspective permits to examine how external factors affect the organization. It examines how ESG issues can lead to both opportunities and risks, affecting the company's financial and operational performance.

Five Level Model: “A model that aids in analysis, decision-making, and planning in complex systems.” (Robèrt et al. 2018, 260).

Green washing: It is the act of making false or misleading statements about the environmental benefits of a product or practice.

Impact Materiality or Inside-out: This perspective permits an examination of the impact an organisation has on the external environment. It includes the effects of business activities on environmental, social and governance issues.

Integrated reporting: Corporate reporting that brings together relevant information on corporate strategy, governance, performance and provides a clear and concise representation of how a company creates value. It provides both financial and non-financial information.

Mandatory reporting: It is the obligation for companies to disclose specific information on financial and non-financial aspects, as laid down in laws, regulations, or standards.

Materiality: It is the principle of determining which data are sufficiently relevant to justify their inclusion in company reports.

Non-financial reporting: It is a report in which social and environmental aspects are reported, with a focus on corporate sustainability policies, personnel management methods and commitment to anti-corruption and respect for human rights.

Sustainability reporting: Sustainability reporting is a communication process through which companies transparently disclose their non-financial information to their stakeholders. This includes information regarding corporate policies, practices, impacts, and strategies related to sustainability.

Standardisation: It is the process of defining and implementing uniform technical standards to ensure that processes and outcomes are safe, reliable, and interoperable.

Strategic: supporting sustainable, lasting system change.

Sustainability: A state where a system or an organization does not violate any of the eight sustainability principles.

Sustainability challenge: The combination of systematic errors of societal design that are driving humans' unsustainable effects on the socio-ecological system.

Sustainability principles (SPs): A set of principles that describe the necessary conditions that must not be violated for sustainability to be achieved.

Sustainable Development: The transition from the current, unsustainable society towards a sustainable society, and continued development within sustainability constraints thereafter.

System: A set of elements or parts that is coherently organized and interconnected in pattern or structure that produces a characteristic set of behaviours, often classified as its "function" or "purpose."

Systems thinking: The organized study of systems, their feedback, and their behaviour as a whole.

Transparency: It is the principle that information is made available and accessible to stakeholders in a clear and timely manner.

Voluntary reporting: It is the voluntary practice of companies to implement and/or provide additional information on non-mandatory aspects.

Wicked problem: Issues that are characterised by their messy, circular, aggressive nature, often with no single right solution.

Wider scope: It means the expansion of the scope of the CSRD to cover a larger number of companies than in the previous directive.

Table of content

- 1 Introduction 1**
 - 1.1 The Sustainability Challenge 1
 - 1.2 The Role of the Private Sector 1
 - 1.3 The European Union and Sustainability Regulation..... 2
 - 1.4 Research Problem 2
 - 1.5 Goals 3
 - 1.6 Research Questions 3

- 2 Background of fields 4**
 - 2.1 Corporate social responsibility vs. corporate sustainability 4
 - 2.1.1 Sustainability, Sustainable Development and Corporate Sustainability 4
 - 2.1.2 CSR vs CS 5
 - 2.2 Sustainability reporting and non-financial reporting 6
 - 2.2.1 Historical Development of Sustainability Reporting 6
 - 2.2.2 Convergence of the Sustainability Reporting Standards 6
 - 2.3 The EU and Sustainability Reporting 7
 - 2.3.1 European Sustainability Reporting Standards 8
 - 2.4 From Single to Double Materiality 9
 - 2.5 From Voluntary to Mandatory Reporting 10

- 3 Research Methodology..... 12**
 - 3.1 Conceptual Framework 12
 - 3.1.1 Strategic Sustainable Development 12
 - 3.1.2 The Framework for Strategic Sustainable Development 12
 - 3.2 Research Design 14
 - 3.3 Phase 1 - A Theoretical Review 15
 - 3.3.1 Purpose 15

- 3.3.2 Data Collection..... 16
- 3.3.3 Data Analysis 16
- 3.3.4 Outcome 16
- 3.4 Phase 2 - Practical Implementation 16
 - 3.4.1 Purpose 16
 - 3.4.2 Data Collection..... 17
 - 3.4.3 Data Analysis 17
 - 3.4.4 Outcome 18
- 3.5 Ethical Considerations and Data Protection 18
- 4 Results of a theoretical review 19**
 - 4.1 The System level..... 19
 - 4.1.1 Development and historical context..... 19
 - 4.1.2 Audience and scope..... 19
 - 4.1.3 CSRD’s underlying assumptions 20
 - 4.1.4 CSRD’s gaps and contributions to SSD at the System level..... 21
 - 4.2 The Success Level 22
 - 4.2.1 Vision of success 22
 - 4.2.2 Unintended consequences 24
 - 4.2.3 CSRD’s gaps and contributions to SSD at the Success level..... 24
 - 4.3 The Strategic Guidelines Level..... 25
 - 4.4 The Action Level 25
 - 4.5 The Tools Level 26
- 5 Interview Results 27**
 - 5.1 Key Concepts..... 27
 - 5.1.1 The Mandatory Nature of CSRD 27
 - 5.1.2 Double Materiality and Double Materiality Assessment 28

- 5.1.3 Integrated Reporting..... 30
- 5.1.4 Assurance 31
- 5.1.5 Transparency 32
- 5.1.6 Standardization And Comparability..... 32
- 5.1.7 Wider Scope 33
- 5.2 CSRD’s Weaknesses from A Practicality Perspective 33
- 5.3 Sustainability Strategy 34
- 5.4 Future Possibilities..... 35
- 5.5 Recommendations..... 35
 - 5.5.1 General Suggestions 35
 - 5.5.2 Action Themes 36
 - 5.5.3 Tools..... 39
- 6 Discussion..... 40**
 - 6.1 What re the strengths and weaknesses of CSRD from a strategic sustainable development perspective? 40
 - 6.1.1 CSRD’s Strengths and Weaknesses Concerning the Approach Of The Tool 40
 - 6.1.2 CSRD’s Strengths and Weaknesses from an SSD perspective 43
 - 6.2 What can companies do to implement CSRD in a way that helps them move strategically towards sustainability? 45
 - 6.2.1 Going beyond CSRD compliance to realise a sustainability business case 45
 - 6.2.2 Key action areas to prepare for change 45
 - 6.2.3 Limitations 47
 - 6.2.4 Suggestions For Future Research..... 48
- 7 Conclusion..... 49**
- References 1**
- Appendix A: Full list of documents used in phase 1. 11**

Appendix B: Guiding question to assess CSRD’s potential contributions to SSD..... 13
Appendix C: Full list of interviews questions 14
Appendix D: Data coding table..... 17
Appendix E: Interviewees list..... 19

List of Figure and Tables

Figure 1: The European Sustainability Reporting Standards (ESRS)..... 9

Figure 2: The Objectives of CSRD, Source: SWD/2021/150 final, 2021 23

Table 1: Comparison between NFRD and CSRD adapted from Baumüller and Sopp, 2021 8

Table 2: ESRS in comparison to the sustainability standards 10

Table 3 3: Research Design’s Overview 15

Table 4: Action themes recommended by interviewees..... 36

1 Introduction

1.1 The Sustainability Challenge

The sustainability challenge consists of a broad range of interconnected social and ecological factors (Hamann et al. 2018). They include, but are not restricted to, exponential population growth, increasing demand for natural resources, increasing economic inequality, as well as ecological problems such as ocean acidification, ozone depletion, chemical pollution, biodiversity loss, increasing land use, nitrogen and phosphorus inputs into the biosphere, and climate change. These changes are diminishing the planet's capacity to sustain life as we know it, bringing humanity alarmingly close to, or even beyond, what some consider "safe boundaries" (Rockström et al. 2009; Steffen et al. 2015). The scale of change is so profound, that scientists have been introducing new concepts to characterize and refer to the current geological period we now live in as the 'Anthropocene' (Crutzen and Stoermer 2000).

The systemic amplification of socio-ecological unsustainability that we face on an unprecedented scale can be classified as a "wicked problem" (Xiang 2013, 1; Scharmer and Kaeufer 2013). "Wicked problems" lack clear definitions, concern diverse stakeholders with widely differing perspectives, and have solutions that cannot be categorized as simply true or false (Scharmer and Kaeufer 2013). Moreover, the complexity of these challenges is also demonstrated by the fact that cause and effect relations are uncertain because they are far away in space and time (Rittel and Webber 1973). Thus, rather than adopting a linear and reductive strategy aimed at permanent solutions, addressing wicked problems necessitates a holistic, flexible, and process-oriented approach (Xiang 2013).

As the planet may be nearing ecosystem collapse, the global challenges are becoming increasingly difficult to address as time progresses (Steffen et al. 2015). This underscores the urgent need to confront these global challenges and steer society back into a safe and equitable space (Raworth 2017). To make that transition happen all three types of capital - ecological, social, and financial - are essential (Broman and Robèrt 2017).

1.2 The Role of the Private Sector

According to Bocken et Short (2021), current corporate business is considered unsustainable due to the heavy reliance on limited resources, such as the use of fossil fuels, and the negative social and environmental impacts that result from this model. Moreover, traditional business models prioritise short-term financial gains and shareholder value, often at the expense of long-term sustainability and the well-being of society at large (ibid.). The linearity of the logic "take- make-destroy" and highly resource inefficient feature of our current production-consumption system is highly problematic from a sustainability standpoint (Roberts et al. 2023).

On the other hand, the private sector can be a positive force in reinventing a more sustainable future for all. Many scholars agree that the private sector brings benefits to society through job creation, technological innovation, and financial resources, which are key solution drivers for the economy, society, and the environment (Scheyvens et al. 2016; Frey and Sabbatino 2018; Buhmann et al. 2019).

1.3 The European Union and Sustainability Regulation

In an era of increasing global awareness about sustainability, the European Union (EU) aims to lead in sustainability initiatives (Leyen 2020). Faced with the catastrophic consequences of climate change, public policies must adapt, and the private sector has a crucial role in driving a greener economy. Public policy can help redirect private capital towards sustainable business, a key objective of the Action Plan on Financing Sustainable Growth (European Commission 2018). This effort evolved into the European Green Deal, a top priority of the European Commission for 2019-2024, aiming to make the EU a prosperous economy with no net greenhouse gas emissions by 2050 (European Commission 2019).

Among various legislative efforts, the Corporate Sustainability Reporting Directive (CSRD) is crucial. Adopted by the European Parliament and the Council of the EU, the CSRD, along with the EU Taxonomy, Sustainable Finance Reporting Directive (SFDR), and Corporate Sustainability Due Diligence Directive (CSDDD), aims to increase transparency and create a framework for sustainable finance, integrating human rights and environmental concerns into business value chains (European Parliament and Council of the European Union 2022).

The CSRD requires companies to disclose how their activities impact social and ecological systems, promoting transparency and allowing stakeholders to assess companies' sustainability performance (European Parliament and Council of the European Union 2022). This can improve corporate governance and elevate the importance of corporate reporting. Interest in sustainability information is expected to grow, leading to more structured and accessible reports on social and environmental efforts (Odoabaša et al. 2023). The CSRD can also give SMEs a competitive edge by positioning them well within the supply chain (Dinh, Husmann, & Melloni 2023).

1.4 Research Problem

Despite the CSRD's intention to increase the efficiency and reliability of the reporting process, considerable debate persists about its actual impact (Hummel et al. 2024; Ali et al. 2023; Rajoko et al. 2023).

In fact, CSRD owes its existence to criticism of its predecessor NFRD - for issues related to lack of guidelines, comparability, consistency, and reliability of information, as well as its limited scope (Hummel et Jobst 2023; Bramüller et Sopp 2021). Similarly, issues of inefficiency have been identified in other reporting frameworks such as the Global Reporting Initiative (GRI), one of the most used sustainability reporting standards. Charl de Villiers et al. (2022) argue that the lack of clarity in the guidelines and the GRI's practical shortcomings in implementation have left room for companies to selectively disclose non-financial information to their advantages, which can manipulate stakeholders' perceptions of the organisation's risk and performance (Szabo et al. 2021; Villiers et al 2022; Correa-Mejía et al. 2024).

In this context, some companies may fall into greenwashing, adopting communication strategies that unfairly portray them as more committed to environmental sustainability than they are (Correa-Mejía et al. 2024; Yu et al. 2020). This is done through misleading advertisements, overstatements or misleading presentations of their environmental policies or green products, undermining trust in their commitment to sustainability (Szabo et al. 2021).

Regarding to double materiality, which is a new concept incorporated into CSRD, in one of their research, Correa- Mejía et al. reports that out of 76 companies studied, 67% of them claim to comply with double materiality but fail to comply with guidelines for the concept proposed by the European Financial Reporting Advisory Group.

All the above inconvenient deficiencies have driven the authors to a burning question: Will CSRD repeat mistakes of the past or will it solve them and really make a difference this time?

1.5 Goals

In light of these initial concerns of scholars and practitioners, the authors seek to understand CSRD's potential contributions, weaknesses, and how it can be used strategically to both help companies transform themselves toward sustainability, and to support society at large in realising a sustainable future.

On a personal level, members of the research team have either a business or politics background. Therefore, the pursuit of a research on CSRD is expected to not only allow the authors to leverage existing knowledge, but also enrich the perception of the current sustainability landscape. This in turn will potentially shed more light on possible and strategic pathways for the authors to move forward as sustainability practitioners.

1.6 Research Questions

Primary Research Question (RQ): How can CSRD move companies strategically towards sustainability?

- Sub-question 1 (SQ1): What are the strengths and weaknesses of CSRD from a strategic sustainable development perspective?
- Sub-question 2 (SQ2): What can companies do to implement CSRD in a way that helps them move strategically towards sustainability?

2 Background of fields

In this part, the authors examine various fields in order to better understand the emergence and potential impact of CSRD. They trace the historical development of corporate social responsibility (CSR) and compare it with corporate sustainability (CS), including the global practice of sustainability reporting. Following that they focus on the historical development of non-financial reporting within the EU. In the last part of this section the authors take a closer look into two patterns that emerge in the historical development of sustainability reporting: the transition from single to double materiality and the shift from voluntary to mandatory sustainability reporting.

2.1 Corporate social responsibility vs. corporate sustainability

Corporate social responsibility (CSR) has a long history, reflecting the business community's concern for society traced back centuries, but formal writing however is largely a product of the 20th century (Carroll 1999). Early writings focused more on social responsibility rather than CSR (Carroll 1999).

Early researchers, including economists and philosophers, questioned the limits of capitalism and neoclassical economics which became the dominant framework in economic theory and policy making after the 1940s. Amongst them Karl Polanyi (1944), one of the most cogent critics of neoclassical economics, shared an early warning: “To allow the market mechanism to be sole director of the fate of human beings and their natural environment . . . would result in the demolition of society.” (Polanyi 1944, 76). His embeddedness thesis, which argues that all economic activities and institutions are embedded with social relations, was an early foundation for what later would evolve into corporate social responsibility and systems thinking.

Considered as the official mark of literature on CSR is the landmark work of Bowen (1953) “Social Responsibilities of the Businessman”. He argues that businesses need to think beyond economic management and consider their social impacts and needs. This new understanding that companies have obligations to society was not met without resistance. One of the most prominent voices of criticism was that of Milton Friedman (1970) who made his opinion clear in the title of his work “The Social Responsibility of business is to increase its profits”. Friedman argued that businesses should not assume the role of government in providing public goods, as this misinterprets the institutional role of business and results in misuse of corporate resources. Even though he believed that the primary responsibility of a business is to increase profits, he considered that this must be done in compliance with societal laws and ethics. This nuanced view, emphasizing legal and ethical conformity while pursuing profit, has become a significant focus in CSR discussions in the years that followed.

2.1.1 Sustainability, Sustainable Development and Corporate Sustainability

The roots of sustainability as a social movement are often associated with the following publications - Rachel Carson's “Silent Spring” (1963) and Meadow's et al.'s “The Limits to Growth” (1972). The message from both is similar – the current industrial model of

production is leading to irreparable harm to the ecosystem. What began as a movement morphed into global efforts to raise awareness of the problems and it was finally consolidated in the UN's report "Our Common Future" (1987) where the famous Brundtland definition of sustainable development emerged from: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.". In other words, central to sustainable development is the goal to increase income and wealth without leaving the future generations worse off. This is later the foundation for the UN Millennium Development Goals (MDG's) and their successor the UN Sustainable Development Goals (SDGs).

Corporate sustainability historically developed in this blend of desire for economic growth, environmental stewardship, and social justice (Christofi et al 2012). It emerged fuelled by the willingness of representatives of the private sector, governments, and non-governmental organisations to develop methods for sharing responsibility and respecting the laws that preserve and maintain the natural resources and the environment (Christofi et al 2012). The field of corporate sustainability has unfolded after the 1990s (Montiel 2020). It is a view that corporations have a responsibility beyond profit (Hahn et al, 2011) and that the success of an organisation doesn't depend only on financial performance, but also on their impact on the natural and social environment (Lawler and Worley 2012). Hahn et al (2011) even go as far to say that sustainability will not be achieved without involving the private sector.

2.1.2 CSR vs CS

Since Friedman's time in the 1970s society has changed a lot, resulting in a shift in government from the welfare to the regulatory state (Sheehy and Farneti 2021). This means that whilst business is tasked with wealth creation, governments' role has shifted from delivering goods and services to making the rules of the society (Feaver and Sheehy 2014). This shift has prompted other parts of civil society to pressure businesses into self-regulation. By the 2000s, the global policy agenda had adapted to these changes, allowing international bodies to coordinate a worldwide response to the re-configured relationship between business and society.

Sheehy therefore considers CSR as "international private business self-regulation" (Sheehy and Farneti 2021, 6) based on international norms, but directed at the level of business organisations. This differentiates CSR from Corporate Sustainability in the sense that CSR is bottom-up driven by individual organisations, while Corporate Sustainability is a top-down, global agenda including key international agreements such as the SDGs and the Paris Agreement.

Although the concepts of responsibility and sustainability emerged at different times and responded to distinct business issues, they both focus on the relationship between business and society and talk to the same audience. Today, business managers and researchers use the terms "responsibility" and "sustainability" often inconsistently and ambiguously (Bansal et. Al 2017). Even though CSR and CS have become buzzwords in the private sector, van Marrewijk observes that many consider corporate sustainability and CSR as synonyms (van Marrewijk 2003).

However, a word of caution: this lack of clarity on these concepts impairs people's ability to address companies' unethical behaviour, their impact on the natural and social environment, and they hinder their ability to identify and direct another course of action (Sheehy et al.

2021). That's why Sheehy et al. (2021) underline the importance of governments to set reporting standards and to ensure that what is being communicated to the public is reliable.

2.2 Sustainability reporting and non-financial reporting

A similar phenomenon between CSR and CS is observed in the concepts of sustainability reporting and non-financial reporting (NFR) where there is also a significant overlap.

According to the Erkens et al. (2015) definition of NFR is “disclosure provided to outsiders of the organization on dimensions of performance other than the traditional assessment of financial performance from the shareholders and debtholders’ viewpoint. [This] definition includes, but is not limited to, items related to social and environmental accounting, CSR, and intellectual capital disclosed outside the financial statements.” This ambiguity of the definitions results in the use several interrelated, loosely defined terms including non-financial reporting, integrated reporting, sustainability reporting and corporate responsibility reporting (Stolowy and Paugam 2018). As this debate is out of the scope of this research and for the sake of clarity, in this paper, non-financial reporting and sustainability reporting will be used interchangeably by the authors.

2.2.1 Historical Development of Sustainability Reporting

The period from 1980 to 1988 saw the theoretical preparation of sustainability reporting, culminating in the establishment of the Global Reporting Initiative (GRI) with the support of the United Nations Environmental Programme (UNEP) in 1997, which developed a comprehensive framework for reporting on economic, environmental, and social impacts (Gokten et al. 2020). Companies began disclosing non-financial information within their annual reports or through standalone sustainability reports. Motivations for this voluntary disclosure include providing stakeholders with a fuller view of operations, increasing shareholder value, gaining public trust, and legitimizing corporate existence in society (Boiral 2013; Roberts and Koeplin 2007; De Villiers et al. 2014).

In the development of voluntary sustainability reporting the Global Reporting Initiative (GRI) has been instrumental since its inception in 1997. By 2016, a significant percentage of top global organizations had adopted the GRI framework (KPMG 2017). The GRI's multistakeholder process for developing guidelines, institutionalizing the production of guidelines, and stewardship of the process have been key factors in its widespread adoption (Brown et al. 2007). The GRI standards have allowed companies to systematically report on social, environmental, and economic performance, improving sustainability performance and reporting quality (Yadava and Sinha 2016). However, criticisms include the voluntary nature of the standards, which can lead to selective positive disclosures and potential greenwashing (Hahn and Lülfs 2014). Calls for regulation and external assurance of sustainability reporting have emerged as a response (Lodhia 2012; Adams 2020).

2.2.2 Convergence of the Sustainability Reporting Standards

Recent years have seen increasing competition among standards setters. The International Integrated Reporting Council (IIRC) and the establishment of the International Sustainability Standards Board (ISSB) by the IFRS Foundation in 2021 are notable developments. The ISSB aims to consolidate sustainability reporting standards under a single, globally recognized

framework, integrating frameworks from the Climate Disclosure Standards Board (CDSB) and the Sustainability Accounting Standards Board (SASB), among others (IFRS 2021).

The ISSB's focus on investor-oriented reporting contrasts with the GRI's broader stakeholder approach. Scholars argue that while the ISSB aims to dominate the reporting standards landscape, it may not displace the GRI due to its foundational investor-centric principles (Irshad Ali et al. 2023; De Villiers et al. 2022).

2.3 The EU and Sustainability Reporting

International dissatisfaction with corporate scandals built mistrust in society which lead the EU to introduce a non-financial reporting and disclosure requirement (De Villars 2018) – the non-financial reporting directive (NFRD), adopted in 2014. It requires large firms, particularly public interest entities with over 500 employees, to disclose information on the environment, social and employee matters, respect for human rights, and anti-corruption and bribery. This directive became applicable for financial year starting in 2017 and it required transposition into national legislation by member states. The NFRD introduced the concept of double materiality, emphasizing that firms must consider both financial and non-financial impacts on people and the environment (Hummel et Jobst 2023). However, NFRD doesn't include any reporting framework or standards, allowing companies to choose whichever suits them well. According to Baumüller and Sopp (2021), companies ultimately are likely to take an outside-in perspective.

Overall, NFRD faced criticism for issues related to comparability, consistency, and reliability of information, as well as its limited scope (Hummel et Jobst 2023). To address these deficiencies, the European Commission (EC) announced its intention to revise NFRD (European Commission 2019) and mandated the European Financial Reporting Advisory Group (EFRAG) to start the preparatory work for the new EU non-financial standards in a revised NFRD (Dombrovksis 2020). In 2021 the European Commission published its proposal with the aim to strengthen the existing rules introduced by the NFRD and to bring sustainability reporting on par with financial reporting (European Commission 2021).

However, they will be impacted in a different timeline:

Adopted in November 2022, the scope of CSRD will grow from 11,700 enterprises covered under NFRD, to around 50,000 companies in EU-regulated markets (European Parliament 2022). However, they will be impacted in phases. In 2025, companies already subject to the NFRD will report for the financial year 2024; In 2026, other large companies will report for the financial year 2025; In 2027, SMEs listed on EU regulated markets, small and noncomplex credit institutions, and captive (re)insurance undertakings will report for the financial year 2026, with an option to defer for two additional years. Microenterprises are excluded from this requirement. In addition, from financial year 2028 onwards, EU branches and subsidiaries of non-EU under-takings are also subject to the CSRD if the non-EU undertaking meets certain criteria (Hummel and Jobst 2024). Here is an overview the main novelties in the design of the CSRD in the following table below:

Table 1: Comparison between NFRD and CSRD adapted from Baumüller and Sopp, 2021

	NFRD	CSRD
Objective	Information to the extent necessary for an understanding of the undertaking's development, performance, position, and impact of its activity	Information necessary to understand the undertaking's impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking's development, performance, and position
Minimum content	Five sustainability matters covered ("environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters")	<ul style="list-style-type: none"> • Three sustainability matters covered ("environmental, social and governance factors") • Sector-specific, sector-agnostic information defined by EFRAG
Perspective taken	(Ultimately) outside-in	Outside-in and inside-out
Links to financial reporting	<ul style="list-style-type: none"> *Optional reporting as part of the management commentary *Mandatory references to, and additional explanations of, other information included in the annual report 	<ul style="list-style-type: none"> *Mandatory reporting as part of the management commentary *Mandatory references to, and additional explanations of, other information included in the management commentary and the annual report
External assurance	Non-mandatory	Mandatory (highlighting the process of materiality analysis)

It is important to mention that there are several other EU legislative instruments that reinforce the CSRD's effect (Hummel et Jobst 2023). As part of the European Green Deal, the EU Taxonomy Regulation was adopted in June 2020. This regulation provides a classification system to identify which economic activities are environmentally sustainable. It requires firms to report on the sustainability of their activities, complementing the NFRD and CSRD (European Parliament and Council of the European Union 2020). Adopted in November 2019, the Sustainable Finance Disclosure Regulation (SFDR) aims to increase transparency about the sustainability of financial products and strengthen investor protection. It categorizes investment products into mainstream products, those promoting environmental or social characteristics, and those with sustainable investment objectives (European Parliament and Council of the European Union 2019). The Corporate Sustainability Due Diligence Directive (CSDDD) is a proposed legislative initiative, but at a state very close to adoption. It mandates companies to identify, prevent, and mitigate adverse impacts on human rights and the environment throughout their supply chains. It requires businesses to integrate due diligence into their policies and risk management and adopt climate transition plans. Non-compliance can result in fines of up to 5% of net worldwide turnover. This directive complements the CSRD, promoting responsible corporate behaviour and ensuring sustainability efforts are integral to business operations and strategy. (Spinaci n.d.)

2.3.1 European Sustainability Reporting Standards

Another difference from the NFRD and key element of the CSRD are the European Sustainability Reporting Standards (ESRS). They were introduced on 31st July 2023 and their aim is to standardize sustainability reporting across the EU (European Commission 2023). The ESRS includes cross-cutting principles, thematic principles, and sectoral principles, providing a comprehensive framework for sustainability disclosures (PwC 2024). More information can be seen in the figure provided below:



Figure 1: The European Sustainability Reporting Standards (ESRS)

2.4 From Single to Double Materiality

Double materiality is a key feature in the ESRS (Correa-Mejia et al. 2023). Understanding it requires grasping 'non-financial information,' introduced by the Modernisation Directive (2003/51/EC), mandating companies to include financial and non-financial information on environmental and employee issues. The European Commission sought to expand these obligations from 2011 to 2014, but it wasn't fully implemented (Bramüller et Sopp 2021). A key development was the development of the NFRD (2014/95/EU) and its 2017 guidelines where double materiality in sustainability reporting was defined for the first time. This principle obliges large companies to include in the annual report a non-financial statement on the impact of the company's activities, with reference to environmental, social, and employee-related issues, respect for human rights and the fight against corruption and bribery (Bramüller et Sopp 2021).

Double materiality involves two perspectives:

- Inside-out (Impact Materiality): Focuses on how an organization's activities impact the external environment, including environmental, social, and governance (ESG) issues.
- Outside-in (Financial Materiality): Examines how external ESG factors affect the organization, influencing its financial and operational performance by presenting both opportunities and risks.

Despite the European Commission's efforts to define the concept of materiality in NFRD, the requirements for the reporting content remain vague and unsatisfactory and hence it became one of the central themes of the CSRD (Bramüller et Sopp 2021). CSRD requires the process of materiality analysis and the need for an integrated view of a company's performance and

position. This directive contributes to the change of non-financial reporting into sustainability reporting and implies that a shift in expectations towards accountability, transparency and corporate reporting is taking place (Bramüller et Sopp 2021).

ESRS is the only one of the international standards that introduces the concept of double materiality as seen in the table below:

Table 2: ESRS in comparison to the sustainability standards

	GRI Standards	ESRS	IFRS sustainability disclosure standards
Focus	Broad stakeholder focus	Broad stakeholder focus	Investor focus
Matters	Broad spectrum of sustainability-related matters	Broad spectrum of sustainability-related matters	Primary focus on climate-related matters
Materiality	Impact Materiality	Double Materiality	Financial Materiality
Location of information	Annual report or separate sustainability report	Management report	Management commentary or similar report within financial report
Legal character (authority)	Voluntary	Mandatory via delegated act through CSRD	Currently not defined (IOSCO endorsement)

Meeting the requirements of the CSRD and the concept of double materiality poses many challenges for addressed companies. Double materiality brings a greater amount of information to report, with the risk of 'information overload' especially if some information is too specific and relevant only to a limited number of stakeholders (Bramüller et Sopp 2021). Correa-Mejia et al. (2023) argue that the assessment of double materiality also requires a significant level of organizational preparedness; companies must develop robust management systems to collect and analyse relevant data. This type of assessment also requires the creation of interdisciplinary teams with different competencies, including risk management, sustainability, finance, and corporate communications. Also of relevance is the difficulty of determining materiality levels for ecological and social information. Meeting this concept therefore represents a major financial commitment for companies, which will certainly have to implement many business aspects.

2.5 From Voluntary to Mandatory Reporting

Over the last decades sustainability reporting has gradually evolved from voluntary initiatives to mandatory requirements. Over time, frameworks like the Global Reporting Initiative (GRI) emerged, and the United Nations' "Who Cares Wins" report in 2004 further encouraged ESG reporting (United Nations 2004). The landscape shifted post-2010 with the introduction of mandatory reporting requirements, culminating in the CSRD, which mandates sustainability reporting for a broad range of companies.

On one hand, some scholars debate the importance of voluntary reporting giving companies the liberty to tailor their disclosed information fostering innovation and flexibility. Nishitani, Unerman, and Kokubu (2021) discuss the motivations for the voluntary adoption of integrated

reporting for companies and the theory behind it, Frecautan et Nita (2022) explain that various international actors prefer voluntary reporting as it enables them to maintain their influence and technical superiority while mandatory reporting might hinder that. On the other hand, others emphasize the importance of mandatory reporting as a way of ensuring uniformity and enhancing accountability. For instance, Gerwing, Kajüter, and Wirth (2022) study the association between various sustainable corporate governance mechanisms and mandatory sustainability reporting quality, they argue that including mandatory sustainability reporting provides a more homogeneous quality for the non-financial data disclosed.

It is also argued by Iozzelli et Velasco (2023) that CSRD form of mandatory/voluntary disclosure rules is a hybrid “softer” governance since the rules are not meant to regulate corporate activities directly but rather regulate how information on activities should be disclosed. Frecautan et Nita (2022) explain that while CSRD identifies certain ESRS as mandatory for companies, it also includes others that are voluntary and subject to self-assessment. This generates a delicate balance between mandatory and voluntary elements, creating challenges for companies, investors, supervisory authorities, and market authorities to effectively interpret and implement the disclosure requirements. According to Lozzelli and Velasco (2023), the absence of a clear conceptual explanation in the CSRD regarding the distinction between voluntary and mandatory standards poses difficulties for companies in determining which information to disclose. This ambiguity may result in inaccuracies and inconsistencies in reports, hindering the evaluation of both the company's sustainability efforts and their environmental and social impact.

3 Research Methodology

3.1 Conceptual Framework

3.1.1 Strategic Sustainable Development

As outlined in the introduction, humanity is being threatened by degrading ecosystem and deteriorating social system. The ecological system possesses characteristics of a complex system including self-regulating mechanism with a complex web of positive and negative feedback loops, emergent behaviours, non-linearity, and thresholds beyond which changes happen suddenly, forcefully (Mebratu 1998; Hjorth and Bagheri 2006; Fiksel 2006; Robèrt et al. 2019). Similarly, the social system can be considered a complex adaptive system (Clayton and Radcliffe 1996; Hjorth and Bagheri 2006; Fiksel 2006), which cannot sustain itself without adaptive capacity consisting of essential aspects including trust, common meaning, diversity, capacity for learning and capacity for self-organization (Missimer, Robèrt, and Broman 2017).

Therefore, to cope with sustainability issues, traditional fragmented and mechanistic science is insufficient (Hjorth and Bagheri 2006). Fiksel acknowledges the interconnectedness between the industrial, social, and ecological systems, hence insisting on a comprehensive systems approach for effective decision making regarding global sustainability (Fiksel 2006). Meanwhile, Hjorth et al. call for a paradigm shift from event-oriented thinking – a linear causal thinking, assuming that certain causes are acting together linearly to result in an event – to systems thinking which recognizes the primacy of the whole, emphasizing the relationships among a system's parts, rather than the properties of the parts themselves (Hjorth and Bagheri 2006).

Taking into consideration the above scientific findings, the authors adopt a Strategic Sustainable Development (SSD) perspective which takes on a science-based approach, acknowledges the complex nature of global sustainability challenges, and embraces a systems perspective in solving these problems, with the aim to achieve ecological and social sustainability. In this paper, terms including strategic sustainability, moving strategically toward sustainability are used in respect to the SSD lens.

3.1.2 The Framework for Strategic Sustainable Development

To analyse and evaluate the potential contribution of CSRD to strategically realising ecological and social sustainability, the authors chose the Framework for Strategic Sustainable Development (FSSD) as the conceptual lens. Developed and advanced through a consensus, scientifically peer reviewed process to assure its robustness, the FSSD operationalizes the SSD perspective by offering a unifying operational definition of sustainability, a strategic and systemic approach to analyse, plan, and make decisions within ecological and social system boundaries (Broman and Robèrt 2015).

To clarify the distinctions and inter-relationships between key elements of different characteristics in a strategic planning process for sustainable development, the FSSD makes use of a five-level model (5LM) that structures information into the following five interdependent levels, which should be looked at simultaneously instead of sequentially

(Broman and Robèrt 2015). The model could be used for planning in any context other than sustainability, which is then referred to as the “generic 5LM” (Broman and Robèrt 2015).

- **The System level (level 1):** In a general context, this level contains a broad view of systems within which the planning occurs. In the FSSD, it refers to the organization within the human society within the biosphere. The fundamental laws and currents threats of the systems at this level form the rationale for the next level.
- **The Success level (level 2):** Generally, the Success level describes the definition of success. In the FSSD context, it refers to a desirable vision bounded by the 8 sustainability principles, which will be presented after this explanation of the 5LM. This level provides input for the level that follows.
- **The Strategic guidelines level (level 3):** In the generic 5LM model, this level refers to any guidelines to inform prioritization among numerous actions with respect to the vision defined at level 2. In the FSSD, it specifies how to form a strategic pathway to realize the principle-framed vision in an economically viable stepwise approach. The pathway is guided by a “backcasting” approach, which means envisioning success in the future, then evaluating the current state through the prism of this vision and investigating avenues for reaching that success (Dreborg 1996). The basic strategic guidelines include three criteria for assessing an action: (1) Does this action proceed in the right direction with respect to the 8 sustainability principles? (2) Does this action provide a stepping stone for future improvements? (3) Is this action likely to produce sufficient return on investment? (Robèrt et al. 2019).
- **The Actions level (level 4):** In a general context, this level presents a roadmap of concrete actions selected based on strategic guideline at level 3. In the FSSD, it comprises of chosen actions taken to strategically move toward sustainability.
- **The Tools level (level 5):** For both use cases, this level consists of systems, strategic, and capacity tools, concepts, and methods that help reach the success within the boundaries of the defined system.

In the FSSD, any vision of success formulated at the second level of the 5LM must be bounded by the 8 sustainability principles (SPs) that said (Broman and Robèrt 2015; Robèrt et al. 2013; Missimer 2015):

In a sustainable society, nature is not subject to systematically increasing ...

1. ... concentrations of substances extracted from the Earth's crust (e.g. fossil carbon and metals)
2. ... concentrations of substances produced by society (e.g. NO_x and CFCs)
3. ... degradation by physical means. (e.g. overharvesting of forests and overfishing)
and people are not subject to structural obstacles to ...
4. ... health (e.g. by dangerous working conditions or insufficient rest from work)
5. ... influence (e.g. by suppression of free speech or neglect of opinions)
6. ... competence (e.g. by obstacles for education or insufficient possibilities for personal development)
7. ... impartiality (e.g. by discrimination or unfair selection to job positions)

8. ... meaning making (e.g. by suppression of cultural expression or obstacles to co-creation of purposeful conditions).

From a theoretical perspective, the FSSD brings various advantages that lend themselves favourably as a basis from which to assess CSRD's contribution to ecological and social sustainability. According to Missimer et al. (2016), its values are as below:

- Its scientific foundation of both ecological and social systems.
- Its systems approach which helps curb situations in which a solution for one issue might cause other issues somewhere else or later in time.
- Its principle-based definition of success which allows for a clear definition of the goal of sustainability beyond current trends, that can be agreed upon by large groups of people thus serving as a shared mental model, while still providing space for more context-specific goals. At the same time, because they are phrased as constraints for re-design, these sustainability principles allow for creativity and innovation; and
- The ability to make better use of other tools, methods, or frameworks for sustainable development when necessary.

The FSSD has been proven to be useful for assessing the strengths and weaknesses of several methods, tools, and concepts in previous studies (Holmberg et al. 1999; Robèrt et al. 2002; Ny et al. 2006; Byggeth et al. 2007; Bratt et al. 2011; Robèrt et al. 2013; Bratt et al. 2013).

Additionally, from a practicality perspective, there is empirical evidence that the theoretical benefits of the FSSD have been observed in business contexts. The framework has contributed to the sustainability transition in several organizations including IKEA, Electrolux, Scandic Hotels, Swedish McDonalds, Interface, etc. (Broman and Robèrt 2015).

3.2 Research Design

This study situates itself within sustainability science as it seeks to support corporate sustainability by exploring the contribution of CSRD in moving companies strategically toward sustainability. Sustainability science is considered an emerging field with three objectives: (1) to understand the fundamental interactions between nature and society, (2) to direct these interactions toward sustainable trajectories and (3) to enhance society's capacity to navigate the sustainability transition (Kates et al. 2001; Miller et al. 2014).

The authors based their methodology on Maxwell's interactive model for qualitative research design (Maxwell 2009). Emerging in the early twentieth century, qualitative research has now grown as a field of inquiry in its own rights, which embodies a unique approach suitable for exploring wicked problems (see section 1.1) (Savin-Baden and Major 2013). In business ethics, corporate responsibility, and sustainability study, qualitative research not only is "particularly valuable for examining novel or emergent questions in business ethics, where no or little extant theory exists from which to deduce testable research hypotheses" but also enables researchers to track novel phenomena in "real time" as they occur (Reinecke, Arnold, and Palazzo 2016, xiii-xiv).

In the context of this study, the authors seek to expand the understanding of CSRD's impacts in the sustainability landscape rather than pursuing a statistic generalization. Hence, qualitative research could give the authors tools to uncover deeper layers of CSRD and the systems within which it operates, as well as to shed light on practical insights of the

implementation process. Also, since the directive has been in force recently, there is limited data for conducting quantitative research. At the same time, this study was developed using Maxwell’s iterative and non-linear approach which encourages reflective processes with concurrent interaction and constant pivoting among the five research components: goals, conceptual framework, research questions, methods, and validity (Maxwell 2009).

To answer the research questions, this study was structured into two phases as described in Table 3. The first phase was designed to allow the authors to situate CSRD within the realm of strategic sustainability, targeting to answer SQ1. Then, in the second phase, the authors engaged with sustainability practitioners to gain more clarity on the directive in practice. The two-curved arrow shown in Table 3 illustrates the relationship between the two phases. While results from the first phase formed a frame of specific topics to be discovered in the second phase, results from phase 2 enriched the answers for SQ1 by adding insights of CSRD’s strengths and weaknesses in respect to its implementation in practice.

Table 3 3: Research Design’s Overview

RQ: How can CSRD move companies strategically towards sustainability?	Phase 1 A Theoretical Review	Phase 2 Practical Implementation
Research Question	SQ1: What are the strengths and weaknesses of CSRD from a strategic sustainable development perspective?	SQ2: What can companies do to implement CSRD in a way that helps them move strategically towards sustainability?
Data Collection Method	Desk research Literature review Grey literature review	Semi - structured interviews
Data Analysis	Data analysis using SSD conceptual framework	Data coding and pattern discovery
Outcome	Strengths and weaknesses of CSRD (Potential gaps)	Recommendations for companies & practitioners

3.3 Phase 1 - A Theoretical Review

3.3.1 Purpose

Sustainability reporting is not a new concept (see chapter 2). As presented earlier in the text, before CSRD, companies have voluntarily adopted non-financial reporting standards such as GRI and SASB, etc. However, impacts of these tools haven’t been fully realised, with the most popular tool – GRI – being in question for several shortcomings such as lack of clarity hence allowing room for greenwashing and manipulation (Charl de Villiers et al. 2022). Thus, given its mandatory nature and a wide scope of governance, there is a clear need to assess the potential contribution of CSRD to sustainable development. This was the main purpose of the first stage. At the same time, the phase helped the authors cultivate essential knowledge of CSRD, forming a necessary background for interacting with practitioners in the next phase.

To meet the purpose of this phase, the researchers analysed data collected through the FSSD conceptual lens, since the framework has proved itself to be able to fulfil such a task as explained in section 3.1.2.

3.3.2 Data Collection

For this phase, the authors conducted desk research and reviewed literature and grey literature. To leverage primary data as much as possible, three official documents from EU institutions were the main source used, including (1) the Official Journal of the European Union about CSRD and (2) ESRS, and (3) the Impact Assessment report by the European Commission, published with the proposal for CSRD. Furthermore, because of the complicated legal language of these documents, the authors also read through various CSRD reports prepared by leading consultancy firms with a more understandable way of presenting information. Furthermore, the literature review about non-financial reporting and topics related to key characteristics of CSRD was an additional source of information. Please refer to Appendix A for the full list of documents that had been used in this phase.

3.3.3 Data Analysis

A series of questions were developed based on the main features of the FSSD and used for scrutinising CSRD. The list of concrete questions can be found in Appendix B. The data analysis for this phase went through several rounds. In the first round, the authors split the five levels among themselves, and everyone worked individually, focusing on only one or two levels. Then, members of the research team cross-checked each other's work in the second round, still separately from each other with singular focus on certain levels. This helped minimise biases and discrepancies in the data analysis process. The final round was a collective sense making process where the authors came together to not only discuss interpretations and disagreements as a team, but also connect and think across the five levels to identify any blind spots concerning the inter-relational nature of the 5LM, maintain a holistic view and ensure comprehensiveness.

3.3.4 Outcome

The outcome of this phase was (1) a systemic understanding of CSRD in a broader EU legislative landscape, with key concepts that make the directive stand out from its predecessor as well as other existing reporting standards; and (2) create a solid perception of CSRD's potential contribution to sustainability from an SSD perspective. This outcome served as a steppingstone for the phase that follows, informing choices of interviewees, key investigation areas which in turn were translated into concrete interview questions.

3.4 Phase 2 - Practical Implementation

3.4.1 Purpose

This phase examined the perspective of companies and consultants involving in either corporate sustainability advisory or directly in implementing CSRD. The objective was to identify CSRD's strengths, potential implementation challenges from a practical view, as well as recommendations for companies related to implementing CSRD or using it to drive their sustainability transition.

3.4.2 Data Collection

In this phase, semi-structured interview served as the primary method for data collection, which was chosen for its ability to enable the authors to gain in-depth information from interviewees (Wengraf 2001). In semi-structured interview, researchers not only follow a set of pre-defined open-ended questions but also elaborate on follow-up questions in response to interviewee answers, allowing for flexibility and adaptability (Savin-Baden and Major 2013).

To ensure rich data and include multiple perspectives (Maxwell 2009), the authors recruited interviewees from three groups. The first group (group 1) was consultants from leading consulting firms including PwC, EY, Deloitte, KPMG, etc. These companies are not only the top-of-mind solution for large businesses, but they also provide both consulting and assurance services which is a key feature of CSRD. Consultants from boutique firms, including independent consultants and the FSSD practitioners, made up the second group (group 2). The group was targeted because (1) these participants might represent voices from smaller businesses, and (2) they may provide diverse and critical opinions about CSRD, especially the FSSD practitioners and those who have been working in the field of sustainability consulting for a long time thus having experience using multiple approaches, frameworks, and tools. The last group (group 3) comprised of companies within the governing scope of CSRD.

During the recruitment process, the authors contacted 58 people, resulting in 18 interviews, out of which the number of people belonging to group 1, 2, 3 were 3, 9, 6 respectively. As the interview questions were designed to answer the two SQs, the authors identified overarching themes including CSRD's strengths, weaknesses, and recommendations for companies. At the same time, a list of key concepts from the first phase (see outcome of phase 1) was incorporated into the themes of strengths and weaknesses to explore more nuanced insights. All questions were open-ended, with general questions being asked before specific questions on key concepts. The authors also customised some questions for each interviewee groups to leverage their unique backgrounds. Sample questions can be found in Appendix C.

Before an interview, interviewees were expected to sign a consent form, with key points being briefly summarised at the beginning of each interview. As requested by several interviewees, a list of fundamental questions was shared in advance. All interviews were conducted and recorded on MS Teams and took approximately 60 minutes. For each interview, there were one lead interviewer and one note taker joining from the research team. The note taker was responsible for transcribing the recording using Online MS Word and sharing the transcript with interviewees if requested, within two working days after an interview.

3.4.3 Data Analysis

The data coding went through an iterative process including multiple rounds. In the first round, a deductive data coding frame was created which replicated a similar logic used to formulate interview questions (see section 3.4.2). A description of this frame with codes and sub codes can be found in Appendix D. Then, an interview was selected to be coded to test the frame, in which all team members conducted the coding independently, followed by a group meeting to discuss the suitability of the frame. During the discussion, the authors also developed a shared understanding of each code and sub code. After this round, one emerging code was added to the frame. In the second round, the lead interviewer of an interview will be in charge of data coding for it, which was then checked by a member who did not participate in the interview. The two people would discuss once there was disagreements, and the note

taker would join the discussion if necessary. A third round was needed because the authors had realised that quotes taken to the coding table after the second round were too long, which was useful for maintaining the context but challenging to see patterns. Therefore, in round 3, for each interview, only critical lines were kept, with contexts to help make sense of them being summarised by the authors and marked with a different colour. The last sprint was a collective sense making process in which the authors reviewed codes by codes altogether and considered all interviewee opinions for each code to spot patterns.

3.4.4 Outcome

The main outcome of this phase was (1) insights of the implementation process in the forms of strengths and weaknesses across all key concepts and, (2) major recommendations themes for companies for both compliance purpose and moving toward sustainability.

3.5 Ethical Considerations and Data Protection

The research team took into account several ethical considerations. First, when planning for phase 2, the authors only reached out to those whose opinions were needed for the research, prioritizing people with less burdens, and guaranteeing diversity of nationality and organization type, size, and industry. Second, in the recruitment process, the research team had shared with potential interviewees a consent form with information about the aim of the study, research questions, what participants would be asked to do, the risks and benefits of participation, voluntary nature of participation and the ability to refuse to answer or withdraw from the research at any time. The authors also reminded interviewees of the existence of this consent form at the beginning of each interview session. Furthermore, the researchers prepared a GDPR-compliant privacy policy for treating personal information and protecting the confidentiality of participants' answers, which was transparently communicated with them in the consent form. Only GDPR-proof tools were used for storing personal information which would be deleted right after the completion of the research project. The privacy policy was registered with the BTH Register of Personal Data Processing at BTH University.

4 Results of a theoretical review

4.1 The System level

This section presents an overview of the system defined by CSRD, which includes development and historical context, audience and scope, and basic assumptions underpinning the directive. Then, the authors will identify how the compliance with CSRD contributes to the understanding of the system as described in the FSSD, as well as possible gaps between these two systems.

4.1.1 Development and historical context

A detailed description of CSRD's historical context can be found in the Background of fields chapter. It is worth highlighting that CSRD tightened its predecessor NFRD by widening the scope to cover 50,000 companies, up from 11,7000 previously; introducing a common standard namely ESRS with a double materiality approach; implementing mandatory external assurance on sustainability reports which are to be published on the same management report with financial statements. At the same time, CSRD functions within the wider EU sustainability legislative ecosystem which also includes the EU Taxonomy, SFDR, CSDDD, etc. Running in the background is the overarching ambition set by the European Green Deal, which aims to decouple economic growth from resource use (SWD/2021/150 final 2021). Additionally, CSRD is a directive and not a regulation which means it doesn't have an immediate binding effect on the national laws of all Member States but has to be transposed to national law (SWD/2021/150 final 2021).

4.1.2 Audience and scope

The two primary audience groups of CSRD are (1) reporting companies, and (2) report readers (SWD/2021/150 final 2021). They are also respectively referred to as “report preparers” or “undertakings”, and “users” in all CSRD-related documents published by the European Commission and the European Union.

Regarding report preparers, the scope determines the extent of economic activities and their corresponding sustainability performance covered. With the scope extension, CSRD covers around 80% of economic activity in certain heavy industry sectors such as energy production, basic materials, manufacture of industrial gases, etc. (Bossut et al. 2021). However, for sectors like agriculture or land transportation, only 30% of economic activity is covered, despite them being major contributors to sustainability problems (Bossut et al. 2021).

With respect to report readers/users, sustainability information disclosure by CSRD-compliant companies first and foremost serves the two groups of intended users (Directive (EU) 2022/2464, Recital (9), 2022). The first one is investors who seek to understand sustainability-related risks and opportunities exposed to their potential investments, as well as the impacts of those investments on society and the environment. By widening the scope of companies and improving the quality and transparency of non-financial reporting, CSRD (1) empowers investors to make more informed investment decisions and (2) supports investors in meeting the disclosure requirements in the Sustainable Finance Disclosure Regulation. Meanwhile, the second group of intended users consists of civil society actors such as non-governmental organizations, and social partners, whose expected role is to hold companies

responsible for their impacts on people and the planet. If the needs of this group are not addressed, it can create “an accountability deficit and could lead to lower levels of citizen trust in businesses, which in turn could have negative impacts on the efficient functioning of the social market economy” (Directive (EU) 2022/2464, Recital (14), 2022).

At the same time, other stakeholders might make use of sustainability information disclosed by companies (Directive (EU) 2022/2464, Recital (9), 2022). While business partners might find relevant information to make purchasing decisions and prepare their sustainability reports with Scope-3 disclosures (i.e. disclosures for activities in the value chain), policymakers can benefit from such information for monitoring trends or consulting public policies. Individuals and consumers might need to refer to a business’ sustainability information to inform decisions related to their engagement with that company, for example, when considering the opinion of financial advisers as to whether to invest their savings in a stock.

4.1.3 CSRD’s underlying assumptions

As can be seen in the analysis about audience and scope above, CSRD’s system of focus revolves around the interactions among three main actor groups: (1) businesses which carry out the majority of economic activities, (2) capital providers (including both asset owners and financial market participants) which influence the flow of financial resources toward economic activities, and (3) civil society and the so-called third sector organizations, which hold companies accountable for their impacts on the society and environment.

The European Commission has recognized that there has been a remarkable increase in demand for sustainability information regarding business operation in recent years, which is driven by both “the changing nature of risks to companies” and growing investor awareness of the financial implications resulting from those risks (SWD/2021/150 final 2021, 10-11). The growth in investment products that “explicitly seek to meet certain sustainability standards or achieve certain sustainability objectives” also contribute to this rising demand (SWD/2021/150 final 2021, 10-11). However, both market forces and regulatory efforts in the form of NFRD have failed to address the gap between information needed by stakeholders and information provided by companies in their sustainability reports (SWD/2021/150 final 2021). By intentionally addressing this gap, CSRD assumes that more transparency in non-financial reporting, together with regulations targeting each actor group, can alter the behaviours of these key actor groups in a way that could lead to a more sustainable future defined by the European Green Deal. To be more specific, it is assumed that investors will factor companies’ sustainability-related risks, opportunities, and impacts on people and the planet into their investment decisions as long as they have access to necessary data. Similarly, forcing companies to report on sustainability performance, together with incentives from sustainable finance, will have a positive impact in driving them toward sustainability. Are these assumptions scientifically agreed upon? Within the limited timeframe of this study, the authors could by no means thoroughly answer such a big question. At best, the authors could only conduct a general literature review to grasp a sense of the existing discussion in the scientific community.

To assess the assumption about investors’ behaviours, the authors’ strategy was to search for academic papers in two major themes: (1) impacts of SFDR, and (2) investment with a systems perspective. The second theme was considered to maintain an SSD lens. Regarding the first theme, there is an ongoing debate over the role of institutional investors in the current efforts to decarbonise the economy: While some believe in asset managers’ ability to push

companies to reduce their carbon footprint, others are more sceptical, recommending that authorities should focus on regulatory tools such as carbon pricing mechanisms (Dai et al. 2023). Dai et al. contribute to the debate by examining the impact of SFDR on asset managers' incentives to decarbonize their portfolios, concluding that this investor-focused directive leads to changes in investment decisions, eventually resulting in a decarbonization of the investment portfolios of EU funds that claim to invest based on sustainability criteria (Dai et al. 2023). Becker and colleagues affirm that (1) the increasing transparency of sustainability enforced by SFDR incentivizes mutual funds to increase their ESG efforts in the form of ESG scores, and (2) the policy intervention has "a statistically significant impact on the fund flows within the first four months after the intervention", which signifies that mutual funds which are associated with a higher ESG alignment attract higher inflows from individual (Becker, Martin, and Walter 2022, 2). At the same time, Cremasco and Boni discovers that "despite the innovation brought by the SFDR, the European financial market context is still characterised by ambiguity and category fuzziness" (Cremasco and Boni 2022, 16), which poses concerns for greenwashing practices. The research discovers that although funds are increasingly adding terms such as "sustainable", "ESG", "impact" to their denominations, "sustainability claims are frequently linked to a fund conduct that does not necessarily differ from that of purely for-profit funds" (Cremasco and Boni 2022, 16). In respect to investment with a systems perspective, Dagers et al. points out that systems thinking has only begun to gain traction in the investment world, with investors' perception of social change being rooted in a linear, reductionist form of logic (Dagers, Hannant, and Jay 2023).

Regarding the assumption about transparent disclosures and corporate sustainability, the Introduction and Background of fields chapters have already described current discussions about initiatives in the past such as NFRD, GRI, etc. Studies about the impact of CSRD, however, cannot be found since the directive has been adopted recently.

Connecting to the bigger vision of the European Green Deal, there exists an underlying assumption that it is possible to decouple economic growth from resource use. While this green growth agenda dominated policy-making at the United Nations, European Union, and several countries (Parrique et al. 2019), there seems to be a consensus among scientists that (1) the kind of decoupling needed for ecological sustainability must be global, absolute, fast and long enough, and (2) although there is evidence of relative and absolute decoupling, especially for CO₂, GHG (Green House Gasses) emissions, and for land and blue water use on some geographically limited cases, evidence of the needed absolute global fast-enough economy-wide decoupling is missing (Parrique et al. 2019; Haberl et al. 2020; Vadén et al. 2020). Vadén and colleagues declared that the goal of decoupling is "an abstract possibility that no empirical evidence can disprove but that in the absence of robust empirical evidence or detailed and concrete plans rests, in part, on faith" (Vadén et al. 2020, 243). Following the EU's "precautionary principle" which favours a cautious approach when the stakes are high and the outcomes are uncertain, Parrique et al. urged policymakers to pursue a sufficiency strategy in complement with decoupling. This means "direct downscaling of economic production in many sectors and parallel reduction of consumption that together will enable the good life within the planet's ecological limits" (Parrique et al. 2019, 3).

4.1.4 CSRD's gaps and contributions to SSD at the System level

On the one hand, to some extent, CSRD contributes to an understanding of specific sustainability issues in ecological, social, economic systems. ESRS goes beyond climate change and GHG emissions, taking into consideration sustainability topics in all three ESG

areas. Moreover, ESRS also introduces some concepts related to complex systems. “Planetary boundaries”, which acknowledges the complexity characteristics of the planetary system, is mentioned in ESRS E4 - biodiversity and ecosystems. “Ecological threshold” is described by ESRS as “the point at which a relatively small change in external conditions causes a rapid change in an ecosystem. When an ecological threshold has been passed, the ecosystem may no longer be able to return to its state by means of its inherent resilience.” (Commission Delegated Regulation (EU) 2023/2772 2023, 266).

On the other hand, both the directive and its bigger umbrella – the European Green Deal – do not explicitly recognize that the economy is nested within the society whose existence in turn relies on and functions within the boundary of the Earth system. Both initiatives are designed to support the development of a new economic model in the context of the sustainability crisis but ignore the discussion about the role of the economy itself in addressing the global sustainability challenge. Meanwhile, the FSSD explicitly states that “A number of sustainability concepts, including the widely known triple bottom line, include economic sustainability as a goal alongside ecological and social sustainability. However, we argue that the economy is best seen as a means for reaching sustainability, as opposed to an independent goal.” (Robèrt et al. 2021, 174-175). Additionally, the directive addresses its targeted audience’s understanding of sustainability by providing a list of relevant topics laid out in the twelve ESRS standards, instead of promoting holistic thinking to help its audience see the interconnectedness among sustainability issues, and systems perspective to aid them in understanding the complexity of the global sustainability challenge.

4.2 The Success Level

The overall objective of this section is to present the vision of success defined by the creators of CSRD, and how it contributes to the global socio-ecological sustainability using the FSSD lens. CSRD’s potential unintended consequences will also be discussed.

4.2.1 Vision of success

The vision of success for CSRD could be interpreted from the European Commission’s summary of the rationale for proposing CSRD shown in Figure 2. As a general strategy, to realise the potential benefits of the European Green Deal’s vision, more private capital needs to be redirected towards companies that are operating in a sustainable manner consistent with Green Deal goals. From Figure 2, it can be concluded that CSRD plays dual roles: (1) compelling companies to conduct operations more sustainably by tightening regulations on non-financial reporting, and (2) aiding the redirection of capital and strengthening the social contract between companies and citizens by ensuring that investors, civil society, and other relevant stakeholders have the data they need to make informed decisions. At the same time, zooming closer to see CSRD as a tool for reporting, the specific objectives defined in Figure 2 describe a definition of success for non-financial reporting, which consists of key factors such as transparency, materiality, comparability, accountability, and convenience regarding locating information. Also, the reporting process should be designed in a way that is clear and cost-effective for companies to follow.

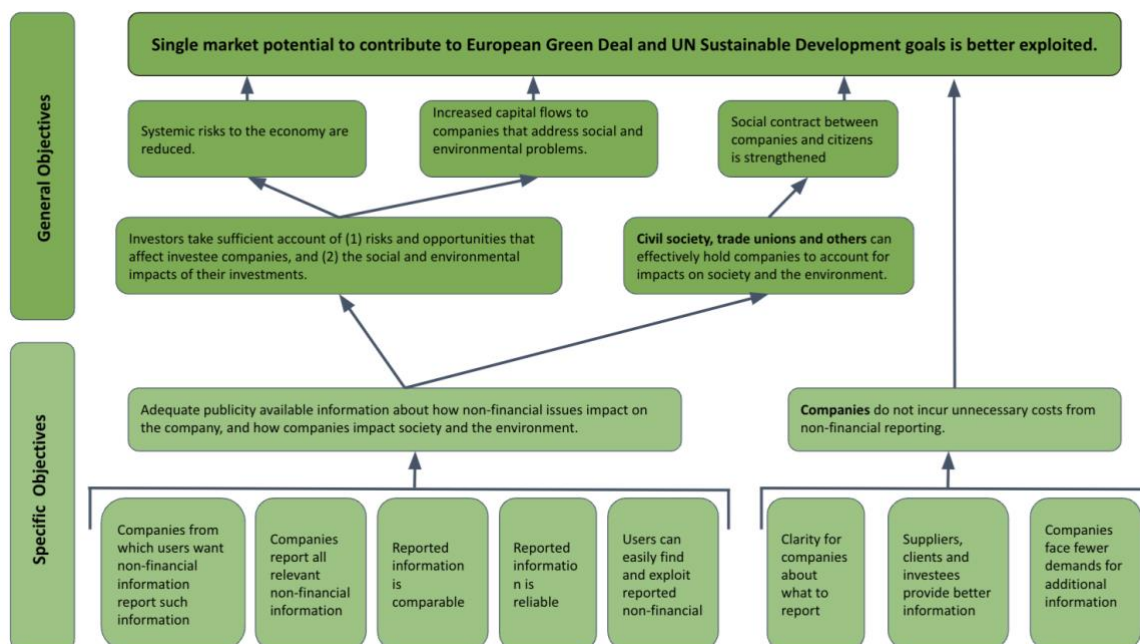


Figure 2: The Objectives of CSRD, Source: SWD/2021/150 final, 2021

With regard to the long-term vision, CSRD does not explicitly define either sustainability or sustainable development. Both concepts are implicitly referred to via (1) the mentioning of the European Green Deal as a general objective of CSRD (SWD/2021/150 final 2021), and (2) the use of the term “sustainability matters” and related terms including “sustainability information”, “sustainability disclosures”, “sustainability-related risks” and “sustainability-related opportunities”.

“Sustainability matters” is defined as “Environmental, social and human rights, and governance factors, including sustainability factors defined in Article 2, point (24), of Regulation (EU) 2019/2088 of the European Parliament and of the Council” (Commission Delegated Regulation (EU) 2023/2772 2023, 280). These “sustainability factors” refer to “environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters.” (Regulation (EU) 2019/2088, Article (2), point (24), 2019). This set of related terms is further demonstrated with the 12 ESRS standards. While the two cross-cutting standards contain mandatory principles for the preparation and disclosure of sustainability information, the ten topical standards include sustainability topics across the three ESG areas (Environment - Social - Governance). They are climate change (E1), pollution (E2), water and marine resources (E3), biodiversity and ecosystems (E4), resource use and circular economy (E5), own workforce (S1), workers in the value chain (S2), affected communities (S3), consumers and end-users (S4), and business conduct (G1).

At the same time, being “an integral part of this Commission’s strategy to implement the United Nation’s 2030 Agenda and the sustainable development goals”, the European Green Deal is a political approach to drive “a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use” (European Commission, COM/2019/640 final 2019). No definition of sustainability is explicitly stated by the European Green Deal. Hereu-Morales et

al. believes it is most likely that the European Green Deal follows the Triple Bottom Line approach to sustainability despite the criticism found in the literature (Hereu-Morales et al. 2023). They also further conclude: “the plans of the European Green Deal are not fit for the purpose of its discourse. The reason is that they present fundamental flaws on environmental sustainability” (Hereu-Morales et al. 2023, 657). On the social sustainability side, Zimmermann and Gengnagel asserts that “productive social policy prevails in the European Green Deal's proposed instruments and in stakeholders’ demands, but there are also vague indications of a more nuanced concept of social inclusion that acknowledges social conflict” (Zimmermann and Gengnagel 2023, 315).

4.2.2 Unintended consequences

As CSRD tightens non-financial reporting regulations, it can put administrative burden on companies, especially SMEs. The bureaucracy from compliance might lead to less resources dedicated for actual sustainability actions. At the same time, the long-term vision of CSRD is based on a weak scientific consensus which poses a risk that even if companies fully comply with CSRD, this will not lead to a collective ecological and social sustainability.

4.2.3 CSRD’s gaps and contributions to SSD at the Success level

It can be seen that all the ESRS standards reflect the core areas mentioned in the European Green Deal. To some extent, while the ESRS environmental standards which range from E1 to E5 are related to all the ecological Sustainability Principles (SP1, SP2, SP3), the ESRS social and governance standards (S1 to S4 and G1) touch upon all the social SPs (SP4 to SP8).

However, the two approaches are different at their cores. More specifically, following a preventative approach, the FSSD leverages scientific findings about basic mechanisms that society is using to degrade the ecological-social system to come up with the 8 SPs which defines what society must stop doing in order to sustain this life-supporting system. As these mechanisms were identified in “upstream in cause-and-effect chains” (Robèrt et al. 2021, 41), compliance with the constraints of sustainability bounded by the SPs is a prerequisite for a continuation of biological evolution and cultural development. Meanwhile, ESRS provides a checklist of specific sustainability topics, together with descriptions of how to report on them, as a reference for companies to assess and only report on which one is material to their operations. There is neither any justification of a science-based methodology about how to identify these topics nor any conclusion of the connection between them. This can also be considered a reactive approach in which more issues might be added to the list and actions will be taken after signals of negative consequences have appeared. Given the difference between the two approaches, it can’t be concluded that complying with CSRD will lead to no violation of the 8 SPs.

Furthermore, within the scope of CSRD and ESRS, businesses are required to consider material sustainability topics within their organizations only. In contrast, the FSSD framework promotes a systems perspective in which companies adopting this lens are expected to not only understand, think, and plan across all SPs terms but also aim not to contribute to society’s violation of any of them.

From a company perspective, while CSRD directly focuses on transparency, the FSSD and its practitioners promote integrating sustainability into the core strategy of a business, turning it

into a competitive advantage for the company in the short to medium term, and then transforming an entire industry in the longer run.

4.3 The Strategic Guidelines Level

Strategic guidelines should help facilitate a decision-making process to reach success in the system at hand. Concerning the success for CSRD as a reporting tool, while framed as “general requirements”, it can be inferred that the concept of double materiality explained in ESRS 1 could serve as a guideline for companies in navigating sustainability disclosures.

With respect to guiding its audience in fulfilling the success in the wider system described at the Success level above, CSRD provides no explicit strategic guidelines for companies and other stakeholder groups. Although the directive was introduced together with its reporting standard ESRS, the authors would argue that ESRS is a descriptive document with a checklist of sustainability-related topics to be considered and description on how non-financial reports should be, rather than a frame to guide businesses on their decision making and action prioritisation.

At the same time, there are possibilities that the information disclosures required by CSRD can potentially inform companies’ decisions if, and only if, they choose to integrate sustainability into their core strategy or at least factoring these data into their daily business choices. Although CSRD requires companies to provide information “at a general level across all material sustainability matters on the reporting areas governance, strategy, impact, risk and opportunity management, and metrics and targets” (Commission Delegated Regulation (EU) 2023/2772, 2023, 5), its main focus is on transparency and comprehensiveness rather than forcing sustainability integration and transformation. In other words, as long as a firm follows requirements of ESRS and reports truthfully, it is considered compliant with CSRD, even when there is little or no improvement in sustainability performance.

CSRD’s gaps and contributions to SSD at the Strategic guidelines level

On the contrary, the FSSD points out the importance of having explicit strategic guidelines to be able to prioritize the most promising actions. The framework provides its users with a default basic guideline to guide early steps, which includes three criteria: “(1) flexible platforms for forthcoming steps that, taken together, are likely to support society's transition towards sustainability and take the organization to the sustainability-framed vision, while striking a good balance between (2) the pace of progress towards the vision and (3) return on investment.” (Robèrt et al. 2021, 47).

With regard to meeting the sustainable vision defined by the FSSD, CSRD does not have any contribution for the Strategic Guideline level.

4.4 The Action Level

CSRD does not provide an explicit list of concrete actions that companies should do to ensure compliance. Recommended actions can be found in advising documents produced by consulting firms, which slightly varies between different firms but generally includes actions as follows: performing a double materiality assessment, engaging with external and internal stakeholders, conducting gap analysis to understand what is missing, planning for data

collection and looking for IT solutions to aid the process, producing and publishing a sustainability report in accordance with requirements from CSRD.

4.5 The Tools Level

On 31 July 2023, the European Commission issued a common reporting standard called the European Sustainability Reporting Standards (ESRS), which serves as the main tool to guide all companies on how to comply with the CSRD.

The implementation of ESRS could potentially lead to more transparent, comparable, and accountable non-financial reports of companies within the governance scope of CSRD. To ensure corporate sustainability, from the FSSD lens, there is still a lack of tools to foster system thinking, equip companies with understanding of sustainability as well as their position within the ecological-social-economic nested system, and guide them on how to craft a new vision if needed, how to formulate a sustainability strategy to orchestrate their transition, and tools to support a strategic planning process.

5 Interview Results

The authors conducted 18 semi-structured interviews in total, within a period of 8 weeks. The aim of conducting these interviews was to gather insights and recommendations from three subgroups - Group A consultants in big consultancy firms (3), Group B consultants, either independently or working within a consultancy firm (9), Group C employees from sustainability departments of companies, (6). Their names were anonymized and given a letter for the cluster they belong to and a number e.g. A1, B2 etc. An overview of the profile of the interviewees can be found in the table provided in Appendix E. The pronouns used for each interviewee will also be changed to “they”, “them”, and “their” to further ensure their anonymity. Additionally, in this research, interviewees and respondents are used interchangeably.

This chapter is structured into five main parts in accordance with how interview questions were formulated and how data were coded. Sample interview questions can be found in Annex C. The first section is presented as clusters of key concepts in CSRD that emerged during the first phase of theoretical review based on grey literature. Key concepts are defined by the authors as core ideas or innovations that make CSRD stand out from other non-financial reporting frameworks, standards, as well as its predecessor NFRD. A definition for each concept is provided in the specific section about it if this supports a better understanding of readers. Contents reported consist of strengths, implementation challenges or weaknesses of these concepts. The second part details general weaknesses of CSRD that either spans across multiple key concepts or relates to the approach and design of CSRD. The next one summarizes findings about sustainability strategy. Then, a section is dedicated to reporting on interviewees’ recommendations. While the four above mentioned parts derived directly from the research questions, the last one about future possibilities is an emerging theme coming up during the data coding process. It will be presented before the recommendations section to ensure a smooth flow for readers, as the theme is connected to key concepts and general weaknesses.

5.1 Key Concepts

5.1.1 The Mandatory Nature of CSRD

CSRD, as discussed earlier in the background of fields, represents a turning point for sustainability reporting from voluntary to mandatory. As many as 10 out of 18 respondents regarded this feature of the directive as a strength. One respondent, A3, considers this to be an inevitable step to solve sustainability issues, as explained in their statement: “So I think it's a natural course if we do want to tackle sustainability as a serious matter and governments as they commit to different type of targets will eventually need to make such disclosure and compliance mandatory”. B1 believed that this movement could push forward the sustainability transition: “Because it is required means that also industries that are not very public facing that don't have the typical drive to publish a voluntary report using the GRI or something like that will also be forced to disclose some important things”. B5 also joined B1 in this view, saying: "it mainly targets companies that are lagging behind and may not believe in their role in the sustainability impacts that they have".

From the point of view of companies, C3, head of sustainability reporting at a large company, affirmed that CSRD helps sustainability reporting to gain “higher priority in top

management". Meanwhile, C2, sustainability manager at a large company that recovers "aggregate minerals and metals from the incinerator bottom ash" as shared by the interviewee, welcomed the directive because it reinforces a broadened sustainability focus beyond GHG emissions "to the waterway, to soil and any negative impact to biodiversity". At the same time, C2 also expressed a preference for the directive to be more of encouragement rather than enforcement: "It is better to motivate companies to take action than to push them and tell them what to do, so the implementation of CSRD should be softer and provide better guidance to companies".

5.1.2 Double Materiality and Double Materiality Assessment

As defined above in the background of fields "double materiality" is one of the key features and novelties in the CSRD. In data analysis process, the authors discovered a lot of overlap and interconnections between the categories of "the concept of double materiality (which includes impact materiality and financial materiality, as explained in the background of fields chapter)", "double materiality assessment (the process in which companies identify material topics - those that are relevant to their business - to report on, with a double materiality lens)", "stakeholder engagement (the action of engaging with relevant internal and external stakeholders to seek for insights, which happens mostly during the double materiality assessment process)" and "value chain". Therefore, the authors decided to report on these four codes under this one section.

A number of the interviewees have recognized double materiality as "completely new" (C1) and will deliver many benefits. C1 asserted that "it [double materiality] creates a lot of awareness [...] It could trigger the internal motivation to actually change something positive in the company", while C4 believed the transition from single materiality to double materiality would lead to deeper understanding about the sustainability challenge and greater cross-department engagement, stating that: "the seriousness of impact materiality has increased and this has made our financial team also engaged in this process of working towards achieving targets". C3 also agreed with C4, as shown in this quote: "We are joining forces with finance and all the company. [...] So we've been working with GRI, and this being mostly on sustainability people, people working in the company only for sustainability. But now with CSRD, the awareness is bigger".

At the same time, the process of stakeholder engagement, especially in the value chain, can help the companies "get insights into blind spots" (B2) and identify new opportunities: "I think if stakeholder mapping is done properly, it can give an organization a very valuable insight into opportunities and business developments for the future" (B2). Agreeing with this view, A3 believed that "the force to move companies towards a better understanding, visibility tracking, and disclosure of the value chain impact is definitely the great point about CSRD [...] and once you can understand those impact, you understand where the risk is coming from, you understand where the opportunity is coming from. That is where you will be able to start engaging across your end tier supply chain to start realizing those values".

On the other hand, there are a number of challenges connected with the implementation of double materiality assessment (DMA). One of the most repeated critiques is related to the fact that the directive is still open for interpretation. As stated by C2: "we need to have more guidelines from the developers or [...] an example from them [...] how we are actually able to get accurate results and good outcomes from the assessment". Due to the current insufficiency of guidelines B3 asserted: "I've seen quite a few from other consultancies now and everyone

is approaching it differently or slightly differently, but overall, there's more and more alignment between them”.

Furthermore, implementing the DMA is costly and requires a lot of resources. According to B2, “[DMA] is also quite complex, and you need to have quite a lot of hours to spend on doing this. [...] If an organization has to do that [DMA] and they want support during the process, they are going to look for our consultants and some of the consultants ask very high prices for these facilitations”. B4 provided a more specific number: “I think a lot of companies spend around €50,000 carrying out a double materiality assessment”. From company’s side, C5 talked about stakeholder engagement: “there's a large amount of topics that need to be covered and there's a lot of, let's say, information that needs to be gathered. So [...] you need to reach out to a large amount of people inside the company and externally as well”.

Additionally, some stakeholders have limited knowledge on sustainability topics. This is recognized by both interviewee groups: companies and consultants. C2 shared: “Our peers in the same industry, we try actually to have the interview with them to see their insight, but they got lost. [...], at the end I saw many of them just like to tick the box just randomly”. The interviewee even made a strong statement that “we made the consultation with different stakeholder groups, and I think that 90% of them do not have the knowledge to answer”. Regarding internal stakeholders, C5 asserted: “You need to bring the entire organization on board as well and you will work with a lot of people who have no idea about sustainability. And then the challenge is to make that tangible to your colleagues. And that might be an educational exercise on this trip”. From consultant’s side, B4 affirmed: “it is really, really hard to actually do stakeholder engagement right now because the general literacy around double materiality is so low”. Therefore, there is a need of leadership, facilitation and trainings to be sure that the gained insights from the stakeholder engagement are reliable, as claimed by B6: “stakeholder engagement have been around for let's say many years [...] it's not something new but my experience is that this is also something that can create some misconceptions because when you have stakeholder dialogues, you need a kind of leadership and an idea what to get out from these stakeholders. [...] you can't get out and ask them 'Oh, what do you think I should do?' They have no clue. They are not involved in what you are thinking about”.

Another major challenge related to double materiality, both in terms of DMA and reporting after material topics have been identified, is the accuracy of data collected as well as the credibility of the impact measurement that has been performed. A3 said: “even with climate, which is somewhat of a more mature ESG topic until this moment, in terms of impact measurement, we still have a lot of blind spots. For example, if you look into scope 3 measurement, which is your value chain, your indirect emission impact, we are still dealing with proxy data. We're still dealing with translating spend, data, input, output model, financial model in order to roughly estimate what the impacts are. So let alone in other let's say biodiversity. How can you actually measure across your value chain now?”. To cope with the problem, A3 called for a collective effort across multiple actors: “it's a lot of work not only for companies but also for the whole sustainability organizations, landscapes, all the supporting stakeholders within sustainability as a whole, governments, to think about how we can improve”. Representing company’s voice, C5, senior sustainability specialist at a large company, confirmed the need of using proxy data: “Our copper is associated with some mining activities. So now let's assume we are identifying some human rights issues with

mining activity somewhere in Chile. Then it would be very difficult to engage with somebody working for that mine or even a community around that, right? It's very difficult to travel there, identify the person that's potentially harmed, have an interview with them, things like that. So, you need to find some other proxies to talk to and so forth. So that is quite a cumbersome process, but very necessary". The interviewee goes further into the challenge of it: "So you look for a representation, for example, a labour union or an NGO (Non-Governmental Organization) who is then capable and credible partner to talk to about what is the impact of an economic activity in terms of human rights violations [...] but that process so to identify a credible partner, assessing whether that partner is credible and is actually allowed to speak for the person that is harmed, or the group that is harmed, that is I think, very costly in terms of money".

Besides difficulties in impact materiality, fulfilling financial materiality is also a challenging task. CSRD essentially asks companies to be "translating sustainability into financial KPIs, financial information and this is very new because it necessitates that the financial departments within a company work very closely with sustainability departments, and it's even gone so far that now financial professionals have to actually learn how to report ESG data" (A2). C2 shared a similar opinion: "but how impact and opportunity and risk actually can be quantified in financial terms is very difficult".

In addition to the matter of quality, data aggregation sometimes means collecting multiple data points from different corners of the world: "If you're just one company, one site, it's going to be easy. But if you're a larger company, especially if you have data that needs to come from different places in the world. That's really going to be a big challenge" (B3).

On a different note, B1 expressed a hope that in the long run, a triple materiality approach will be adopted. Also referred to as "the context driven materiality" as explained by the interviewee, triple materiality requires companies to consider local contexts and global thresholds of critical sustainability issues when conducting impact assessments. B1 asserted that: "until that moment, the reporting is still just numbers on paper and it's not really necessarily contributing to a sustainable society. And the moment that the thresholds are put down, it becomes clear what the limits are and what the work needs to be".

5.1.3 Integrated Reporting

Integrated reporting refers to the consolidation of financial and sustainability reporting under one management report. Interviewees generally agreed that this is a good move. "In a sense, this is symbolic for bringing sustainability to the right level of consideration of importance. The right weight when you consider it head-to-head with financial impact and management and reporting" (A3). This could foster the integration of sustainability into business strategy, as shared by many interviewees. B5 said: "I think it [integrated reporting] signifies that sustainability is no longer a separate issue [...] it's also letting management understand how sustainability impacts their general company risk [...] it really ties together the longer-term strategy for the company". B1 even thought that: "There should never have been separate to begin with. [...] Sustainability should be integrated within the whole organization, just like financial reporting does. And then you have one department that manages all the data and the reporting of the organization, both the financial and the sustainability stuff".

From company's perspective, according to C1, integrated reporting is going to "make life a lot easier because right now it's multiple tiny reports which let's say 40% are very overlapping

or pretty much the same thing but you have to do it and legal pushes you to do it easily to combine those”. Integrated reporting is also “enabling any external reader, typically an investor, to assess how well a company is doing on sustainability and how well it's integrating it. Because you will see now that it's one document. You would see conflicts between sustainability and annual reports, if a company is not integrating it very well”, as shared by C5.

Alongside these benefits, B3 highlighted a potential risk that companies should be aware of: "The same auditor generally will look into both [financial and sustainability data] and cannot sign off on the financial data if your [sustainability] data is also not in order. So it suddenly becomes a real issue for companies if their ESG data is not properly audit ready because they won't be able to file their end of year financial figures”.

5.1.4 Assurance

Assurance refers to the requirement to bring in third party verification to ensure the credibility of sustainability reports. Various strengths and challenges associated with implementing assurance measures within the CSRD were explored in the interviews.

C6 highlighted the importance of external assurance: "I'm positive with the external assurance because then it adds credibility to the reporting and that you as a stakeholder can feel safer or comfortable that these numbers are correct, and this information is correct. So, it makes sure that the green washing will be lower”. Another important aspect underscored by B1: “It's important even if you don't have a legal obligation to get it audited, because it just changes the way people work and think, it introduces a feedback mechanism”. This points out the role of assurance not only in ensuring accuracy but also in cultivating a culture of accountability and continuous improvement. Furthermore, some interviews shed light on the phased approach to implementing assurance of CSRD, as described by a senior sustainability consultant (A2): “CSRD is huge. If you look at how many data points are in the ESRS, it's absolutely massive. [...] That's why CSRD is being introduced over a number of years, and why also the assurance part is being phased in. So first, just simple limited assurance to not make it too difficult. And then moving on to the reasonable assurance, which will be just as strict as the assurance that's provided on financial reports. And this is actually valuable as well to analysts and financial institutions, because they need to know this stuff as well, because they will base their investment decisions in part on this information”. It can be concluded that this approach aims to strike a balance between feasibility and rigor, ensuring that assurance standards evolve alongside reporting frameworks.

On the other hand, from company's side, one significant challenge highlighted by many interviewees is the substantial cost associated with assurance processes, as C1 stated: “And they charge a lot for it [assurance] [...] it's about the same level as financial and sometimes it's a bit more, it's crazy”. This cost factor presents a barrier, particularly for smaller organizations with limited resources. Moreover, concerns were raised in regard to the expertise of consultants tasked with conducting assurance. C5, senior sustainability specialist at a large company, posed a question: “So the question is do auditing companies have the competencies to make the assurance that is asked of them?”. The sentiment is shared by C2, sustainability manager at a large company: “But even for consulting companies like all the big fours to make a fair assessment, it's still challenging. I have been really talking with 5 different accounting companies, they don't have the knowledge even like me to make accurate assessments”.

From consultant's point of view, an implementation challenge is a lack of concrete guidelines for assurance at the moment. "It must be noted that the assurance standard for ESRS is expected mid next year. So that's a little bit late" (B3). According to B2, "so if you compare it with the financial standards, financial standards have a lot of documents on how to interpret the different laws and rules and processes and auditing standards. And for CSRD, that's not yet there".

Additionally, some interviewees conveyed a concern over a potential "conflict of interest" (B4) due to the fact that consultants could also be auditors. This fact was confirmed by A1: "In [their consultancy firm], I have a double role. I don't know if in the other countries it is organized in this way, but in Italy, in the big four companies, Deloitte, EY, Price Waterhouse Cooper and KPMG, they have this double role. So, they are consultants and auditors". B4 provided an elaboration, saying that "if they [consultants] are allowed to carry out assurance on the double materiality assessments that they themselves carried out and right now there is no rule for doing that, I think that really opens up a floodgate for misinformation".

5.1.5 Transparency

As a result of the assurance requirement, CSRD fosters transparency, as affirmed by C2: "with CSRD, any stakeholder can see the real effort, the real impact of a company in a transparent way because CSRD also requires third party verification". According to C1, "the main goal of CSRD is about transparency". Moreover, thanks to the increase in transparency, companies can leverage their sustainability efforts to gain a "commercial sales advantage because if you are transparent on CSRD on your sustainability, you may be able to win some tenders or concessions in the market" (B2). At the same time, it also helps unlock investment opportunities, as shared by B8: "Also by doing this, the transparency will bring an opportunity to the company to retain investment and gain better intel".

5.1.6 Standardization And Comparability

Standardization refers to the introduction of one common reporting framework - ESRS - for all companies within the compliance scope of CSRD. This has the potential for enhanced comparability across companies, as emphasized by B4: "I think with them [companies] reporting under the same standards, there will inevitably be a lot of comparability and I think this will be strengthened once we get the sector specific standards in 2026 if they don't delay". Moreover, comparability enables companies to gain valuable insights that can be used to steer their strategy, as noted by B5: "So, I think the whole point of the ESRS is indeed to be able to make it comparable and I think that's really good because that way you're able to recognize which sectors might be more intense in their energy use than others. But maybe that other sector might be more water intense and then you can steer your strategy based on that too".

However, there is a group of interviewees expressing scepticism about the comparability among companies adopting ESRS. C5 said: "There's still a lot of room for interpretation, which makes it very hard to compare". Additionally, comparing companies requires comprehensive understanding and context, as reiterated by C5: "Again, to understand how sustainable a company is, you need to be able to compare it to something you know, for that you need the context". B2 agreed, highlighting that: "if you want to use it [standards] also to do a certain benchmark or to compare organizations with each other, you really need to do deep dives into the identity of the different organizations before you can compare them".

5.1.7 Wider Scope

Another key point of CSRD is that it has expanded the scope to include more organizations required to produce sustainability reporting. B6 supported this decision by the European Union, stating: "in Sweden for example, I think 97% of people working for private enterprise are working for small and medium enterprises. So that's where everything happens actually if you look at the volume. They're small and spread out, but they serve the big corporations, so they have to be within and report in the same kind of structure, of course". At the same time, CSRD has implemented a phased-in approach, in which big corporations start their reporting in 2024 while SMEs are given some more time to get prepared. This enables SMEs to learn from best practices of large companies, as B5 claimed: "there's quite some learnings that SMEs can take from larger companies that are reporting in the same industry". The main concern for widening the scope is on the cost of implementation that SMEs will have to bear.

5.2 CSRD's Weaknesses from A Practicality Perspective

For many interviewees, high cost for implementation is one of the top drawbacks of CSRD. An ESG advisor at a consultancy (B4) mentioned "this is quite a big expense for a lot of companies, especially those medium sized companies that don't have the in-house team to do it and need to hire somebody like me to help them out. It is quite a big burden for them financially". This can in turn lead to a challenge for companies, to balance between "being able to focus on the business model and revenue and being able to focus on CSRD because it costs a lot, and it does not help your business in the first place" (B2). A2 pointed out a similar dilemma between paying for compliance and using "money to actually implement a sustainability project", as complained by their clients. B5 referred to this dilemma as a "resource allocation competition", explaining that: "if you put all your eggs into the reporting basket, what's left for your team to focus on in terms of actual initiatives that you can then report over?". From company's point of view, C6, sustainability manager at a large company offering green products that empower the electrification movement, honestly asserted that: "it's [CSRD] just an administrative burden, I would say it's time consuming, takes a lot of resources and it's heavy administrating".

Lobbying for less stringent requirements is another pitfall according to many interviewees including B3: "It's a weakness that the lobby has been strong and that they've been able to make a lot of things sub mandatory". It is likely that this conclusion was drawn based on the fact that in the final ESRS revision adopted in July 2023, all topical standards, including ESRS E1 - Climate change and ESRS S1 - Own workforce, are subject to a materiality assessment, instead of being mandatory as in the initial version published for public consultation in 2022 (KPMG, 2023). B4 wanted "more of the standards and the disclosure requirements [to be] mandatory, at least some of the ones that every company needs to consider".

When asked what should be changed in CSRD, B4 replied "first of all, I think I'll change the language because it is written in a very legal manner which is not conducive to understanding for a lot of companies". This is agreed by various interviewees from both consultant and company groups, including B3, CSRD lead at a consultancy, C3, head of sustainability reporting at a large company, and C5, senior sustainability specialist at a large company.

The group of FSSD practitioners - those who proactively promote the FSSD or use it as their main consulting framework - had a tendency to give opinion about CSRD from a design

perspective. B6 criticized that CSRD is “a fragmented mess”, because it lays out a list of “[sustainability] problems we are seeing from the moment” without making any “real connection or structure between them”. To elaborate on their view, B6 used the metaphor of building a house, stating that “you can't work it out without having the architecture. When you have a house construction, you are very eager to make it clear from the architecture of the house that this is the ground, this is the wall, etc. [...] Start with the drawing. Make it a great ground. Then discuss the furniture later”. B9 joined B6 in this point, saying that “CSRD is giving you a list of impacts [they refer to sustainability topics as impacts] and FSSD is giving you a way to integrate the present situation through the lens of the future, a sustainable future. So the big gap again here is that you could be totally missing out on a big subject for your organization and still being compliant with CSRD”.

Some interviewees, who have gained exposure to the FSSD framework but are not currently using it in their professional work, shared a similar viewpoint that compliance is about putting “a lot of money for a report that doesn't lead to a transformational change” (B4). “In the long run, just reporting will never change the world.” (B3).

5.3 Sustainability Strategy

This part summarizes perspectives about the relationship between CSRD and sustainability strategy or any other forms that could influence the sustainability-related decision-making process of companies.

B1, the CEO of a consultancy with 25 years of experience with a focus on sustainability strategy consulting, strongly stated that “we never start with a reporting framework because they are too limiting in actually determining strategy”. According to this interviewee, “if you follow a reporting standard, then you get a bunch of tick boxes [...] In order to make a core strategy for an organization, you have to start with the organization and not with a reporting framework”. At the same time, B1 also affirmed that sustainability should be integrated in the core strategy of organizations, which stems from the interviewee’s opinion that corporate sustainability should concern less about “doing less harm in terms of a story that sits inside of a more traditional understanding of what sustainability is about”. They saw “sustainability as something that each organization needs to consciously contribute to outside of itself for society as a whole, because if we don't do that, we're never going to make a sustainable society”. In other words, according to B1, an integrated strategy, which connects both sustainability and business, has to come first, then reporting is all about putting information that has already been determined within this strategy into a format required by regulators.

On another note, many other respondents only describe a general expectation that data collected from CSRD could inform a sustainability strategy. B5 expressed their hope that “the information gathered through the CSRD requirements are then also used for the [sustainability] strategy”. Meanwhile, A2 said “The good thing is when you start to implement CSRD whether that's ESRS and the taxonomy, you quickly identify all kinds of gaps. [...] So when you find out what these gaps are, then you know what you need to do to close that gap to meet these requirements. So that informs your strategy and what you can do”.

Furthermore, many interviewees emphasized the important role of investors and leadership level in setting objectives and formulating sustainability strategy, A3 mentioned: “this requires leadership level, investors, shareholders, different stakeholders to really align and get

that buy-in in terms of what they accept to invest and what are the end goals. If the end goal is purely to respond to CSRD, they would realize that it is a huge cost added up on to all the other costs that they already have to deal with. If they realise that there is a business case to be had, there are value extractions to be had, then they might be able to provide more investment to provide more alignment and that is where the opportunities can be captured and I think that's where, you know, ideally CSRD would help company to head to”.

5.4 Future Possibilities

In the foreseeable future, the landscape of reporting standards and frameworks within the realms of finance and sustainability, is shifting towards more synchronization and merging. As articulated by B5: "Yeah, there's a lot of synchronizations across all the reporting standards and frameworks, especially right now. It seems like there is a bit of a hint like there's more merging taking place”. The same interviewee believes that the convergence of these standards can lead to a significant structural change within the industry over the next 5 to 10 years.

Moreover, some interviewees anticipate that European market’s prominence will strengthen this synchronization trend to extend beyond current boundaries and include markets outside the EU. As A2 noted, "Even other countries like Korean sustainability standards are coming out now, and that's all going to be sort of integrated”.

Despite the initial implementation costs associated with CSRD, there's an optimistic outlook regarding long-term benefits. While many interviewees acknowledged the current resource-intensive nature of compliance, they foresee a reduction in costs as organizations develop familiarity and routine in their reporting processes. This was echoed by B4 when they said: "But once you kind of get into a habit and establish procedures around ESG reporting, then it definitely will be less costly”.

Furthermore, two interviewees explicitly highlighted that CSRD will mature over time and many current gaps will be closed. B4 said: “But I also know that this is something that will mature. Meanwhile, C5 stated that: “In the data point of view, there are data points that are still in development, for example, circularity, biodiversity, and that is still for companies’ time to decide how they interpret the data as well. But I expect that they will probably close that gap in the future when we are all gaining a little bit more”. In a more implicit manner, B3 also observed an on-going learning curve in the market, as they believed that although consultancies are approaching double materiality assessment differently (as noted under the section about double materiality assessment), “but overall, there's more and more alignment between them”.

5.5 Recommendations

Recommendations by interviewees are captured in this part in 3 categories: general suggestions which refers to an overall approach, action themes which include concrete activities, and tools.

5.5.1 General Suggestions

Starting soon and engaging top management early are general advice provided by some interviewees. Considering CSRD implementation as a “huge challenge”, A2 suggested taking

action as soon as possible: “My recommendation, but I'm already too late, is to begin on time”. B2 said: “I think it is really important that it does not just become a sustainability department, but that it is really integrated into the whole company and has the support of top management to keep it relevant and empower people. We need to move fast”.

At the same time, B1 urged companies to go beyond compliance with the minimum requirements to fully realise the business case of sustainability, saying: "What CSRD is asking them [companies] to do year by year, is very inefficient. It's very cumbersome, it doesn't add anything [...] to the actual value of the organization. But if you now start doing a fundamental sustainability strategy and then incorporate CSRD's road map into that, you can still use it to leverage market advantages".

5.5.2 Action Themes

The authors have grouped concrete actions recommended by interviewees into bigger themes presented in Table 4 below. Each action theme is followed by a number in brackets to indicate the amount of interviewees recommending it. These themes are presented in an order that is expected to be easy for readers to follow, which, however, does not represent a sequence agreed by interviewees.

Table 4: Action themes recommended by interviewees.

Action theme	Description
Define reporting scope (2)	“The first thing you need to do is the legal scoping and determining the reporting boundaries” (A2). This is especially important for holding companies.
Form a cross-functional team (7)	7 out of the 18 interviewees recommended forming a team, which was also referred to as a “sustainability committee” by B3. According to B1, the team should consist of “the key representatives from the different parts of the organization, bottom up, and wide”. Meanwhile, A3 claimed that it's important to categorize the people and what kind of support they can provide on certain topics: “Are they your on the ground people, are they your leaders? Can we pick champions across the different levels?”. From company’s side, C6 pointed out that the departments of “strategy, risk, finance and HR” in addition to the sustainability team are at the core of implementing CSRD.
Train the team (3)	As suggested by A3, it is important to conduct a skill and knowledge assessment of the team that will be involved in the implementation of CSRD: "Once you know and mark your people, then you need to map also the skill level, the understanding, the knowledge, how much they know about this, what are the skill gaps? What are the knowledge gaps? How can you bridge it? How are you going to upskill your people? [...] And then you start to move from the champion. How are the Champions going to be able to help you to support other people with lower levels of motivation and commitment? So, it's definitely a piece of change management that you would need to do there”. The training should last a significant amount of time as pointed out by B1:

	"Train the team during a period of half a year. Training of the team also helps the team to get to know each other, to understand each other's challenges, so it's a kind of dual process".
Find out what's material (7)	As shared by many interviewees, conducting DMA is one of the starting points for companies, as it helps "determine what's important, which ESRSs you [companies] need to report on the double materiality and the impacts, risks and opportunities" (A2). This will in turn "drive how many data points you [companies] will need to report on" (C3). At the same time, B1 emphasised the importance of conducting a systemic analysis to understand the organisation's impact on the world "including where it generates value and where it creates impact". Going into more details, C1 recommended that: "if there are 1000 data points, narrow it down to 500 or 250". Only B3, CSRD lead at a consultancy, disclosed further information about the DMA methodology used by their firm. The methodology consists of two main steps. The first step, whose weighted percentage is 80%, is to conduct an initial "IRO [Impact, Risk, Opportunity] analysis" based on the list of sustainability matters covered in the topical ESRS (including topics, sub-topics, sub-sub-topics) provided in AR 16, Appendix A, ESRS 1. After that, stakeholder engagement will be performed to double check the result from the first step, which weighs 20% to the outcome.
Stakeholder engagement (6)	Interviewees agreed on the importance of engaging internal stakeholders or "get everyone on board" as shared by B5, making sure that "you have listened to everyone in house", said B8. At the same time, getting the leadership on board is identified as a prerequisite to make it easier for performing DMA: "The next thing would be to align the leadership. You have to have a leadership commitment, that's number one. If you don't have a leadership commitment, it's going to be a lot tougher" (B8). C3 agreed, pointing out that "the engagement from top management is crucial for having the buy in of those [internal] stakeholders". Regarding communication, A1 advised to organize "workshops or meetings" to engage all departments that should be involved, instead of sending an "e-mail or an Excel file asking please can you fill in this file". The interviewee also shared that this is "the most tricky part" as everyone "speaks different languages in terms of business languages". Along a similar line, it is important to "continue building the awareness in the company" (C3) as well as "upskill your team, [...] teach them what CSRD is, why it's important" (B5). Moreover, besides internal people, B4 gave a comment that companies should "prioritize main stakeholders who have a more critical lens on the companies and also some of the scientific stakeholders in doing that".
Gap analysis (4)	Gap analysis was mentioned multiple times by various interviewees as a critical step to be taken. According to A3, doing a gap analysis means "looking at your [a company's] operations, your data that you're already collecting and recognize what gaps there are".
Collect data (3)	Data collection is one of the most "crucial" (B5) parts of DMA. C1 suggested planning to identify how to obtain necessary data points and determine the

	sources, as shown in this quote: "Make an action plan on how to get these points and who can give you these data points".
Develop an integrated strategy (3) and incorporate it into the vision (2)	A1 suggested that companies should “integrate the sustainability strategy into the industrial strategy, so it has to be an integrated strategy [...] companies really have to integrate sustainability in their daily job. Starting from a strategy, because, of course, a strategy is something very concrete to give an overview of the performance of the company and is very also helpful, for example, for investors or banks". A2 pushed a little bit further, saying that "as we discussed, they [sustainability issues] actually affect your company strategy and the strategy is tied to your business model, so a change to your strategy might mean that you have to think of different ways to do business for some parts of your company". At the same time, there are 2 interviewees acknowledging the importance of incorporating sustainability into a company’s vision. B8 said: “Definitely incorporate the CSRD strategies to drive sustainability transformation. So, you would have it in your vision and mission, and all this in the beginning, you should have it as a framework”. Meanwhile, B1 clearly asserted the primary role of having a sustainability-driven vision which will later influence sustainability reporting: "Then you have to create a vision and kind of set a goal. So what is the organization trying to achieve in the long term? And then from that on you create a road map with individual projects and actions that take place over years in order to achieve those goals. And then at the end you can help determine if there is a reporting requirement and then choose the right reporting framework and tool and then plug that in".
Set targets, make an action plan (5)	Setting targets and coming up with a general action plan is another essential step confirmed by numerous interviewees. A2 shared: "ESRS requires you to keep track of many, many KPIs, but you can start to think about what KPIs might be key for your company. Once you've determined your targets and metrics, then you first have to think of an action plan. OK, well, how am I going to meet those targets?". The interviewee also emphasised the role of having "underlying policies in place" to support action plans defined in the previous step.
Participate in CSRD-related workshops (3)	C2 advised “participating in sectoral events where we [companies] can learn from each other”. Meanwhile, as a consultant organising multiple open workshops and training sessions for companies, B8 recommended joining those sessions to gain more knowledge in an easier way.
Seek support from consultants, engage with assurance party (5)	Some interviewees explicitly advised seeking external support. Both B1, a consultant, and C6, sustainability manager at a large company, recommended working with consultants. B1 said: “Just like if you have a company and you have complicated legal framework and financial stuff, you hire an accountant, you're not going to learn all of the laws and the regulations by yourself”. Another point is to engage with auditors early to “make sure that you are very much aligned with your assurance party and what they're expecting to see" (A3).

5.5.3 Tools

Many interviewees suggested companies to think about embracing technologies to ease the compliance process. According to A3, it's essential to use technology to track and manage crucial data points and stakeholders, they said: "I think it is a crucial move for companies to start thinking about the technology. Any kind of technology, be it ERP [Enterprise Resource Planning] or any supporting software that can be linked up to your ERP to be able to gain that view and to track and to trace and to record all the crucial data points as well as the stakeholders, the responsible parties that are relevant to the process, what have been done". Similarly, A2 emphasized the importance of Information Technology (IT) for information and data management saying: "you can start to think about IT tooling, so the information and data management, what technology can you use to make all of this easy within your company". Coming from an automation perspective, C1 asserted that: "Oh definitely in terms of simplified automated processes, you know my goal in the end is to have all the data in one dashboard, press a button and there's a CSRD report". The interviewee, working as a sustainability project lead in a holding company, further explained: "Because currently us and there's a lot of other companies use excel, excel sheets, and then build a structure in their own financial database, which is a bit of a workaround. But data increases that much. We're in big need of such tools". B1 also gave examples of specific tools including Position Green and Watershed. Additionally, for benchmarking, C1 and B4 suggested tools such as Encore and SASB homepage that help in benchmarking sustainability efforts against industry standards.

6 Discussion

In this chapter, the authors will discuss the results from both phases to answer the primary research question: **How can CSRD move companies strategically towards sustainability?** In order to answer this question, it is crucial to first evaluate the strengths and weaknesses of CSRD from both an SSD perspective and the practicality when implementing the directive. Therefore, insights from the theoretical review of CSRD and findings from the interview phase with practitioners will be interwoven to ensure the most comprehensive view possible. At the same time, to strengthen a systems perspective, CSRD will be evaluated in the context of a broader effort of the EU to meet the European Green Deal's goals. In the second part of this chapter, recommendations for companies will be provided, with respect to both a regulatory adherence purpose and the need to go beyond compliance to realise a collective sustainable future for society at large.

6.1 What re the strengths and weaknesses of CSRD from a strategic sustainable development perspective?

6.1.1 CSRD's Strengths and Weaknesses Concerning the Approach Of The Tool

Mandating a shift from voluntary to mandatory non-financial reporting, CSRD clearly represents a public policy approach, for which many interviewees expressed a positive opinion and pointed out several benefits. Its strengths include pushing laggards to be more active in sustainability and increasing leadership teams' attention to non-financial reporting, etc. (see section 5.1.1). The recognition from both companies and consultants might signify a significant role of CSRD as a policy intervention in lifting up the entire sustainability field. At the same time, when reviewing CSRD's goals with respect to a bigger EU legislative system (see section 4.2), the authors believe that CSRD's impacts have been driven by a more complicated hybrid approach combining both regulatory and market tools. As explained in the Success level analysis of the theoretical review section, CSRD governs non-financial reporting which serves as a steering instrument for directing capital flows towards economic activities aligned with the European Green Deal. Therefore, besides a "stick" in the form of a directive together with penalties for noncompliance (to be decided at the national level by the Member States), CSRD also contributes to creating a "carrot" that rewards companies with greater sustainability efforts. To be more specific, as non-financial reporting is expected to be an input to inform investment decision of financial institutions, it helps shape a market-based incentive to reinforce companies' sustainability transition and foster more ambitious targets. For example, impact-linked financial instruments such as loans that offer more favourable lending terms for companies with better sustainability efforts will incentivise them to stay committed to or even raise the bar for their sustainability goals. In the interview phase, many interviewees also mentioned this positive feedback loop, saying that transparency in non-financial reporting could help companies retain investment.

This dual mechanism is amplified even more with ESRS and its double materiality approach. Taken altogether, it is likely that these factors have supported CSRD in enforcing a deeper integration of corporate sustainability into core activities of a business, giving corporate sustainability a business risk management lens. To be more specific, a failure to comply with CSRD put companies in a regulatory risk. Demands and pressures from financial institutions

pose a risk in failing to raise capital due to poor sustainability performance. Impact materiality disclosures provide more information for civil society organisations to supervise and take action on companies' impacts on people and the planet, which could result in a risk of damaging reputation once businesses poorly manage their social and environmental footprints. Financial materiality directly requires companies to translate sustainability issues into risks and opportunities. This point of view seems to stand stronger when taking into consideration past efforts regarding the role of companies. As described in the Background of fields chapter, the vague concept of corporate social responsibility revolves around the idea of businesses' obligation to society, with a debate that the central role of companies should be increasing profit. This signifies a perception of viewing corporate responsibility and doing business as two separate realms.

Furthermore, some interviewees agreed with opinions from scholars shown in the Background of fields chapter that mandatory reporting could enhance transparency, accountability, and comparability. At the same time, many interviewees provided more critical views around these strengths, with concerns about assurance – which is a mechanism to ensure credibility of non-financial reports (see section 5.1.4), and obstacles for comparing sustainability performances between companies (see section 5.1.6).

On the other hand, this multilayer approach of CSRD could result in several pitfalls. Two of them are heavy legal language and lobbying for fewer demands from and more flexibility for companies (see section 5.2), which are inevitable side-effects of using public policy.

More noteworthy, while the strategy of linking corporate sustainability with sustainable finance is a comprehensive effort to steer the entire economy towards a more sustainable future, if not well managed, it could result in a bias in sustainability reporting toward financial materiality (Wassénus et al. 2024). Grounded in corporate risk management, by definition, financial materiality only concerns environmental and social impacts if they pose a direct physical, reputational, or regulatory risk to company operations or lead to relevant new business opportunities. In response to the problem, CSRD has adopted a double materiality approach to ensure that impact materiality is also taken into consideration. However, the directive allows companies to choose which sustainability-related impacts to report on via a materiality assessment, which is a consequence of lobbying as mentioned earlier in this study. Without a systems perspective, this could lead to a neglect, either on purpose or due to a lack of knowledge, of issues that are material for the planet yet not important enough for businesses to be considered. For example, a company might perceive impacts caused by operations of a business unit as insignificant (therefore deciding not to report on them) if the revenue stream from this unit is small in relation to the total revenue of the company. Nevertheless, in a particular region, the negative impacts of the company's activities may contribute to a critical driver of a bigger sustainability challenge.

This issue was shared by two interviewees including B1, CEO with 25 years of experience at a consultancy focused on sustainability strategy, and B6, an independent consultant and an FSSD practitioner. B1 supported an adoption of the triple materiality approach which builds on double materiality by adding the lens of local context and global sustainability thresholds. To be more specific, with triple materiality, companies must consider the sustainability context in which they operate to decide if a sustainability topic is important. The concept also requires that organizations cannot assess their performance on an issue without looking at scientific limits, planetary boundaries, and social norms regarding that issue, especially in the local context where it takes place. Meanwhile, B6 affirmed that companies could miss out on

a significant sustainability issue and still are considered compliant with CSRD. With the above arguments, the authors join Wassénus and colleagues in their urge that “the responsibility of determining environmental impact materiality should be shifted from companies to a transparent process underpinned by scientific evidence” (Wassénus et al. 2024, 213). This movement will also help (1) reduce the ambiguity and burden on companies’ shoulders to conduct double materiality assessment, especially concerning less mature sustainability topics in terms of impact measurement such as biodiversity, and (2) address concerns over comparability among different companies due to different interpretations of sustainability topics, as asserted by many interviewees (see section 5.1.6).

There could be several reasons why not all interviewees expressed an opinion about either the possible neglect of critical issues that matter for the planet and society at large or the need for triple materiality. CSRD is still in its early stage of implementation, written in a complex language, and even double materiality itself is considered by many people as an innovation when compared to single materiality. Therefore, most efforts are being spent on understanding and mastering double materiality assessment. This could signify a lack of shared understanding about sustainability, a systems perspective, and a science-based mindset among people working in the field of corporate sustainability.

On another note, as reported in the Interview results chapter, intensive resources required for implementing CSRD, administrative burdens, the large quantity of data needed, and the lack of concrete guidelines on conducting double materiality are considered by many interviewees as weaknesses of CSRD. These findings also align with scholars’ ongoing discussions about obstacles to adopt double materiality and concerns over the shift from voluntary to mandatory reporting (Frecautan et Nita 2022; Lozzelli and Velasco 2023). At the same time, CSRD is in its early stage of implementation, therefore stakeholders involved (companies, consultants, etc.) are going through a collective learning process to identify best practices and fill current gaps, as laid out in section 5.4 about future possibilities. This led the authors to believe that these perceived weaknesses might be temporary implementation challenges, which could be overcome when the field gets more mature. To be more specific, many interviewees agreed that the cost for reporting will go down once companies have established a system, rhythm, and routine, which might increase their efficiency in fulfilling the task. The administrative burdens will be lessened once processes are optimized and integrated into companies’ everyday operations. Similarly, collective learning over time will enrich the understanding of key concepts and result in best practices for core procedures such as data collection and double materiality assessment (although from a sustainability perspective, as affirmed earlier in this section, the authors advocate for an increasing role of science-based processes in deciding sustainability matters that should be reported on). On another hand, although these difficulties might be overcome, the authors still sit with a question: Is the speed of improvement fast enough given the limited amount of time left for saving society from a system collapse?

Moreover, challenges related to assurance and stakeholder engagement are more complex. Scepticism and implementation bottlenecks of both concepts revolve around the existing knowledge gap among auditors and stakeholders. Within the current context, a normal learning curve of companies, consultants, and auditors might help solve issues for a compliance purpose yet might be insufficient from a strategic sustainability perspective. On the one hand, incremental improvement can be achieved with capacity-building activities for the sake of complying with CSRD. On the other hand, if companies want to go beyond

compliance to fully realise a business case for sustainability and drive forward the collective effort toward strategic sustainable development, the authors would argue that a mere understanding of ESRS sustainability topics (in the form of topical standards) and how to report on them could not fulfil the goal. The argument is further discussed in section 6.1.2 below. Additionally, with regard to the potential conflict of interest in assurance (see section 5.1.4), data gathered within the scope of this study is insufficient to come up with a strong conclusion if this is a systemic issue or temporary implementation challenge.

6.1.2 CSRD's Strengths and Weaknesses from an SSD perspective

6.1.2.1 CSRD: incremental or transformational change?

According to Broman and Robèrt (2015), an SSD perspective embraces the backcasting approach in planning and decision making. The approach starts with a vision of success bounded within the 8SPs, followed by a current reality assessment to identify gaps before investigating solutions for reaching the vision (see section 3.1.2). Another major approach commonly used by businesses is forecasting, which projects existing trends into the future to predict and solve problems (Dreborg 1996). To address complex global sustainability challenges, backcasting is a more appropriate approach (Broman and Robèrt 2015), driving a transformational change – a systemic leap to reshape the present system. Meanwhile, based on dominating trends which are themselves a part of the problem, forecasting can only result in incremental change – a gradual improvement over time – thus exposing organizations heavily depending on it to risks of continuing these unsustainable trends and degradation of the socio-ecological system (Robèrt et al. 2021). Within this context, from an SSD lens, it is critical to discuss if the implementation of CSRD will lead companies to an incremental change or the transformation needed to achieve ecological and social sustainability.

During the first phase of the research, the authors discovered that ESRS mandates companies to report on progress indicators in which reported values are intended to be compared against a baseline year or an industry benchmark, which signifies a forecasting approach. An example of such indicators is the disclosure requirement ESRS E4-5 on biodiversity and ecosystems, which asks companies to disclose “the number and area (in hectares) of sites owned, leased or managed in or near these protected areas or key biodiversity areas” (Commission Delegated Regulation (EU) 2023/2772, 2023, 139). Given a lack of science-based contextual sustainability thresholds as discussed in the previous section, once such a baseline number is set in the first report, it is likely that the number will become an anchor, leading to path dependencies. As a result, it is most likely to drive gradual improvements over years, especially when it is probable that investors will be satisfied with any kind of progress. Even if some companies might be motivated to go the extra mile for sustainability, without knowledge other than CSRD compliance, it might be hard for them to see beyond these anchored indicators. Hence, the authors are convinced that if companies choose to adhere to CSRD as their sole sustainability effort, they will only pursue an incremental improvement of doing less bad rather than a transformational change that enables them to operate sustainably within the system boundaries constructed by the 8 SPs.

6.1.2.2 CSRD's long-term success in realising the European Green Deal

As presented in the results for the first phase, CSRD is designed to support the long-term vision described in the European Green Deal, which is in turn based on a weak scientific foundation of decoupling. The European Green Deal itself is also facing criticism by scientists

(see section 4.2). From an SSD perspective which emphasises the importance of science, this could be translated into several implications for both companies and investors. First and foremost, it is most likely that corporate sustainability based on mere compliance with CSRD is not enough to realise a sustainable future for all. Similarly, current sustainable finance practices that direct capital to sustainable businesses defined by the European Green Deal and its related regulations are also insufficient. Given the ongoing discussion about systemic investing (Daggers, Hannant, and Jay 2023), the authors would argue that the questions to be asked should be about not only mobilising more financial resources for sustainability but also how to deploy them strategically and with respect to scientific findings and recommendations.

6.1.2.3 CSRD's contributions and gaps to SSD

Up until this point, it has been clear to the authors that a mere compliance with CSRD will not assure a sustainable future for all. Given the fact that CSRD is mandatory, and its implementation is inevitable, the discussion in this section aims to draw a clearer picture on the directive's contributions and gaps to SSD to support consultants and companies that are serious about going beyond tick-the-box exercises and doing less bad.

Overall, all the strengths of CSRD discussed in section 6.1.1 contribute to lifting the entire sustainability field, drawing more attention to sustainable development from multiple actors in the economy, which possibly leads to stronger business cases for sustainability. Moreover, with ESRS being considered the most comprehensive directive and standard that has been launched to date by many interviewees, CSRD has the potential to support strategic sustainability work in many ways. The list of sustainability topics described in ESRS can not only enrich the knowledge of companies about specific sustainability issues but also assist them in understanding the negative impacts occurring downstream once the SPs are violated. CSRD also requires stronger collaborations within companies and across their value chains. This could be a good chance to engage with stakeholders and factor their needs and values into envisioning a new definition of success for companies. Furthermore, ESRS requires disclosures of massive data, which could contribute to the assessment and understanding of companies' current reality.

On the other hand, CSRD shows several gaps which hinders it from supporting an SSD approach. The first critical missing piece is a systems perspective. As explained multiple times in this research, to stay compliant with CSRD, companies only need to consider material topics within their individual organisations. This silo mentality is insufficient to deal with the complexity nature of sustainability challenges, as discussed earlier in the text. Instead, companies should be able to situate themselves within the ecological-social-economic systems to be aware of their contributions to both a systemic degradation of the ecology and society and solutions to reverse the damages that have been caused collectively. The second gap is a shared definition and holistic understanding of sustainability with a science-based approach. As all sustainability problems are interconnected within complex nested systems, operating without this holistic mind will prevent companies from having a full picture of where future risks and opportunities might lie. From a sustainability perspective, it also poses a risk of a system collapse if too many actors underestimate a particular phenomenon at the same time, which unfortunately might add up to a non-linear accumulation of a cause leading to a significant consequence upstream. Furthermore, companies and consultants who use CSRD should be aware that it is a reporting tool with a direct focus on transparency, embraces a forecasting mindset in planning, and goes without any strategic guidelines to help prioritise actions. "In the long run, just reporting will never change the world", said B3, CSRD lead at a

consultancy, and agreed by many other interviewees. Last but not least, from company's point of view, CSRD lacks the narrative and rationale to help firms realise the full benefits of embracing a proactivity approach to sustainability, which has been demonstrated with empirical evidence from the application of the FSSD in business contexts (Broman and Robèrt 2015). Although the risk management perspective could partly justify the value of sustainability, it comes with a lot of burdens, pressures and bureaucracy.

6.2 What can companies do to implement CSRD in a way that helps them move strategically towards sustainability?

6.2.1 Going beyond CSRD compliance to realise a sustainability business case

At the moment, for most companies, CSRD comes inevitably with enormous workload. Despite cost reduction as a likely future possibility, CSRD still requires a significant initial investment as affirmed by many interviewees. Therefore, first and foremost, as advised by several interviewees, businesses should start as soon as possible and go beyond CSRD compliance. This can lead to numerous advantages for companies. First, while CSRD is still in its infancy and allows more room for mistakes, companies should go the extra mile to realise strong business cases for sustainability, i.e. extracting more business values from compliance and sustainability efforts. From a strategic point of view, this could enhance the return on investment of unavoidable costs for implementing CSRD in early days. Second, an ambitious transformation at the beginning can also future proof and help companies stay ahead of more and more stringent regulations in the future, which has already been a reality, exemplified by the introduction of CSDDD shortly after CSRD. Moreover, gaining a deeper understanding of sustainability beyond ESRS topical standards will enable companies to see underlying risks and opportunities that cannot be identified without a systems perspective and holistic thinking. This in turn can empower product innovation, new business model or gaining more shares for existing business lines.

To be able to realise these benefits, there must be a mindset shift from longing for incremental change to pursuing a sustainability transformation with a proactivity approach. A transformational change in turn cannot happen without a deeper integration of sustainability into businesses' core values, vision and business strategy, instead of stopping at risk management. This perspective shift implies that companies should consider CSRD as the entry point for a transformation process, instead of an extra layer to be put on top of current operations. At the same time, as firms have to make profit to self-fund their existence, approaching sustainability with a stepwise strategy is essential for staying in business for long enough to harvest the fruits from investing in sustainability.

6.2.2 Key action areas to prepare for change

After the interview phase, the authors have already identified a list of action themes for a compliance purpose (see section 5.5.2). Within the limited timeframe of this research, the authors want to be strategic, therefore choose not to put more effort into verifying, testing these actions, or translating the table into an actionable roadmap. Instead, to answer the research questions, key action areas in this section is about using CSRD as a stepping stone to

drive companies toward strategic sustainability. Recommendations from interviewees are still taken into consideration to ensure a stepwise transition.

There is a general agreement among interviewees about the crucial role of people, whether it is for the purpose of complying with CSRD, formulating a sustainability strategy, or crafting a new vision to integrate sustainability into the core business of a company (see section 5.1.2 and 5.5.2). Therefore, one of the most important missions to start with is to nurture a task force for change. At an operational level, first and foremost, it is critical to engage and get support from C-suite, board of directors and other leadership management positions whose critical role has been asserted multiple times earlier in the text. Then, companies should form a core team consisting of people from key departments, as pointed out by many interviewees in section 5.5.2. From a change management perspective, interviewees also emphasised the importance of mapping internal stakeholders to identify early supporters, champions, deniers, etc. as well as their motivations, barriers to adopt change, current strengths and existing gaps.

Raising awareness and building a common understanding around sustainability is the following essential action. As explained in section 6.1.2, while CSRD contributes to the understanding of sustainability defined in the FSSD, there are existing gaps that need to be closed. First and foremost, the core team established earlier should be equipped with a science-based, holistic understanding of the interconnectedness among sustainability issues. Then after that, knowledges of sustainability topics defined by ESRS, double materiality, and reporting principle could be introduced to give concrete examples of downstream sustainability issues, as well as for compliance purposes. This will be one of the most challenging tasks, as it requires dealing with multiple sustainability worldviews, different business languages, and complex topical knowledge. At the same time, the learning process should not be a one-off effort. In fact, companies should reinvent themselves as a learning organisation to be able to cope with both the ongoing progression of CSRD and the complexity of sustainability challenges.

The next area is related to building capacity for doing stakeholder engagement and embracing leadership in the value chains. Until the task of determining impact materiality could be shifted (read 6.1.1 for a further explanation), companies should take a proactive role in preparing for DMA, in which stakeholder engagement plays a role. However, engaging with stakeholders requires a certain level of facilitation and leadership skills to be able to host conversations, extract insights, as well as create alignment across diverse needs and sustainability-related values of different stakeholder groups. The sentiment is shared by B6 as laid out in section 5.1.2. At the same time, companies can consider this an opportunity to educate partners across the value chain about their material sustainability issues. The position of value chains has been further emphasised with the introduction of the recent CSDDD. The new directive obliges companies to conduct appropriate human rights and environmental due diligence with respect to their operations, operations of their subsidiaries, and operations of their business partners in companies' chains of activities. A failure to engage with key stakeholders, together with a high dependency on proxy data, could expose companies to more and more business and regulatory risks.

Additionally, the number of information required and data points to be collected for CSRD is massive. Therefore, as recommended by interviewees (see section 5.5.3), companies should consider leveraging technologies to develop an infrastructure supporting data collection, data management, data analysis, and report generation. While tools are normally a secondary topic when it comes to change management, due to the complicated nature of the CSRD

compliance process, the authors believe that having a strong infrastructure to facilitate collaborations early on will help reduce hurdles and keep track of learnings within organisations. Furthermore, it is worth noting that while a search for tools should start early, it should not be prioritised over other aspects presented in this section.

6.2.3 Limitations

This study has several limitations that possibly influenced the result, and thus must be transparently conveyed to contextualise the findings better, or for further research to take into account.

First, concerning the research design, the methods chosen for both phases implied certain limitations, either due to the method itself or the capacity of the researchers to cover all the details of a certain subject. Details are as below:

- Data taken from grey literature, analysed using the FSSD conceptual framework for the first phase: None of the authors has a legal background. This may hinder the understanding of CSRD's official documents which was the primary source of data for this method. Furthermore, the guiding questions for assessing CSRD from the FSSD lens are by no means a complete set of questions that could be asked, nor were they fully answered by this study.
- Semi-structured interviews for the second phase: The data sample for this phase is limited in size, and the numbers of interviewees from the three interviewee groups are unequal, which might lead to a bias over a certain group's opinions when analysing the interview results. Concerning organisation types, the authors could not recruit any SMEs (according to the definition of the EU), which risks leaving out their voices. Moreover, investors and civil society – who are report readers – are excluded from the research, due to limited resources. This could prevent the authors from gaining a more comprehensive understandings of the needs and opinions of all relevant stakeholders in the system within which CSRD functions. Furthermore, all interviews were conducted virtually with limited opportunities for observing their behaviours compared to in-person conversations. Technical issues from the interviewee's end also disrupted one interview, reducing the interview time from 60 minutes to only 45 minutes. Additionally, English is not a native language of most interviewees and none of the authors. This might result in communication challenges and misunderstandings, even though the authors tried to minimise the risk by asking for clarification and confirmation when the information provided by interviewees was unclear.

In data analysis, the authors recognise their disposition as a diverse group of researchers with different sustainability worldviews and varied professional, cultural, and linguistic backgrounds. This fact may negatively affect the collective sense making processes among team members, which in turn might distort the result of this study.

Moreover, CSRD is in its early stage with constant updates from the EU and active ongoing discussions happening informally among sustainability practitioners. Due to time constraint and a lack of a structured method, the authors could not factor these data into this research.

Last, the authors should have validated synthesis of the results from phase 2, and recommendations for companies given in section 6.2 by getting feedback from interviewees or more people in the sustainability landscape. However, this could not be done due to time

constraint. Ideally, the authors expect to have one more research phase to engage deeper with companies and test suggestions provided.

6.2.4 Suggestions For Future Research

For further studies, the authors suggest engaging with investors to better understand their needs in terms of sustainability-related risks and opportunities, the current progress of SFDR as well as how much pressure it places on investors' transition toward sustainable investing, and the level of influence of sustainable finance on companies' sustainability transition. These factors closely relate to the demand for more financial materiality, potentially driving out of balance the focus between impact and financial materiality.

From an SSD perspective, research on potential integration between CSRD/ESRS and the FSSD framework could result in more meaningful recommendations for companies. For example, to what extent does current reality assessment could support double materiality assessment?

Furthermore, the authors also see a need for more study on hosting a collective learning on CSRD-related topics among researchers, consultants, and companies across industries. This could potentially help speed up the collective learning curve of the entire sustainability community.

7 Conclusion

Given the interconnectedness and complexity of sustainability challenges, the private sector has a big role to play. It is contributing to the problem and at the same time, could be part of the answer. The current growth model that is based on fossil-fuels and take-make-waste is out of date, out of touch with the planet and posing a great risk to the existence of humanity. In response, the EU has created the European Green Deal which canters around a new green growth model. To bring this model to life, the EU has designed a legislative system consisting of several closely connected directives and regulations to push forward the sustainability transition of businesses and financial sectors, as well as to alter interactions between these key actor groups. In this context, CSRD serves as a steering instrument (1) governing non-financial reporting to ensure transparency, comparability, accountability, and (2) interacting with investor-focused regulations such as SFDR to direct capital flows toward economic activities aligned with the European Green Deal. Against the backdrop of scholars' criticism for non-financial reporting initiatives in the past including CSRD's predecessor NFRD and one of the most dominant voluntary reporting standards GRI, this research was conducted to explore how CSRD as a tool could assist companies in moving strategically toward sustainability. Besides an intellectual goal of seeking to understand CSRD, the authors also grounded themselves in a practical goal of delivering research of values for companies that fall within the scope of CSRD, for consultants who are practicing CSRD or other sustainability tools and frameworks, and CSRD creators for gaining an additional perspective which is rooted in strategic sustainable development.

The study has led the authors to multiple discoveries of CSRD. On the one hand, the directive should be recognised for its comprehensive approach and its ambition to create impact on a large scale, helping lift up and draw more attention to the entire sustainability field. Functioning within the bigger legislative system, CSRD is also showing a great effort in integrating sustainability deeper into the core business activities.

On the other hand, to fully achieve its potential contribution to ecological and social sustainability, as a reporting tool, CSRD has to overcome various existing implementation challenges. Furthermore, as an approach, CSRD and the broader European Green Deal family are built on a weak scientific foundation, ignoring most recent scientific consensus in dealing with complex sustainability challenges. As a tool to foster corporate sustainability, CSRD is currently requiring huge resources from companies, likely administrative burden, with vague values to be realised.

Is it worth putting a lot of resources into embracing an approach that does not consider the most solid and trustworthy sources of knowledge of humanity so far? The answers might differ from company to company, and there will be winners and losers in this race. But one thing that has been very clear to the authors is that going beyond compliance is critical from both sustainability and company's perspective.

References

- Ali, Irshad, Peni T. Fukofuka, et Anil K. Narayan. 2023. « Critical Reflections on Sustainability Reporting Standard Setting ». *Sustainability Accounting, Management and Policy Journal* 14 (4): 776-91. <https://doi.org/10.1108/SAMPJ-01-2022-0054>.
- Aras, Güler, and David Crowther. 2008. "Governance and Sustainability." *Management Decision* 46, no. 3 (April): 433–48. <https://doi.org/10.1108/00251740810863870>.
- Bansal, Pratima, and Hee-Chan Song. 2017. "Similar but Not the Same: Differentiating Corporate Sustainability from Corporate Responsibility." *Academy of Management Annals* 11, no. 1 (January): 105–49. <https://doi.org/10.5465/annals.2015.0095>.
- Baumüller, Josef, and Karina Sopp. 2021. "Double Materiality and the Shift from Non-Financial to European Sustainability Reporting: Review, Outlook and Implications." *Journal of Applied Accounting Research* 23, no. 1 (December): 8–28. <https://doi.org/10.1108/jaar-04-2021-0114>.
- Baumüller, Josef, and Stefan O. Grbenic. 2021. "MOVING from NON-FINANCIAL to SUSTAINABILITY REPORTING: ANALYZING the EU COMMISSION'S PROPOSAL for a CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)." *Facta Universitatis, Series: Economics and Organization*, no. 1 (December): 369. <https://doi.org/10.22190/fueo210817026b>.
- Becker, Martin G., Fabio Martin, and Andreas Walter. 2022. "The Power of ESG Transparency: The Effect of the New SFDR Sustainability Labels on Mutual Funds and Individual Investors." *Finance Research Letters* 47, no. June (June): 102708. <https://doi.org/10.1016/j.frl.2022.102708>.
- Bocken, Nancy M.P., et Samuel W. Short. 2021. « Unsustainable Business Models – Recognising and Resolving Institutionalised Social and Environmental Harm ». *Journal of Cleaner Production* 312 (août): 127828. <https://doi.org/10.1016/j.jclepro.2021.127828>.
- Bossut et al. 2021. "Sustainable Finance Research Platform Why It Would Be Important to Expand the Scope of the Corporate Sustainability Reporting Directive and Make It Work for SMEs." https://wpsf.de/wp-content/uploads/2021/09/WPSF_PolicyBrief_8-2021_Scope.pdf.
- Bowen, H. *Social Responsibilities of the Businessman*; Harper & Row: New York, NY, USA, 1953.
- Bratt, C. et al., 2013. Assessment of criteria development for public procurement from a strategic sustainability perspective. *Journal of Cleaner Production*, 52, 309–316.
- Bratt, C. et al., 2011. Assessment of eco-labelling criteria development from a strategic sustainability perspective. *Journal of Cleaner Production*, 19(14), 1631–1638.
- Broman, Göran Ingvar, and Karl-Henrik Robèrt. 2017. "A Framework for Strategic Sustainable Development." *Journal of Cleaner Production, Systematic Leadership towards Sustainability*, 140, no. January (January): 17–31. <https://doi.org/10.1016/j.jclepro.2015.10.121>.

Brown, Halina Szejnwald, Martin de Jong, and Teodorina Lessidrenska. 2007. "The Rise of the Global Reporting Initiative (GRI) as a Case of Institutional Entrepreneurship." Corporate Social Responsibility Initiative, Working Paper No. 36. Cambridge, MA: John F. Kennedy School of Government, Harvard University. https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/programs/cri/files/workingpaper_36_brown.pdf

Byggeth, S. H., G. Broman, and K.-H. Robèrt. 2007. A method for sustainable product development based on a modular system of guiding questions. *Journal of Cleaner Production* 15:1-11. <http://dx.doi.org/10.1016/j.jclepro.2006.02.007>

Carolina, Ana, Larissa Mendes, and Silva. 2020. "Advances in Sustainability Reporting: What Is Missing?," January (January). https://doi.org/10.1007/978-981-15-3473-7_6.

Carol A Adams, Abdullah M. Alhamood, Xinwu He, Jie Tian, Le Wang and Yi Wang. 2022. "The Development and Implementation of GRI Standards: Practice and Policy Issues." <https://drcaroladams.net/the-development-and-implementation-of-gri-standards-practice-and-policy-issues/>.

Carroll, Archie B. 1999. "Corporate Social Responsibility: Evolution of a Definitional Construct." *Business & Society* 38, no. 3 (September): 268–95. <https://doi.org/10.1177/000765039903800303>.

Carson, R. *Silent Spring*; Houghton Mifflin: New York, NY, USA, 1963.

Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 Supplementing Directive 2013/34/EU of the European Parliament and of the Council as Regards Sustainability Reporting Standards." n.d. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302772.

Clayton, Anthony M. H., and Nicholas J. Radcliffe. 1996. *Sustainability: A Systems Approach*. Google Books. Earthscan. https://books.google.se/books/about/Sustainability.html?id=Z_LaYeKiGtwC&redir_esc=y.

Cremasco, Chiara, and Leonardo Boni. 2022. "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) Effective in Shaping Sustainability Objectives? An Analysis of Investment Funds' Behaviour." *Journal of Sustainable Finance & Investment* 0, no. 0: 1–19. <https://doi.org/10.1080/20430795.2022.2124838>.

Crutzen, P. J. and Stoermer, E. F., 2000, ' The Anthropocene: how can we live in a world where there is no nature without people?', in Robin, L., et al. (eds), *The future of nature*, Yale University Press, New Haven, CT (<https://doi.org/10.12987/9780300188479-041>).

Daggers, J., Hannant, A., & Jay, J. (2023). Systemic Investing for Social Change. *Stanford Social Innovation Review*. <https://doi.org/10.48558/G2FT-YM24>

De Villiers, C.; Dumay, J.; Farneti, F. The EU Directive on Non-Financial and Diversity Information: A New Toothless Tiger Is Born? In *Proceedings of the 41st Annual Congress of the European Accounting Association*, Milan, Italy, 30 May–1 June 2018.

Diego Andrés Correa-Mejía, Jaime Andrés Correa-García, and María Antonia García-Benau. 2024. “Analysis of Double Materiality in Early Adopters. Are Companies Walking the Talk?” *Sustainability Accounting, Management and Policy Journal*, January (January). <https://doi.org/10.1108/sampj-07-2023-0469>.

Dinh, Tami, Anna Husmann, and Gaia Melloni. 2022. “Corporate Sustainability Reporting in Europe: A Scoping Review.” *Accounting in Europe* 20, no. 1 (December): 1–29. <https://doi.org/10.1080/17449480.2022.2149345>.

DIRECTIVE (EU) 2022/2464 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464&qid=1706871406348>

Dombrovskis, Valdis, Letter to Jean-Paul GAUZES, Chairman of the Board of EFRAG, 25.06.2020, <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FLetter%2520EVP%2520annex%2520NFRD%2520governance%2520mandate%252020.pdf>

Dreborg, Karl H. 1996. “Essence of Backcasting.” *Futures* 28, no. 9 (November): 813–28. [https://doi.org/10.1016/s0016-3287\(96\)00044-4](https://doi.org/10.1016/s0016-3287(96)00044-4).

Erkens, Michael, Luc Paugam, and Hervé Stolowy. 2015. “Non-Financial Information: State of the Art and Research Perspectives Based on a Bibliometric Study.” *Comptabilité - Contrôle - Audit* 21, no. 3: 15. <https://doi.org/10.3917/cca.213.0015>.

European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Action Plan: Financing Sustainable Growth, 8.03.2018, COM(2018) 97 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&qid=1706871635841>

European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS The European Green Deal, 11.12.2019, COM (2019) 640, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:640:FIN>

European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Commission work programme 2024, Strasbourg, 17.10.2023 COM(2023) 638 final, https://commission.europa.eu/document/download/79628203-f1b5-450d-9d6c-0a2f5374a9dc_en?filename=COM_2023_638_1_EN.pdf

European Commission, Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2013/34/EU, Directive 2004/109/EC,

European Commission, Directive 2006/43/EC and Regulation (EU) No 537/2014, as Regards corporate Sustainability Reporting, 2021/0104 (COD) <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0189&from=EN>

European Commission, Summary Report of the Public Consultation on the Review of the Non-Financial Reporting Directive, 20 February 2020 - 11 June 2020, Ref. Ares(2020)3997889 - 29/07/2020 - https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive/public-consultation_en

EFRAG, Press Release: REPORTS PUBLISHED ON DEVELOPMENT OF EU SUSTAINABILITY REPORTING STANDARDS, 8 March 2021, <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2F210308%2520Final%2520press%2520release%2520for%2520NFRS%2520mandates%2520report%2520publication.pdf>

EFRAG (a), Public consultation on the first set of Draft ESRS, 2022, <https://efrag.org/lab3>

EFRAG (b), Press Release: EFRAG delivers the first set of draft ESRS to the European Commission, 27 November 2022, <https://www.efrag.org/Assets/Download?assetUrl=/sites/webpublishing/SiteAssets/EFrag+Press+release+First+Set+of+draft+ESRS.pdf>

Fiksel, Joseph. 2006. "Sustainability and Resilience: Toward a Systems Approach." *Sustainability: Science, Practice and Policy* 2, no. 2 (October): 14–21. <https://doi.org/10.1080/15487733.2006.11907980>.

Frecautan, Ion, et Andreea Nita (Danila). 2022. "WHO IS GOING TO WIN: THE EU ESG REGULATION OR THE REST OF THE WORLD? – A CRITICAL REVIEW". *The Annals of the University of Oradea. Economic Sciences* 31 (volume 31): 109-20. [https://doi.org/10.47535/1991AUOES31\(2\)011](https://doi.org/10.47535/1991AUOES31(2)011).

Friedman, M. The Social Responsibility of Business is to Increase its Profits. *N. Y. Times Mag.* 1970, 32–33, 122–126.

Gerwing, Tobias, Peter Kajüter, and Maximilian Wirth. 2022. "The Role of Sustainable Corporate Governance in Mandatory Sustainability Reporting Quality." *Journal of Business Economics*, April (April). <https://doi.org/10.1007/s11573-022-01092-x>.

Gokten, Soner, Yildiz Ozerhan, and Pinar Okan Gokten. 2020. "The Historical Development of Sustainability Reporting: A Periodic Approach." *Zeszyty Teoretyczne Rachunkowości* 107, no. 163 (July): 99–118. <https://doi.org/10.5604/01.3001.0014.2466>.

Goswami, Saheli, and Jung Ha-Brookshire. 2015. "From Compliance to a Growth Strategy." *Journal of Global Responsibility* 6, no. 2 (September): 246–61. <https://doi.org/10.1108/jgr-04-2015-0005>.

Haberl, Helmut, Dominik Wiedenhofer, Doris Virág, Gerald Kalt, Barbara Plank, Paul Brockway, Tomer Fishman, et al. 2020. "A Systematic Review of the Evidence on Decoupling of GDP, Resource Use and GHG Emissions, Part II: Synthesizing the

Insights.” *Environmental Research Letters* 15, no. 6 (June): 065003. <https://doi.org/10.1088/1748-9326/ab842a>.

Hamann, Maike, Kevin Berry, Tomas Chaigneau, Tracie Curry, Robert Heilmayr, Patrik J.G. Henriksson, Jonas Hentati-Sundberg, et al. 2018. ‘Inequality and the Biosphere’. *Annual Review of Environment and Resources* 43, no. 1 (October): 61–83. <https://doi.org/10.1146/annurev-environ-102017-025949>.

Hahn, Tobias, and Frank Figge. 2011. “Beyond the Bounded Instrumentality in Current Corporate Sustainability Research: Toward an Inclusive Notion of Profitability.” *Journal of Business Ethics* 104, no. 3 (June): 325–45. <https://doi.org/10.1007/s10551-011-0911-0>.

Hereu-Morales, Joan, Alba Segarra, and César Valderrama. 2023. “The European (Green?) Deal: A Systematic Analysis of Environmental Sustainability.” *Sustainable Development* 32, no. 1: 647–61. <https://doi.org/10.1002/sd.2671>.

Hjorth, Peder, and Ali Bagheri. 2006. “Navigating towards Sustainable Development: A System Dynamics Approach.” *Futures* 38, no. 1 (February): 74–92. <https://doi.org/10.1016/j.futures.2005.04.005>.

Holmberg, John, Ulrika Lundqvist, Karl-Henrik Robèrt, and Mathis Wackernagel. 1999. “The Ecological Footprint from a Systems Perspective of Sustainability.” *International Journal of Sustainable Development & World Ecology* 6, no. 1 (March): 17–33. <https://doi.org/10.1080/13504509.1999.9728469>.

Hummel, Katrin, and Dominik Jobst. 2024. “An Overview of Corporate Sustainability Reporting Legislation in the European Union.” *Accounting in Europe*, February (February), 1–36. <https://doi.org/10.1080/17449480.2024.2312145>.

Iozzelli Laura, et María del Carmen Sandoval Velasco. 2023. “Mandatory or Voluntary? The Hybrid Nature of Sustainability Disclosure in the EU’s Corporate Sustainability Reporting Directive (CSRD)”, Janvier.

IPCC. 2022. “Mitigation of Climate Change Climate Change 2022 Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.” https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf.

IPCC. 2023. “Synthesis Report of the IPCC Sixth Assessment Report (AR6) Summary for Policymakers.” IPCC. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf.

Johannes Meuer, Julian Koelbel, and Volker H. Hoffmann. 2020. "On the Nature of Corporate Sustainability." SANGE.

Kates RW, Clark WC, Corell R, Hall JM, Jaeger CC, Lowe I, McCarthy JJ, Schellnhuber HJ, Bolin B, Dickson NM, Faucheux S, Gallopin GC, Grübler A, Huntley B, Jäger J, Jodha NS, Kaspersen RE, Mabogunje A, Matson P, Mooney H, Moore B 3rd, O’Riordan T, Svedlin U. Environment and development. Sustainability science. *Science*. 2001 Apr 27;292(5517):641-2. doi: 10.1126/science.1059386. PMID: 11330321.

Kiron, D., Kruschwitz, N., Reeves, M. and Goh, E. (2013b), “The benefits of sustainability-driven innovation”, MIT Sloan Management Review, Vol. 54 No. 2, p. 69.

Le Monde.fr. 2023. “Comptabilité d’entreprise : « Exiger que la matérialité s’étende au-delà du domaine économique est en réalité simpliste »,” October 10, 2023. https://www.lemonde.fr/idees/article/2023/10/10/comptabilite-d-entreprise-exiger-que-la-materialite-s-etende-au-dela-du-domaine-economique-est-en-realite-simpliste_6193607_3232.html.

Leyen, Ursula von der. 2020. Political Guidelines for the next European Commission 2019-2024. Opening Statement in the European Parliament Plenary Session 16 July 2019. Speech in the European Parliament Plenary Session 27 November 2019. Luxembourg: Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/62e534f4-62c1-11ea-b735-01aa75ed71a1>

Majone, Giandomenico. 1994. “The Rise of the Regulatory State in Europe.” West European Politics 17, no. 3 (July): 77–101. <https://doi.org/10.1080/01402389408425031>.

Marrewijk, Marcel van. 2003. “Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion.” Journal of Business Ethics 44, no. 2: 95–105. <https://doi.org/10.1023/a:1023331212247>.

Maxwell, Joseph. 2009. “Designing a Qualitative Study”. In The SAGE Handbook of Applied Social Research Methods, edited by Leonard Bickman and Debra Rog. 214-253 Thousand Oaks: SAGE Publications, Inc.

Mebratu, Desta. 1998. “Sustainability and Sustainable Development.” Environmental Impact Assessment Review 18, no. 6 (November): 493–520. [https://doi.org/10.1016/s0195-9255\(98\)00019-5](https://doi.org/10.1016/s0195-9255(98)00019-5).

Meadows, D.H.; Meadows, D.L.; Randers, J.; Behrens, W.W., III. The Limits to Growth (1972); Yale University Press: London, UK, 2013.

Miller, Thaddeus R., Arnim Wiek, Daniel Sarewitz, John Robinson, Lennart Olsson, David Kriebel, and Derk Loorbach. 2014. “The Future of Sustainability Science: A Solutions-Oriented Research Agenda.” Sustainability Science 9, no. 2 (April): 239–46. <https://doi.org/10.1007/s11625-013-0224-6>.

Missimer, Merlina, Karl-Henrik Robèrt, and Göran Broman. 2017. “A Strategic Approach to Social Sustainability – Part 1: Exploring the Social System.” Journal of Cleaner Production, Systematic Leadership towards Sustainability, 140, no. January (January): 32–41. <https://doi.org/10.1016/j.jclepro.2016.03.170>.

Montiel, Ivan. 2020. “Corporate Social Responsibility and Corporate Sustainability.” Organization & Environment 21, no. 3 (September): 245–69. <https://doi.org/10.1177/1086026608321329>.

Nishitani, Kimitaka, Jeffrey Unerman, et Katsuhiko Kokubu. 2021. « Motivations for Voluntary Corporate Adoption of Integrated Reporting: A Novel Context for Comparing

Voluntary Disclosure and Legitimacy Theory ». *Journal of Cleaner Production* 322 (novembre): 129027. <https://doi.org/10.1016/j.jclepro.2021.129027>.

Ny, H., J. P. MacDonald, G. Broman, R. Yamamoto, and K.-H. Robèrt. 2006. Sustainability constraints as system boundaries: an approach to making life-cycle management strategic. *Journal of Industrial Ecology* 10:61-77. <http://dx.doi.org/10.1162/108819806775545349>

“On the Triple Illusion of Double Materiality | EDHEC Risk Climate Impact Institute.” 2024. Accessed February 2, 2024. <https://climateimpact.edhec.edu/triple-illusion-double-materiality>.

Parrique T., Barth J., Briens F., C. Kerschner, Kraus-Polk A., Kuokkanen A., Spangenberg J.H., 2019. Decoupling debunked: Evidence and arguments against green growth as a sole strategy for sustainability. European Environmental Bureau.

Polanyi, K. 1944. *The great transformation: The political and economic origin of our time*. Boston, MA: Beacon Press.

PwC. 2024 : Worldwide impact of CSRD - Are you ready? https://viewpoint.pwc.com/dt/us/en/pwc/in_the_loop/in_the_loop_US/whatscsrduscompaniesneed.html?WT.mc_id=CT10-PL102-DM2-TR1-LS3-ND30-PR4-CN_ViewpointHighlights-

Rajko Odobaša, & Katarina Marošević. 2023. “EXPECTED CONTRIBUTIONS of the EUROPEAN CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD) to the SUSTAINABLE DEVELOPMENT of the EUROPEAN UNION.” *EU and Comparative Law Issues and Challenges Series*, January (January). <https://doi.org/10.25234/eclic/27463>.

Raworth, Kate. 2017. *Doughnut Economics: Seven Ways to Think like a 21st-Century Economist*. Chelsea Green Publishing.

Reinecke, Juliane, Denis G. Arnold, and Guido Palazzo. 2016. “Qualitative Methods in Business Ethics, Corporate Responsibility, and Sustainability Research.” *Business Ethics Quarterly* 26, no. 4 (October): xiii–xxii. <https://doi.org/10.1017/beq.2016.67>.

REGULATION (a) (EU) 2019/876 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0876>

REGULATION (b) (EU) 2019/2088 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 November 2019 on sustainability-related disclosures in the financial services sector, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088>

REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32020R0852>

Rittel, Horst W. J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (2). Springer Science + Business Media: 155–69. doi:10.1007/bf01405730.

Rockström, J., et al., 2009, 'Planetary boundaries: exploring the safe operating space for humanity', *Ecology and Society* 14(2), 32
<http://www.ecologyandsociety.org/vol14/iss2/art32/>

Roberts, Hedda, Leonidas Milios, Oksana Mont, and Carl Dalhammar. 2023. "Product Destruction: Exploring Unsustainable Production-Consumption Systems and Appropriate Policy Responses." *Sustainable Production and Consumption* 35, no. January (January): 300–312. <https://doi.org/10.1016/j.spc.2022.11.009>.

Robèrt, Karl-Henrik, Göran Broman, David Waldron, Henrik Ny, Sophie Hallstedt, David Cook, Lena Johansson, Elaine Daly, Jonas Oldmark, George Basile, Hördur Haraldsson, Jamie MacDonald, Brendan Moore, Tamara Connell, Merlina Missimer, and Pierre Johnson. 2019. *Sustainability Handbook*, 2nd ed., 3-18. Lund: Studentlitteratur.

Robèrt K.-H., B. Schmidt-Bleek, J. Aloisi de Larderel, G. Basile, J. L. Jansen, R. Kuehr, P. Price Thomas, M. Suzuki, P. Hawken, and M. Wackernagel. 2002. Strategic sustainable development - selection, design and synergies of applied tools. *Journal of Cleaner Production* 10:197-214. [http://dx.doi.org/10.1016/S0959-6526\(01\)00061-0](http://dx.doi.org/10.1016/S0959-6526(01)00061-0)

Robèrt, K.-H., G.I. Broman, and G. Basile. 2013. "Analyzing the Concept of Planetary Boundaries from a Strategic Sustainability Perspective: How Does Humanity Avoid Tipping the Planet?" *Ecology and Society* 18, no. 2. <https://doi.org/10.5751/ES-05336-180205>.

Missimer, Merlina. 2015. "Social Sustainability within the Framework for Strategic Sustainable Development." <https://urn.kb.se/resolve?urn=urn:nbn:se:bth-10464>.

Rodríguez-Gutiérrez, Pablo, M. Dolores Guerrero-Baena, Mercedes Luque-Vílchez, et Francisca Castilla-Polo. 2021. « An Approach to Using the Best-Worst Method for Supporting Sustainability Reporting Decision-Making in SMEs ». *Journal of Environmental Planning and Management* 64 (14): 2618-40. <https://doi.org/10.1080/09640568.2021.1876003>.

Savin-Baden, Maggi, and Claire Howell Major. 2013. *Qualitative Research: The Essential Guide to Theory and Practice*. Routledge

Scharmer, Otto, and Katrin Kaeufer. 2013. *Leading from the Emerging Future: From Ego-System to Eco-System Economies*. San Francisco: Berret-Koehler Publishers.

"Secretary-General's Remarks on Climate Change [as Delivered]." 2018. United Nations Secretary-General. September 10, 2018. <https://www.un.org/sg/en/content/sg/statement/2018-09-10/secretary-generals-remarks-climate-change-delivered>.

Sheehy, Benedict, and Federica Farneti. 2021. "Corporate Social Responsibility, Sustainability, Sustainable Development and Corporate Sustainability: What Is the Difference, and Does It Matter?" *Sustainability* 13, no. 11 (May): 5965. <https://doi.org/10.3390/su13115965>.

Spinaci, Stefano, “LEGISLATIVE TRAIN 04.2024 3 an ECONOMY THAT WORKS for PEOPLE LEGISLATIVE PROPOSAL on CORPORATE SUSTAINABILITY DUE DILIGENCE -Q1 2021 [close to ADOPTION] CONTENT.” n.d, Accessed 22 May 2024, <https://www.europarl.europa.eu/legislative-train/carriage/legislative-proposal-on-sustainable-corporate-governance/report?sid=8001>.

Steffen, W., et al., 2015, ‘Planetary boundaries: guiding human development on a changing planet’, *Science* 347(6223), 1259855.

Stolowy, Hervé, and Luc Paugam. 2018. “The Expansion of Non-Financial Reporting: An Exploratory Study.” *Accounting and Business Research* 48, no. 5 (June): 525–48. <https://doi.org/10.1080/00014788.2018.1470141>.

Szabo, Szerena, and Jane Webster. 2021. “Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions.” *Journal of Business Ethics* 171, no. 4 (February): 719–39. <https://doi.org/10.1007/s10551-020-04461-0>.

United Nations. 2004. “Who Cares Wins.” https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf.

Vadén, T., V. Lähde, A. Majava, P. Järvensivu, T. Toivanen, E. Hakala, and J. T. Eronen. 2020. “Decoupling for Ecological Sustainability: A Categorisation and Review of Research Literature.” *Environmental Science & Policy* 112, no. October (October): 236–44. <https://doi.org/10.1016/j.envsci.2020.06.016>.

Villiers, Charl de, Matteo La Torre, and Matteo Molinari. 2022. “The Global Reporting Initiative’s (GRI) Past, Present and Future: Critical Reflections and a Research Agenda on Sustainability Reporting (Standard-Setting).” *Pacific Accounting Review* 34, no. 5 (May). <https://doi.org/10.1108/par-02-2022-0034>.

Wassénus, Emmy, Beatrice Crona, and Sasha Quahe. 2024. “Essential Environmental Impact Variables: A Means for Transparent Corporate Sustainability Reporting Aligned with Planetary Boundaries.” *One Earth* 7, no. 2 (February): 211–25. <https://doi.org/10.1016/j.oneear.2024.01.014>.

Wengraf, Tom. 2001. *Qualitative Research Interviewing*. SAGE Publications, Ltd. <https://doi.org/10.4135/9781849209717>.

World Commission on Environment and Development. *Report of the World Commission on Environment and Development: Our Common Future*; Oxford University Press: Oxford, UK, 1987

Xiang, Wei-Ning. 2013. “Working with Wicked Problems in Socio-Ecological Systems: Awareness, Acceptance, and Adaptation.” *Landscape and Urban Planning* 110: 1–4.

Yu, Ellen Pei-yi, Bac Van Luu, and Catherine Huirong Chen. 2020. “Greenwashing in Environmental, Social and Governance Disclosures.” *Research in International Business and Finance* 52, no. 52 (April): 101192. <https://doi.org/10.1016/j.ribaf.2020.101192>.

Zimmermann, Katharina, and Vincent Gengnagel. 2023. "Mapping the Social Dimension of the European Green Deal." *European Journal of Social Security* 25, no. 4 (December): 523–44. <https://doi.org/10.1177/13882627231208698>.

Appendix A: Full list of documents used in phase 1.

Document	Reference	Description
The Official Journal of the European Union about CSRD	DIRECTIVE (EU) 2022/2464 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC, and Directive 2013/34/EU, as regards corporate sustainability reporting, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464&qid=1706871406348	The Official Journal of the European Union is the official publication (gazette) for EU legal acts, other acts and official information from EU institutions, bodies, offices, and agencies.
European sustainability reporting standards (ESRS)	“Delegated regulation – EU – 2023/2772 – EN – EUR-Lex.” Europa.eu. 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R2772 .	This is the official communication detailing the ESRS and the different information and requirement related.
The Impact Assessment report by the European Commission, published with the proposal for CSRD.	“IMPACT ASSESSMENT EUR-Lex - 52021SC0150 - EN - EUR-Lex.” 2014. Europa.eu. 2014 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021SC0150 .	This is the impact assessment report that was published as an accompanying documents with the CSRD proposal.
Communication from the European Commission. Action Plan: Financing Sustainable Growth	European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Action Plan: Financing Sustainable Growth, 8.03.2018, COM(2018) 97 final, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018	This is a communication from the European commission to the European parliament and other relevant stakeholders about an action plan to finance sustainable growth.

	DC0097&qid=1706871635841	
Communication from the European Commission - The European Green Deal	European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS The European Green Deal, 11.12.2019, COM (2019) 640, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:640:FIN	This is a communication from the European commission that explains the European green deal.
PwC. 2024: Worldwide impact of CSRD - Are you ready?	PwC. 2024 : Worldwide impact of CSRD - Are you ready? https://viewpoint.pwc.com/dt/us/en/pwc/in_the_loop/in_the_loop_US/whatscsrduscompaniesneed.html?WT.mc_id=CT10-PL102-DM2-TR1-LS3-ND30-PR4-CN_ViewpointHighlights-	This document is a discussion from PwC about the CSRD's road map, requirements, potential impact and different key

Appendix B: Guiding question to assess CSRD's potential contributions to SSD.

The FSSD	Guiding questions for CSRD
System	Who created or developed CSRD? Why was it created? Who should use CSRD, and under what circumstances? Is it equally useful for organisations of all types and scales? Is CSRD part of a broader system? Does CSRD state any explicit or implicit assumptions about its system of focus? Does CSRD contribute to an understanding of the system as defined by the FSSD? Does it help users understand more about the system of study and how it relates to society within the biosphere? Does it offer, describe, or measure further information to understand more about earth, the biosphere, and the socio-ecological system, or any aspects of their subsystems? How does CSRD describe its boundaries to the environment and society globally? If CSRD states or implies assumptions about the system, are they scientifically agreed upon?
Success	What is CSRD intended/designed for? How well does CSRD deliver what it is intended/designed for? Are there any blind spots or areas where it cannot help users achieve success in relation to the SPs? Does CSRD offer or further elaborate on a definition of success, i.e. ultimately a sustainable society? Does this definition cover the full scope of sustainability according to the SPs? If companies comply with this definition, how close can they get to addressing sustainability? Is global sustainability integrated in CSRD long-term success definition?
Strategic Guidelines	Does CSRD offer any guidelines, processes for planning, or further information for prioritising strategic actions? If so, how does it integrate sustainability aspects in these guidelines and processes? Can CSRD help users decide whether a potential action is a good choice in light of strategic prioritisation guidelines? Does CSRD utilise a backcasting approach, or does it solely reply on forecasting?
Actions	Does CSRD require any specific actions to be done to attain its defined success? To what extent do these actions assist users to fulfil this success? What may be missing?
Tools	Are there any specific tools provided to support CSRD users in attaining its defined success? How these tools support them to do so? What may be missing?

Appendix C: Full list of interviews questions

The authors developed two sets of interview questions, one of consultants and one for companies' representatives.

Interview questions for consultants:

Section I: Demographic questions

1. Where do you work?
2. For how long have you worked there?
3. What is your portfolio of companies? (SMEs, Large companies etc.)
4. What kind of sustainability frameworks or standards have you worked with/or are working with?

Section II: The strengths and weaknesses of CSRD from a strategic sustainability perspective?

1. How is CSRD different than other sustainability reporting tools that you know / or have worked with? What are main the benefits of the design of CSRD in your opinion?
 - 1.1. What is your opinion on 'double materiality'?
 - 1.1.1. What are some strengths and challenges about the implementation of 'double materiality'?
 - 1.2. What are the potential values and costs of conducting stakeholder engagement?
 - 1.2.1. How well do you think companies will be able to extract more insights from stakeholder engagement?
 - 1.3. What is your opinion on the introduction of assurance requirements?
 - 1.3.1. What are some potential benefits and challenges when complying with assurance requirements?
 - 1.4. What are some of the implications about putting the sustainability report in the management report?
 - 1.4.1. Can you identify any drawbacks of this move?
 - 1.5. What is your opinion on widening the scope to compliance of the CSRD to nearly 50,000 companies?
 - 1.6. To what extent do you think that CSRD and ESRS can deliver comparability across different companies within one industry?
2. In your opinion, how might compliance with CSRD potentially harm companies in any way?
3. What do you think are some potential implications of the introduction of ESRS to the global sustainability standards ecosystem?
 - 3.1. Looking at the ESRS, what would you change about them? Is there something missing?

4. If CSRD didn't exist, what would you recommend companies to still do to transform themselves towards sustainability?

Section III: What support do companies need to implement the CSRD in a way that helps them move strategically towards sustainability?

1. What are your recommendations for companies to comply with CSRD effectively and efficiently?
2. What are your recommendations for companies to use CSRD as a tool in their wider strategy towards a sustainability transformation?

Interview questions for companies:

Section I: Demographic questions

1. Please introduce your company including the founding year, the headquarters, the industry, the number of employees, and which group the company belongs to (large public company, large private company, SMEs)
2. What is your position in the company?
3. Do you do any reporting on sustainability at the moment?
4. If yes, what kind of sustainability frameworks or standards have you worked with/or are working with?

Section II: The strengths and weaknesses of CSRD from a strategic sustainability perspective?

1. In your opinion, what are the main benefits of implementing CSRD?
 - 1.1. How is CSRD different than other sustainability reporting tools that you have worked with?
 - 1.2. What is your opinion on 'double materiality'?
 - 1.2.1. What are some strengths and challenges about the implementation of 'double materiality'?
 - 1.3. What are the potential values and costs of conducting stakeholder engagement with regards to the materiality assessment?
 - 1.4. What is your opinion on the introduction of assurance requirements?
 - 1.4.1. What are some potential challenges when complying with limited assurance requirements?
 - 1.5. What are some of the implications in your opinion about putting the sustainability report in the management report?
 - 1.6. To what extent do you think that CSRD and ESRS can deliver comparability across different companies within one industry?
2. Can you share some drawbacks or challenges in the implementation of CSRD from a company's point of view?
 - 2.1. Taking into consideration those drawbacks/challenges, would you consider that it's still useful to implement the CSRD from company's point of view?
3. What does 'sustainability' mean to your company within 1-2 sentences?
 - 3.1.1. Do you think that the CSRD helps you understand 'sustainability' better?

Section III: What support do companies need to implement the CSRD in a way that helps them move strategically towards sustainability?

1. Given the drawbacks/challenges you mentioned earlier, what support do your company need to implement CSRD effectively and efficiently?
2. Is sustainability part of your current company's strategy in the moment?
3. What is your plan for using the information and data required by CSRD in formulating your sustainability strategy?

Appendix D: Data coding table

Codes	Sub-codes
Demographics (D)	
Strength (S)	S - Mandatory and hybrid nature (flexibility)
	S - double materiality
	S - Materiality assessment - stakeholder engagement
	S - Assurance
	S - Same management report
	S - Wider scope
	S - Standardization and comparability
	S - Transparency
Implementation Challenge (IC)	IC - Mandatory and hybrid nature (flexibility)
	IC - Double materiality
	IC - Stakeholder engagement
	IC - Assurance
	IC - Same management report

	IC - Wider scope
	IC - Standardization and comparability
	IC - Transparency
	IC - Legal language of ESRS
	IC- Value Chain
	IC - Other challenges
Weakness (W)	W - Drawbacks, harms
Sustainability Strategy	
Future possibilities (FB)	FB - Cost reduction
	FB - Prediction / expectation on future developments
Recommendation (R)	R - Mindset
	R - Action
	R - Tool
Emerging / Unknown	

Appendix E: Interviewees list

Code of interviewee	Position
A1	Sustainability Manager at a big consultancy firm
A2	Senior Sustainability Consultant at a big consultancy firm
A3	Sustainability Consultant Manager at a big consultancy firm
B1	CEO with 25 years of experience at a consultancy focused in sustainability strategy
B2	Sustainability specialist at a consultancy
B3	CSRD lead at a consultancy
B4	ESG advisor at a consultancy
B5	Senior Sustainability Professional at a consultancy
B6	Independent Consultant & Researcher
B7	Independent Consultant & Researcher
B8	Independent Consultant
B9	Independent Consultant
C1	Sustainability project lead in a holding company
C2	Sustainability manager at a large company

C3	Head of Sustainability Reporting at a large company
C4	Sustainability Specialist at large company
C5	Senior Sustainability Specialist at a large company
C6	Sustainability Manager at a large company



Master's Programme in Strategic Leadership towards Sustainability
Blekinge Institute of Technology, Campus Gräsvik
SE-371 79 Karlskrona, Sweden

Telephone: +46 455-38 50 00
Fax: +46 455-38 55 07
E-mail: sustainabilitymasters@bth.se