NOVA SCHOOL OF LAW

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THE IMPLICATIONS OF THE CORPORATE SUSTAINABILITY REPORTING DIRECTIVE ON ENVIRONMENTAL DUE DILIGENCE PRACTICES AND CLIMATE CHANGE STRATEGIES

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I hereby declare that the work I present is my own work and that all my citations are correctly referenced and acknowledged. I am aware that the use of unacknowledged extraneous materials and sources constitutes a serious ethical and disciplinary offence.

Lisbon, 15 March 2024

Larissa Elisabeth Alterdinger

Acknowledgment

This thesis represents the concluding milestone of the master’s program in Law and Management. The composition of this master’s thesis over months gave me an exciting and challenging opportunity to take an in-depth look at some of the latest European sustainability regulations. The topic selection resulted from a profound interest in corporate sustainability and its utmost relevance to many companies today and in the future. This thesis contributes to the existing body of knowledge surrounding corporate sustainability.

First and foremost, I would like to thank Professor Lucila de Almeida, my supervisor, for her continuous support and guidance throughout the selection of the thesis topic and its subsequent development. Furthermore, I extend my deepest gratitude to my family and friends, who have supported me throughout my academic career and this Master’s program.

My intention with this thesis is not only to make an informative contribution to the ongoing discourse surrounding the implementation of the Corporate Sustainability Reporting Directive and the Proposal of a Directive on Corporate Sustainability Due Diligence but also to provide value for companies grappling with these new requirements.

This dissertation adheres to the citation guidelines of the fourth edition of OSCOLA (Oxford University Standard for the Citation of Legal Authorities). Throughout this thesis, relevant references are provided in footnotes, presented in full when first cited, and subsequently abbreviated. A comprehensive listing of all references is included in the bibliography.

The body of the thesis, including spaces and notes, has a total of 199.910 characters.

Abstract

In this master thesis, the focus lies on the analysis of the Corporate Sustainability Reporting Directive (CSRD) and its implications for environmental due diligence practices and climate change strategies within the food retail sector. The objective is to assess the readiness of food retail companies to comply with the impending reporting requirements concerning environmental due diligence and climate change. Furthermore, this thesis aims to explore the implications of these obligations on the actual implementation of environmental due diligence and climate change policies against the background of the recent Proposal for a Directive on Corporate Sustainability and Due Diligence.

The findings indicate that the examined food retail companies have a solid foundation for reporting on environmental due diligence and climate change strategies. Nevertheless, to align with the CSRD, these companies must disclose supplementary data and adjust their fundamental reporting structures. In addition, the study underlines the significance of companies taking the CSRD reporting obligation as an opportunity to establish a robust environmental due diligence system and climate change strategy. Within this context, the study identifies implications in four dimensions: (1) the establishment of environmental due diligence practices and climate change strategies; (2) the design of environmental due diligence systems and climate change policies; (3) processes of environmental due diligence and climate change strategies; and (4) the legislative process of the CSDDD.

Keywords: EU, CSRD, CSDDD, due diligence, environmental due diligence, environment, climate change, climate change strategy, corporate governance, sustainability reporting, sustainability

Resumo

Nesta tese de mestrado, o foco está na análise da Diretiva relativa aos relatórios de sustentabilidade das empresas (CSRD) e nas suas implicações para as práticas de *due diligence* em matéria ambiental e para as estratégias de combate às alterações climáticas no sector do retalho alimentar. O objetivo é avaliar o grau de preparação das empresas de retalho alimentar para cumprirem os requisitos de informação iminentes relativos à *due diligence* em matéria ambiental e às alterações climáticas. Além disso, esta tese visa explorar as implicações destas obrigações na aplicação efectiva das políticas de *due diligence* em matéria de ambiente e de alterações climáticas, tendo como pano de fundo a recente proposta de diretiva relativa à sustentabilidade empresarial e à diligência devida.

As conclusões indicam que as empresas de retalho alimentar examinadas têm uma base sólida na comunicação de informações sobre a *due diligence* ambiental e as estratégias em matéria de alterações climáticas. No entanto, para se alinharem com a CSRD, estas empresas têm de divulgar dados suplementares e ajustar as suas estruturas fundamentais de informação. Além disso, o estudo sublinha a importância de as empresas considerarem a obrigação de comunicação da CSRD como uma oportunidade para estabelecerem um sistema sólido de *due diligence* em matéria ambiental e uma estratégia para as alterações climáticas. Neste contexto, o estudo identifica implicações em quatro dimensões: (1) o estabelecimento de práticas de *due diligence* em matéria de ambiente e de estratégias de combate às alterações climáticas; (2) a conceção de sistemas de *due diligence* em matéria de ambiente e de políticas de combate às alterações climáticas; (3) os processos de *due diligence* em matéria de ambiente e de estratégias de combate às alterações climáticas; e (4) o processo legislativo da CSDDD.

Palavras-chaves: UE, CSRD, CSDDD, *due diligence*, *due diligence* ambiental, ambiente, alterações climáticas, estratégia para as alterações climáticas, governo das sociedades, comunicação de informações sobre sustentabilidade, sustentabilidade

Table of context

List of Abbreviations

A

art .... *Article*

C

C1 .... *Company 1*
C2 .... *Company 2*
Capex .... *Capital expenditure*
CIs .... *Composite Indicators, Composite Indicators*
CO2 .... *Carbon Dioxide*
CO2eq .... *Carbon Dioxide Equivalent*
CSDDD .... *Corporate Sustainability Due Diligence Directive*
CSR .... *Corporate Social Responsibility*

D

DD .... *Due Diligence*
DR .... *Disclosure Requirement*

E

e. g. .... *exempli gratia (for example)*
EC .... *European Commission*
EC Treaty .... *Treaty establishing the European Economic Community*
EFRAG .... *European Financial Reporting Advisory Group*
EMAS .... *Eco-Management and Audit Scheme*
EP .... *European Parliament*
ESG .... *Environmental, Social, Governance*
et al. .... *et alii (and others)*
EU .... *Europäische Union*

G

GHG .... *Greenhouse Gas*
GOV .... *Governance*
GRI .... *Global Reporting Initiative*

H

HLEG .... *High-Level Expert Group on Sustainable Finance*

I

IRO .... *Impact, Risk and Opportunity Management*

K

KPIs .... *Key Performance Indicators*

L

lit .... *Litera*

M

MDR .... *Minimum Disclosure Requirements*
MT .... *Metrics and Targets*

N

NFRD .... *Non-Financial Reporting Directive*

O

Opex .... *Operating expenditure*

P

Paris Agreement ....*Paris Agreement on Climate Change*

S

SBM...*Strategy*
SBTI .... *Science Based Targets Initiative*
SDGs..*Sustainable Development Goals*
SFDR .... *Sustainable Finance Disclosure Regulation*
SFRD ....*Sustainable Finance Disclosures Regulation*
SMEs ....*Medium-Sized Enterprises*

T

TEU ....*Treaty on European Union*
TFEU .... *Treaty on the Functioning of the European Union*

U

UN ....*United Nations*
UNIDO .... *United Nations Industrial Development Organization*

1. Introduction

The European Union (hereafter EU) has a longstanding history of promoting sustainable development, dating back to the 1970s[1], a commitment that gained momentum around 2015[2]. This was also when the first sustainability reporting regulations emerged – initially under “non-financial reporting.” The so-called Non-financial Reporting Directive[3] (hereafter NFRD) mandated around 11,700 companies to publish sustainability data[4] – including data on due diligence (hereafter DD) and the environmental impact[5] – alongside their financial figures.

One significant achievement in recent years was the introduction of the European Green Deal in 2019. With the ultimate goal of achieving carbon neutrality by 2050, the Green Deal lays a roadmap to address climate and environmental-related concerns[6].

This led to the revision of the NFRD and, further consequence, the Corporate Sustainability Reporting Directive[7] (hereafter CSRD) enactment in 2023[8]. The CSRD not only expands its applicability but also introduces new obligations, including an enhanced reporting duty on (environmental) DD and climate change strategies, which now has to be aligned with the transition to a sustainable economy and with the Paris Agreements’ goal of limiting of global warming to 1,5 °C[9].

[1] Suzanne Kingston, Veerle Heyvaert, and Aleksandra Čavoški, ‘European Environmental Law’ (Cambridge : Cambridge University Press, 2017).
[2] Livia Ventura, ‘Corporate Sustainability Due Diligence and the New Boundaries of the Firms in the European Union’ [2023] Eur Bus Law Rev 34/2 239 (Ventura ‘Corporate Sustainability Due Diligence’).
[3] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups [2014] L 330/1 (NFRD).
[4] European Parliament, ‘Sustainable economy: Parliament adopts new reporting rules for multinationals’ <https://www.europarl.europa.eu/news/en/press-room/20221107IPR49611/sustainable-economy-parliament-adopts-new-reporting-rules-for-multinationals> (EP ‘Sustainable economy’) accessed 22 January 2024.
[5] NFRD, art 1.
[6] EC, ‘The European Green Deal’ COM(2019) 640 final.
[7] 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 [2022] L 322/15 (CSRD).
[8] European Commission, ‘Corporate sustainability reporting’ <https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en> (EC ‘Corporate sustainability reporting’) assessed 11 May 2023.
[9] CSRD, art 1 (4).

Moreover, the European Green Deal underlines the need to incorporate sustainability into corporate governance to a greater extent[10]. Initiatives on directors' duties and DD obligations were introduced, and in 2020, the European Commission (hereafter EC) initiated a public consultation. Subsequently, in 2022, the Proposal of a Directive on Corporate Sustainability Due Diligence (hereafter CSDDD[11]) was published, aiming to introduce direct obligations to conduct environmental DD[12] and develop a climate change strategy[13]. On March 15th, 2024, the European Council approved the CSDDD[14]. While the official version of the final text is yet to be published, an unofficial version was published on March 18, 2024, by Axel Voss, a Member of the European Parliament (hereafter EP)[15]. Due to the proximity of these events and the thesis submission date, the author has tried to include all relevant changes to the best of her ability without claiming completeness.

Crucially, the CSRD and the proposed CSDDD are closely related, a recognition acknowledged by the EC. In the Proposal for the CSDDD 2022, the EC highlighted their complementary nature, mutual reinforcement, and intention to promote behavioral change.[16]

The food retail industry is a sector that is highly impacted by these developments, particularly concerning sustainability along the value chain. This sector, responsible for a significant proportion of global greenhouse gas emissions (hereafter GHG) emissions[17], plays a central role in the sustainable transformation of food systems due to its size, bargaining power, and strategic positioning[18].

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[10] EC, 'The European Green Deal' COM(2019) 640 final.
[11] Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 [2022] COM(2022) 71 final (Proposed CSDDD (2022)).
[12] Proposed CSDDD (2022), art 15.
[13] Proposed CSDDD (2022), art 4.
[14] Jon McGowan, 'EU Releases Full Text Of Corporate Sustainability Disclosure Law Ahead Of Parliament Vote' (2024) <https://www.forbes.com/sites/jonmcgowan/2024/03/18/eu-releases-full-text-of-corporate-sustainability-disclosure-law-ahead-of-parliament-vote/?sh=769cccac3520>, assessed 18 March 2024.
[15] Axel Voss, 'Here you can find the new text of the Corporate Due Diligence Directive (CSDDD) after the modifications in Council:' <https://www.linkedin.com/posts/axel-voss-a1744969_csddd-text-18032024-activity-7175438464635568128-SAEv?utm_source=share&utm_medium=member_desktop> assessed 18 March 2024.
[16] Proposed CSDDD (2022), Explanatory Memorandum
[17] Mengyu Li et al., 'Global food-miles account for nearly 20% of total food-systems emissions' [2022] Nature Food, 3(6) 445.
[18] Bjarne Ytterhus, Petter Arnestad and Solveig Lothe, 'Environmental Initiatives in the Retailing Sector: An Analysis of Supply Chain Pressures and Partnerships' [1999] Eco-Management and Auditing 6/4 181.

There is a wealth of literature on sustainability reporting and some on CSRD and DD obligations. However, the author found a research gap concerning reporting on environmental due diligence and climate change strategies and their implications. The need to address this gap is even more emphasized, given the legislator's explicit acknowledgment of the interconnection between the CSRD and the proposed CSDDD. Therefore, this master thesis aims to explore the implications of the CSRD on environmental DD practices and climate change strategies, including assessing the readiness of companies in the food industry to comply with reporting obligations on environmental DD practices and climate change strategies.

1.1. Objectives and Research Questions

The principal aim of this study is to analyze the reporting obligation on environmental DD practices and climate change strategies, as stipulated for specific European companies by the CSRD, and, in consideration of the Proposal of a CSDDD, which seeks to establish a duty for companies to set up DD processes and climate change mitigation plans, to evaluate the implications of the reporting requirements on the actual environmental DD practices and climate change policies in companies. This analysis will focus on the food retail sector as an illustrative example. Therefore, this thesis aims to achieve the following sub-objectives:

1. <u>Examine Regulations on Sustainability Reporting and Environmental Due Diligence Obligations within the European Union:</u> Explore concepts of corporate sustainability and the historical development of sustainability regulations within the EU, focusing on the evolution of sustainability reporting regulations. Discuss the critical provisions of the CSRD and, consequently, the relevant ESRS on DD and combating climate change, as well as, within this context, the key provisions of the proposed CSDDD.
2. <u>Assess the Readiness of Companies in the Food Retail Sector to comply with the CSRD Reporting Obligations on Environmental Due Diligence and Climate Change Strategies:</u> Develop a comprehensive readiness assessment framework by analyzing the legal basis – guided by the ESRS – to identify the readiness of current practices for CSRD compliance. Evaluate the readiness of two selected food retail companies and identify potential areas for enhancement.
3. <u>Investigate the Implications of the CSRD on Actual Environmental Due Diligence Processes and Climate Change Strategies:</u> Assess how the reporting obligations intersect with the practical implementation of DD processes and climate change strategies. Derive implications based on the overall findings.

By pursuing these objectives, this study aims to offer a holistic perspective on the regulatory frameworks, assess the readiness of food retail companies, and subsequently analyze the implication of the CSRD on the practice of environmental DD processes and climate change mitigation plans. Through this exploration, the study aims to contribute insights to academic discussions and practical business applications.

Therefore, this study will shed light on the following research questions:

How do the reporting obligations for companies within the scope of the CSRD affect their corporate due diligence processes on adverse environmental impacts and their climate change strategy? How prepared are companies in the food retail sector?

1.2. Scope

This thesis explores corporate sustainability reporting within the domain of environmental DD and climate change strategies, particularly within the food retail sector. The study emphasizes two significant regulatory frameworks, namely the CSRD and the proposed CSDDD, both set to be implemented in the coming years. While the CSRD imposes reporting obligations on certain European companies, mandating comprehensive disclosures on sustainability practices[19], the CSDDD Proposal requires companies to conduct DD[20] and set up a strategy to combat climate change[21]. Considering the number of disclosure obligations deriving from the CSRD and delimiting the thematic scope, this study focuses exclusively on climate change and environmental DD. Given that both directives stem from the EU, the geographical scope of this thesis was limited to European companies. For practicability while strengthening the validity of the results and ensuring comparability, the CSRD readiness assessment was conducted on a small group of companies, precisely two, operating within the food retail sector.

For the selection of the specific companies within this sector, care was taken to ensure that the companies fall within the scope of the CSRD and are based in a country where regional supply chain legislation is already in force (see Chapter 4.5).

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[19] CSRD, art 1 (4).

[20] Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 [2024] 2022/0051 (COD) <https://media.licdn.com/dms/document/media/D4E1FAQFprarx7TU4QA/feedshare-document-pdf-analyzed/0/1710757822275?e=1711584000&v=beta&t=RmOK7CCSUB4RyUZECmi-uc0-GWPaJqrfTCgkkdsQ-h8> (Proposed CSDDD (unofficial version, 2024)) assessed 18 March 2024.

[21] Proposed CSDDD (unofficial version, 2024), art 15

1.3. Structure

Seven chapters, each devoted to a different aspect of the research, make up this thesis. The chapters are structured in the following order:

Chapter 1 – Introduction: This chapter introduces the research topic and objectives and presents the research question. Additionally, it outlines the scope of the study.

Chapter 2 – Literature Review: This section defines different concepts of corporate sustainability and gives an overview of research on sustainability reporting and the development of sustainability regulations in the EU. It provides a basic understanding of how the current legal framework came about, which is analyzed in the following chapter.

Chapter 3 – Legal Framework: The chapter introduces the key regulatory provisions of the NFRD and the CSRD, as well as the proposed CDDDD focusing on environmental DD and climate change. It thus creates the academic basis for developing the research methodology, particularly the readiness assessment framework.

Chapter 4 – Research Methodology and Design: The employed research methodology and design are described in Chapter 4. It also includes the research design, the data collection, the introduction and rationale of the readiness assessment framework, the ethical considerations, explanations of the sample selection, and the data analysis.

Chapter 5 – Findings: This chapter describes the study's results, showing and comparing the sample companies' readiness levels.

Chapter 6 – Discussion: This part of the thesis discusses the findings, considering the existing literature, and derives specific recommendations and implications for the practice of environmental DD and climate change strategies to answer the research question.

Chapter 7 – Conclusion: The final chapter summarizes the key findings, outlines the contribution to research, and opens up topics for future research.

2. Literature Review

2.1. Corporate Sustainability and Sustainability Reporting

Corporate sustainability is related to two prominent concepts: *Corporate Social Responsibility* (hereafter CSR) and *Environmental Social Governance* (hereafter ESG). Both ideas, which have gained increasing significance for companies worldwide, are extensively discussed in the literature. Given this thesis's limitations, it is only possible to cover part of the spectrum of literature. Therefore, this review focuses on publications the author finds relevant in reporting on environmental DD and corporate climate strategies.

<u>The Conceptual Frameworks of CSR and ESG</u>

The operationalization of CSR can be traced back to the 1980s, with its popularity rising throughout the 1990s and 2000s, as described by Agudelo, Jóhannsdóttir, and Davídsdóttir[22]. Despite its increasing relevance, there is no standardized definition[23]. The United Nations Industrial Development Organization (UNIDO) defines CSR as "a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders."[24] Conversely, the EC places responsibility in the center, defining CSR as "the responsibility of enterprises for their impact on society [..]". It further assumes that "companies can become socially responsible by integrating social, environmental, ethical, consumer, and human rights concerns into their business strategy and operations or by following the law."[25]

[22] Mauricio Andrés Latapí Agudelo, Lára Jóhannsdóttir and Brynhildur Davídsdóttir, 'A literature review of the history and evolution of corporate social responsibility' [2019] Int J Corp Soc 6.
[23] See e. g. Hans B. Christensen, Luzi Hail and Christian Leuz, 'Mandatory CSR and sustainability reporting: economic analysis and literature review' [2021] Rev Account Stud 26 1176; or Johannes Meuer, Julian Koelbel and Volker H. Hoffmann, 'On the Nature of Corporate Sustainability' [2020] Organ Environ 33/3 319; or Stuart L. Gillan, Andrew Koch and Laura T. Starks, 'Firms and social responsibility: A review of ESG and CSR research in corporate finance' J Corp Fin 66 101889.
[24] United Nations Industrial Development Organization, 'What is CSR?' <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr> accessed 23 November 2023.
[25] European Commission, 'Corporate sustainability and responsibility?' <https://single-market-economy.ec.europa.eu/industry/sustainability/corporate-sustainability-and-responsibility_en>, (EC, 'Corporate sustainability and responsibility?') accessed 23 November 2023.

While CSR involves integrating social and environmental factors into business operations[26] and taking responsibility for impacts, ESG is a framework used in sustainable finance[27] to measure an investment's impact[28]. The term ESG was introduced in 2004 by the UN Global Compacts' report *Who Cares Wins,* establishing the three sustainability pillars: Environmental, Social and Corporate Governance[29]. However, like CSR, ESG lacks a globally recognized definition. The EC describes ESG as "a framework or criteria to measure the sustainability and ethical impact of an investment or a company focusing on three fields: Environmental, Social and Corporate Governance."[30] Building on these three factors, according to the OSCE, a process known as sustainable finance emerged, including ESG factors in investors' decision-making. ESG investing is "an approach that seeks to incorporate environmental, social and governance factors into asset allocation and risk decisions, to generate sustainable, long-term financial returns."[31] However, the absence of standardized ESG metrics and the existence of different methodologies and indicators have been emphasized by the OSCE[32] and Eccles, Lee, and Stroehle[33]. Nonetheless, Busch et al. [34] and Eccles, Lee, and Stroehle[35] have pointed out that the importance of environmental and social data has increased in recent decades, accompanied by a growing demand for such information. ESG data, traditionally of some ethical relevance, have become financially significant metrics for mainstream financial markets, as noted by Busch et al..[36] The catalyst for this surge, as the OSCE has observed, was the investors' aspiration to have an impact on the environment and society while achieving economic success in their investments[37]. Notably, the EC underscores that this data is not only for investors but also for other stakeholders such as customers, suppliers, employees, and anyone interested in the sustainability of a business[38]. Especially the most recent updates of ESG reporting standards, namely the European Sustainability Reporting Standard (hereafter

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26 United Nations Industrial Development Organization *(n 24).*
27 R. Boffo, R. and R. Patalano, 'ESG Investing: Practices, Progress and Challenges, OECD Paris,' (2020) <www.oecd.org/finance/ESG-Investing-Practices-Progress-and-Challenges.pdf> accessed 15 March 2024.
28 EC, 'Corporate sustainability and responsibility?' *(n 25)* accessed 23 November 2023.
29 The Global Compact, 'Who Cares Wins Connecting Financial Markets to a Changing World' (2004) <https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf> accessed 28 November 2023.
30 EC, 'Corporate sustainability and responsibility?' *(n 25)* accessed 23 November 2023.
31 Boffo and Patalano (n 27).
32 Boffo and Patalano (n 27).
33 Robert G. Eccles, Linda-Eling Lee and Judith C. Stroehle 'The Social Origins of ESG: An Analysis of Innovest and KLD' [2020] Organization & Environment 33(4) 575.
34 Timo Busch et al., 'Impact investments: a call for (re)orientation' [2021] SN Bus Econ 1/33 32.
35 Eccles, Lee and Stroehle *(n 33).*
36 Busch et al. *(n 34).*
37 Boffo and Patalano (n 27).
38 EC, 'Corporate sustainability and responsibility?' *(n 25)* accessed 23 November 2023.

ESRS)[39] and further harmonization with the Global Reporting Initiative (hereafter GRI)[40], are expanding the addressee of ESG indicators from investors to stakeholders.

Evolution of Corporate Responsibility

Sustainable development was not a big topic before the Industrial Revolution, according to Ditlev-Simonsen. However, by the 1970s, as the global population grew tremendously and consumption in the industrialized world increased, mainly due to products manufactured by companies, sustainable development became an international concern. During this time, the ecological footprint exceeded the Earth's carrying capacity.[41]

During this time, the topic also gained international attention. In 1972, the *United Nations Conference on the Human Environment* in Stockholm, the first global environmental conference, took place. As a result, the so-called *Stockholm Declaration* initiated broad environmental policy goals and objectives to address environmental challenges, leading to increased awareness. A second landmark conference – the *United Nations Conference on Environment and Development (UNCED)* – was held in Rio de Janeiro in 1992. The *Rio Conference* aimed to organize and reaffirm existing environmental normative expectations while establishing legal and political foundations for sustainable development. The conference was expected to create an "Earth Charter." While the final *Rio Declaration* fell short of the envisioned lofty document, it still stands as a significant environmental legal milestone, building upon and reinforcing the principles of the *Stockholm Declaration*.[42] Over the past 30 years, ten more UN environmental conferences have been held, the most recent being held in 2022, again in Stockholm.[43]

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[39] 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 (Text with EEA relevance) [2023] OJ L, 2023/2772, 3 (Delegated Regulation (ESRS)).

[40] Global reporting initiative, 'The global leader for impact reporting' <https://www.globalreporting.org> assessed 1 March 2024.

[41] Caroline D. Ditlev-Simonsen, 'A Guide to Sustainable Corporate Responsibility From Theory to Action' (Palgrave Macmillan 022).

[42] Günther Handl, 'Declaration of the United Nations Conference on Human Environment (Stockholm Declaration),1972 and the Rio Declaration on Environment and Development, 1992' [2012] United Nations Audiovisual Library of International Law 1.

[43] United Nations, 'Conferences | Environment and sustainable development' (2024) <https://www.un.org/en/conferences/environment>, assessed 18 March 2024.

In today's society, large corporations play a significant role. Ditlev-Simonsen contends that the world's largest economies are not necessarily nation-states; corporations like Walmart, for instance, have substantial responsibility.[44] The results of literature research conducted by Agudelo, Jóhannsdóttir, and Davídsdóttir underscore a shift in the understanding of corporate responsibility. Responsibility used to be seen as limited to profit generation, while today, it is recognized that companies' responsibility lies in creating shared values. Simultaneously, social expectations regarding corporate behavior have evolved.[45]

Sustainability Disclosure and its Driver

Over the past three decades, there has been a significant increase in the demand for non-financial information within the investor community. Eccles, Lee, and Stroehle argue that the traditional shareholder-centered viewpoint, as represented by Friedmann, which assumes that companies are solely responsible to their shareholders, began to be challenged in the 1960s. This challenge emerged from the information need for value-driven, socially responsible investment strategies. More recently, investors' financial value-driven ESG interest – instead or on top of emphasis on values – has resulted in a higher interest in ESG data.[46] Numerous studies support this assumption, indicating that investors increasingly attach importance to how companies approach ESG matters. Examples include research conducted by Elliot et al. in 2014[47], Liao et al.[48] in 2021, and PricewaterhouseCoopers in 2023[49].

In addition, Fombrun and Shanley, as early as the 1990s, indicated that a company's contribution to social welfare positively influences its reputation[50]. Recent research by McKinsey and NielsenIQ found that products with ESG-related claims even positively impact

[44] Ditlev-Simonsen *(n 41).*
[45] Latapí Agudelo, Jóhannsdóttir and Davídsdóttir *(n 22).*
[46] Eccles, Lee and Stroehle *(n 33).*
[47] Elliott W. Brooke et al., 'The Unintended Effect of Corporate Social Responsibility Performance on Investors' Estimates of Fundamental Value' [2014] Account Rev 89/1 275.
[48] Chih-Hsien Liao et al., 'Board Reforms Around the World: The Effect on Corporate Social Responsibility' [2021] Corp Gov an International Review 29/5 496.
[49] PricewaterhouseCoopers, 'ESG trends in 2023' (2023) <https://www.pwc.com/kz/en/publications/new_publication_assets/esg-trends-in-2023-eng.pdf> accessed 01 December 2023.
[50] Charles Fombrun and Mark Shanley, 'What's in a name? Reputation building and corporate strategy' [1990] Acad Manage J 33/2 233.

consumer spending.[51] PwC also reports that sustainability and ethical criteria are relevant to the purchasing behavior of over 60 % of customers.[52]

Governments and policymakers represent another influential stakeholder group mentioned in the literature. They impose direct influence through legislation and indirect impact, as discussed by Delmas and Toffel[53] or Christensen, Hail, and Leuz[54]. Policymakers value ESG information for its insights into the relationship between economic development and environmental protection and the relationship between economic development and social cohesion, as described by Cerciello, Busato, and Taddeo[55].

Voluntary Sustainability Reporting

In response to the growing demand for corporate sustainability, voluntary sustainability reporting and corporate CSR activities have become widespread, as authors such as Luo and Bhattacharya[56], Muslu et al.[57], and Gillan, Koch, and Starks[58] have noticed. Over the past decade, various studies have supported this trend, as the Governance & Accountability (G&A) Institute's study among S&P 500 companies[59] shows. While in 2011 only 20 % of S&P 500 companies reported on sustainability, in 2021, this figure increased to 96 %.[60] The Center for

[51] McKinsey and NielsenIQ, 'Consumers care about sustainability – and back it up with their wallets' (2023) <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets#/> accessed 01 December 2023.
[52] PricewaterhouseCoopers *(n 49).*
[53] Magali A. Delmas and Michael W. Toffel, 'Organizational Responses to Environmental Demands: Opening the Black Box' [2008] Strateg Manag J 29/10 1027.
[54] Christensen, Hail and Leuz *(n 23).*
[55] Massimiliano Cerciello, Francesco Busato, and Simone Taddeo 'The effect of sustainable business practices on profitability. Accounting for strategic disclosure' [2023] Corp Soc Responsib Environ Manag 30 802.
[56] Xueming Luo and CB Bhattacharya, 'Corporate Social Responsibility, Customer Satisfaction, and Market Value' [2006] J Mark 70/4 2.
[57] Volkan Muslu et al., 'Corporate Social Responsibility Report Narratives and Analyst Forecast Accuracy' [2019] J Bus Ethics 154/4 1119.
[58] Gillan, Koch, and Starks (n 23)
[59] Forbes defines the S&P 500 (Standard & Poor's 500 Composite Stock Price Index) as "a stock index that tracks the share prices of 500 of the largest public companies in the United States."; Kat Tretina, 'What Is The S&P 500? How Does It Work?' <https://www.forbes.com/advisor/investing/what-is-sp-500/> accessed 15 February 2024.
[60] G&A Institute, Inc., '2022 sustainability reporting in focus. Examining 2021 trends of companies on the S&P 500® + Russell 1000®' (2022) <http://www.ga-institute.com/fileadmin/ga_institute/images/FlashReports/2022/G_A-2022-Sustainability_Trends_Report.pdf?vgo_ee=b27tOr1WnQcUZmxt18qsF48WIxpcler2Hi3rXhh6tMqa5MZB0QjKGEjG%3ADdRQyPIVt3WZRrSxkaUoJTLBNzH8R53b> accessed 20 November 2023.

Audit Quality (CAQ) even found a reporting rate of 99 % among S&P 500 companies[61]. Among the G250 companies[62], KPMG stated that 96 % reported on sustainability or ESG matters in 2022.[63] While extensive research has been done on large companies, there is notably less regarding small and medium-sized enterprises (hereafter SMEs). Despite findings by Dias et al. in 2019 suggesting minimal differences in sustainability reporting between SMEs and large entities – the latter discloses a broader range of information[64] – Ortiz-Martínez and Marín-Hernández discovered that, according to the GRI database from 2016 to 2018, there were only 157 sustainability reports by European SMEs, with only about 28 % in English[65]. They also noted that larger SMEs tended to publish more extended reports[66], possibly due to resource limitations. Baumann-Pauly et al., 2013 investigated CSR activities in Swiss multinationals and SMEs. They found that smaller companies, while not necessarily less advanced in CSR implementation than larger counterparts, may face organizational constraints limiting external communication and reporting on their sustainability practice.[67]

Although regulation may help, Baumüller and Sopp argue that more reporting obligations must not automatically mean more transparency for stakeholders and state that researchers found that a rise in reporting obligations could lead to a company's approach to disclosing only the minimum required.[68]

A related aspect broadly covered in the literature is the quality of ESG data. In 2016, Martínez-Ferrero, Ruiz-Cano, and García-Sánchez[69] and Cho, Lee, and Pfeiffer[70] argued that

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[61] Center for Audit Quality, (2023) 'S&P 500 ESG Reporting and Assurance Analysis' <https://www.thecaq.org/sp-500-and-esg-reporting#> accessed 01 December 2023.

[62] KPMG defines the G250 as "the world's 250 largest companies by revenue based on the 2021 Fortune 500 ranking."; KPMG International, 'Big shifts, small steps. Survey of Sustainability Reporting 2022' (2022) <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2022/10/ssr-executive-summary-small-steps-big-shifts.pdf> accessed 15 February 2024.

[63] KPMG International *(n 51)*

[64] Antonio Dias et al., 'Sustainability Information in European Small and Medium-Sized Enterprises' [2019] Soc Responsib J 15/2 137.

[65] Esther Ortiz-Martínez and Salvador Marín-Hernández, 'Sustainability Information in European Small and Medium-Sized Enterprises' [2023] J Knowl Econ.

[66] Ortiz-Martínez and Marín-Hernández *(n 65).*

[67] Dorothée Baumann-Pauly et al., 'Organizing Corporate Social Responsibility in Small and Large Firms: Size Matters' [2013] J Bus Ethics 115, 693.

[68] Josef Baumüller and Karina Sopp, 'Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications' [2021] J Appl Account Res.

[69] Jennifer Martínez-Ferrero, David Ruiz-Cano and Isabel-María García-Sánchez, 'The Causal Link Between Sustainable Disclosure and Information Asymmetry: The Moderating Role of the Stakeholder Protection Context' [2016] Corp. Soc Responsib Environ Manag 23/5 319.

[70] Seong Y. Cho, Cheol Lee and Ray J. Pfeiffer 'Corporate social responsibility performance and information asymmetry' [2013] J Account Public Policy 32/1 71.

reporting on CSR positively impacts information asymmetry. Clarkson et al.[71] noted that although companies with strong environmental performance tend to disclose more extensively, there is room for improvement, particularly in independent assurance and the disclosure of environmental performance indicators. At the same time, Melloni, Caglio, and Perego found that companies with poorer social performance tend to make unclear statements and provide less complete information.[72] This development is accompanied by increasing investor dissatisfaction due to insufficient high-quality, comprehensive, and reliable data. A survey published in 2022 by FTSE Russell, a subsidiary of the London Stock Exchange Group, revealed that 59 % of nearly 200 global asset owners express concern about the lack of standardization in ESG data, scores, and ratings[73]. Similarly, Ernst and Young's Global Institutional Investor Survey 2022 highlighted investor doubts regarding the transparency and quality, especially the materiality, of ESG data. Thus, 89 % of respondents expressed the need for mandatory worldwide consistent standards.[74]

Along with the need for reliable ESG data, researchers such as Ruhnke and Gabriel[75] identified an increasing demand for external assurance. The increased relevance is also reflected in the abundance of publications on external assurance, as determined by Venter and van Eck[76] in 2021.

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[71] Peter M. Clarkson et al., 'Revisiting the Relation Between Environmental Performance and Environmental Disclosure: An Empirical Analysis' [2008] Account Organ Soc 33/4 303.
[72] Gaia Melloni, Ariela Caglio and Paolo Perego, 'Saying more with less? Disclosure conciseness and completeness in Integrated Reports' [2016] University of East Anglia.
[73] LSEG 'ESG investing and the great data challenge' <https://content.ftserussell.com/blogs/esg-investing-and-great-data-challenge> (LSEG) accessed 01 December 2023.
[73] Center For Audit Quality *(n 61).*
[74] Ernest & Young 'Is your ESG data unlocking long-term value? Sixth global institutional investor survey' (2021) <https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/assurance/assurance-pdfs/ey-institutional-investor-survey.pdf> accessed 01 December 2023.
[75] Klaus Ruhnke and Alexander Gabriel 'Determinants of voluntary assurance on sustainability reports: an empirical analysis' [2013] J Bus Econ 83/9 1063.
[76] Elmar R. Venter and Lanise van Eck, 'Research on extended external reporting assurance: trends, themes, and opportunities' [2021] J Int Financial Manag Account 32/1 63.

Sustainability Reporting and Performance

Sustainability reporting and its impact on business performance has led to considerable academic controversy. Authors such as Cerciello, Busato, and Taddeo[77] or Baumüller and Sopp[78] provide a comprehensive overview of the research conducted in this context.

Regarding sustainability reporting and performance, the literature identifies numerous positive relations. Alareeni and Hamdan[79], regarding financial aspects, discovered a positive relation between disclosure and return on equity and return on assets. Additionally, Li, Zheng, and Wang[80], Dhaliwal et al.[81], and Cheng, Ioannou, and Serafeim[82] describe potential lower costs of equity capital associated with sustainability reporting. According to Cho et al., a favorable correlation exists between capital market reactions and the publication of sustainability-related information on stakeholders' perceptions of enterprises.[83] In 2022, Viererbl and Koch found that CSR communication can positively and negatively affect the perception of a company's social responsibility. For example, an imbalance between the extent of disclosure and the actual carrying out of CSR activities influences public perception.[84] Aureli et al. identified a positive impact on strategic awareness stemming from the NFRD in 2014, which made sustainability reporting mandatory for certain companies.[85] Conversely, mixed but negative correlations have been identified, such as the relationship between sustainability reporting and banks' performance in Europe, as described by Buallay.[86] According to Cerciello, Busato, and Taddeo, comparing literature is difficult because of a lack of standardized and comparable data on ESG performance.[87]

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[77] Cerciello, Busato and Taddeo *(n 55)*
[78] Baumüller and Sopp *(n 68)*
[79] Bahaaeddin Ahmed Alareeni and Allam Hamdan 'ESG Impact on Performance of US S&P 500-Listed Firms' [2020] Corporate Governance (Bradford) 20/7 1409.
[80] Lingyu Li, Xianrong Zheng and Shuxi Wang, 'The Effect of Sustainability Information Disclosure on the Cost of Equity Capital: An Empirical Analysis Based on Gartner Top 50 Supply Chain Rankings' [2023] J risk financ manag 16/8 465.
[81] Dan S. Dhaliwal et al., 'Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting' [2011] Account Rev 86 59.
[82] Beiting Cheng, Ioannis Ioannou and George Serafeim, 'Corporate social responsibility and access to finance' [2014] Strateg Manag J 35 1.
[83] Seong Cho et al., 'Financial Reporting Conservatism and Voluntary CSR Disclosure' [2020] Account Horiz 34/2 63.
[84] Benno Viererbl and Thomas Koch, 'The Paradoxical Effects of Communicating CSR Activities: Why CSR Communication Has Both Positive and Negative Effects on the Perception of a Company's Social Responsibility' [2022] Public Relat Rev 48/1.
[85] Selena Aureli et al., 'Nonfinancial reporting regulation and challenges in sustainability disclosure and corporate governance practices' [2020] Bus Strat Env. 29 2392.
[86] Amina Buallay, 'Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector' [2019] Manag Environ Qual 30/1 98.
[87] Cerciello, Busato and Taddeo *(n 55).*

2.2. Sustainability Policies and Regulations in the European Union

Amid ongoing discussions, the EU legislator has been introducing and proposing new laws in the field of sustainability, such as the CSRD and the CSDDD Proposal.[88] The commitment to sustainability has been the focus of the EU's agenda for a long time. However, the original EEC Treaty did not include an environmental policy, as Kingston, Heyvaert, and Čavoški noted.[89] Instead, the legislation enacted then was based on Article 100 (now Article 115 TFEU) and Article 235 (now Article 352 TFEU) and would be referred to as environmental matters today. The Stockholm Conference in 1972 (see Chapter 2.1) triggered a new era of international environmental law and a change in the EU's approach to environmental policy. Around the same time, the EC published a Communication on Community environmental policy in 1971, followed by the release of the first Action Plan on the Environment in 1973. This first action plan set out the strategy for the following years and clarified environmental protection as a necessary component of the aims of achieving growth. Until 1987, three more Action Plans were published, numerous Community Environmental legislations were made, and the first international environmental treaties were signed.[90]

With the introduction of the Single European Act in 1987 and Article 25 of the Single European Act introducing a new Title VII Environment (Article 130r-130t[91]), the EU took a big step in explicitly anchoring environmental protection as an aim. The Treaty of Maastricht in 1992 further emphasized the EU's focus on environmental policies, including the provision in Article 2 EC Treaty: "The Community shall have as its task […] to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment […]." As a next significant achievement, Kingston, Heyvaert, and Čavoški mention the Treaty of Amsterdam in 1997 with its implementation of "high level protection and improvement of the quality of the environment" as an aim of Article 2 EC Treaty and modification of Article 2 EC Treaty wording.[92]

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[88] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
[89] Kingston, Heyvaert, and Čavoški *(n 1).*
[90] Kingston, Heyvaert, and Čavoški *(n 1).*
[91] Single European Act [2012] OJ L 169/1.
[92] Kingston, Heyvaert, and Čavoški *(n 1).*

The Treaty of Lisbon is also worth mentioning as Article 3 (3) TEU builds on the Treaty of Amsterdam[93], stating in its current version that the Union shall "work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment."[94] Additionally, Article 11 TFEU states that "environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development."[95]

The EU supported the union-wide implementation of the UN Guiding Principles for Corporate and Human Rights in the corporate sector, which started in 2011[96]. In addition, the EU introduced its Corporate Social Responsibility Strategy[97]. Through numerous initiatives, the EU has continuously worked toward its goals; however, since the UN 2030 Agenda for Sustainable Development (the so-called 2030 Agenda), its Sustainable Development Goals (the so-called SDGs) in 2015, and the signing of the Paris Agreement on Climate Change (the so-called Paris Agreement) in 2016, the EU has made significant progress.[98] Also initiated by the Paris Agreement, the EU made sustainable finance the focus of its sustainability ambitions. Following Colaert financial policies significantly influence the shift towards a more sustainable economy. Therefore 2018, the EC communicated the Action Plan on Financing Sustainable Growth.[99] Shortly after, to enable the European economy to meet specific climate targets, such as the objective of attaining climate neutrality by 2050 and lowering emissions by at least 55 % by 2030 compared to 1990, the EC issued the European Green Deal in 2019[100]. Furthermore, the EU's goals in sustainable finance were further strengthened by the Green Deal Investment Plan 2020 and the Strategy for Financing the Transition to a Sustainable Economy in 2021[101]. The development of sustainability policies and regulations in the EU is illustrated in *Figure 1.*

[93] Kingston, Heyvaert, and Čavoški *(n 1).*
[94] Consolidated version of the Treaty on European Union [2012] OJ C 326 (Treaty on European Union).
[95] Consolidated version of the Treaty on the Functioning of the European Union [2012] OJ C 326 (Treaty on the Functioning of the European Union).
[96]European Parliament, 'Implementation of the UN Guiding Principles on Business and Human Rights' (2017) <https://www.europarl.europa.eu/thinktank/en/document/EXPO_STU(2017)578031> accessed 5 March 2024.
[97] Ventura 'Corporate Sustainability Due Diligence' *(n 2)* .
[98] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
[99] Veerle Colaert, 'The changing nature of financial regulation: sustainable finance as a new EU policy objective' [2022] Common Market Law Review 59 1669.
[100] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
[101] Colaert *(n 99).*

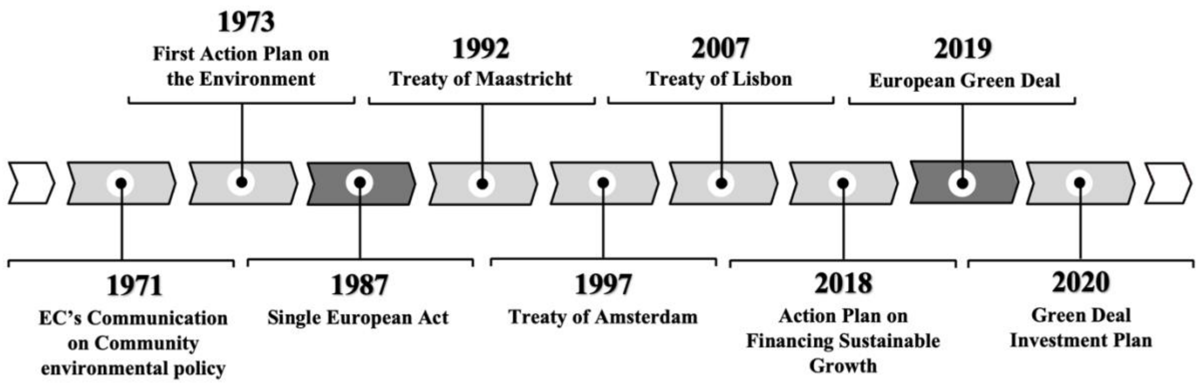

Figure 1: Development of Sustainability Policies and Regulations in the European Union.

The financial and business sector has seen a surge in (re-)regulation to comply with the new targets. This also signaled a move away from soft – which was initially voluntary – toward hard law to increase sustainability in the European economy. For example, the NFRD from 2014 contained a "comply or explain"-mechanism regarding the disclosure of sustainability data. The CSRD 2022, on the contrary, no longer specifies this option, resulting in a more mandatory nature and ending certain flexibility. In light of the recent EU legislation, Ventura outlines two distinct regulatory approaches – indirect and direct – to incentivize European corporations to adopt more sustainable practices. Acts, such as financial markets regulations and reporting laws, attempt to steer the European economy indirectly toward sustainability. From an ex-ante perspective, the EC also established complementary measures in business law to address business actions and plans directly. These measures comprise sustainability commitments that affect business operations, decision-making, risk management, and liability policies. Therefore, based on the European Green Deal and the Action Plan on Financing Sustainable Growth, the EC released Proposals for directors' responsibilities and DD requirements in 2020. Two years later, the CSDDD Proposal was adopted.[102]

[102] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*

2.3. Development of EU Sustainability Reporting Regulation

Baumüller and Soop analyzed the development of sustainability reporting in the EU[103] and traced the origins back to 1992 to the program *Towards Sustainability*[104]. About ten years later, the EC published the Communication *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development*, and it invited "[a]ll publicly-quoted companies with at least 500 staff […] to publish a "triple bottom line" in their annual reports to shareholders that measures their performance against economic, environmental and social criteria"[105] Shortly after in its Green Paper *Promoting a European framework for Corporate Social Responsibility*[106], the EC went into further detail. The EU then requested the recently established EU Multi-Stakeholder Forum on CSR to consensually develop guidelines and criteria for measurement, reporting, and assurance until the middle of 2004[107]. However, the members were unable to agree[108].

In 2001, the EC took a significant step towards integrating environmental reporting into financial reports by issuing the *Recommendation of 30 May 2001 on the recognition, measurement, and disclosure of environmental issues in the annual accounts and annual reports of companies*[109]. This recommendation, a consequence of the EC's action plan *Towards sustainability*, laid the foundation for the Modernization Directive 2003. The directive introduced the term "non-financial information" and mandated its inclusion in the management

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[103] Baumüller and Sopp *(n 68).*

[104] Resolution of the Council and the Representatives of the Governments of the Member States, meeting within the Council of 1 February 1993 on a Community programme of policy and action in relation to the environment and sustainable development - A European Community programme of policy and action in relation to the environment and sustainable development OJ C 138 (Resolution Towards Sustainability).

[105] Communication from the Commission, A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (Commission's proposal to the Gothenburg European Council)' [2001] COM/2001/0264 final.

[106] Commission, Promoting a European framework for Corporate Social Responsibility (Green Paper, 2001 DOC/01/9).

[107] Communication from the European Commission of 2 July 2002 concerning Corporate Social Responsibility: A business contribution to Sustainable Development [2002] COM(2002) 347 final.

[108] European Multi-Stakeholder Forum on CSR, 'Final results and recommendations' (2024) <https://www.businesseurope.eu/sites/buseur/files/media/imported/2004-01424-EN.pdf> accessed 19 January 2024.

[109] Commission Recommendation of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies (notified under document number C(2001) 1495) [2002] OJ L 156.

commentary[110], marking the first push towards European sustainability reporting requirements.[111]

After years of discussion and disagreement on the nature of the reporting requirements, the subject regained attention in the wake of the 2008 financial crisis[112]. In 2010, the EC launched a consultation to investigate potential avenues for further expansion of the 2003 Modernization Directive[113]. The NRFD was eventually proposed in 2013, but its vague wording necessitated several changes[114]. This highlights the challenges and changes that have characterized the development of sustainability reporting in the EU.

The adoption of the SDGs and the signing of the Paris Agreement in 2015/2016 marked the second significant change in the EC's policy strategy. In 2017, the EC released its *Guidelines on Non-Financial Reporting*[115] as a preliminary measure to give guidance in the interpretation of the NRFD. In response to the recommendations of the High-Level Expert Group on Sustainable Finance (HLEG),[116], which was established, the EC published the *Action Plan on Financing Sustainable Growth*[117] in 2018. The plan included many steps to improve sustainability reporting. In 2019, additional *Guidelines on non-financial reporting: Supplement on reporting climate-related information* were released[118].

[110] Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings (Text with EEA relevance) [2003] OJ L 178 (Modernization Directive).
[111] Baumüller and Sopp *(n 68).*
[112] Baumüller and Sopp *(n 68).*
[113] European Commission, ´Public consultation on disclosure of non-financial information by companies` <https://ec.europa.eu/finance/consultations/2010/non-financial-reporting/index_en.htm> accessed 19 January 2024.
[114] NFRD.
[115] Communication from the Commission, Guidelines on non-financial reporting [2017] C 215/1.
[116] European Commission, 'High-Level Expert Group on sustainable finance (HLEG)' (2020) <https://finance.ec.europa.eu/publications/high-level-expert-group-sustainable-finance-hleg_en> accessed 19 January 2024.
[117] Communication from the Commission, Action Plan: Financing Sustainable Growth [2018] COM/2018/097 final.
[118] Communication from the Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information [2019] C 209/1.

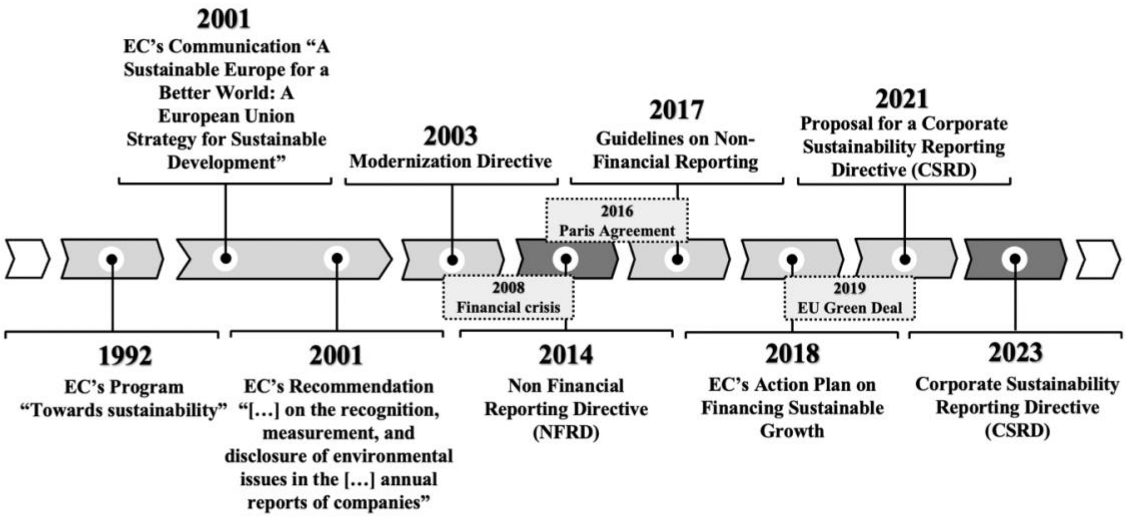

Figure 2 Development of Sustainability Reporting in the European Union.

In the same year, the European Green Deal was communicated[119]. This became an important landmark and the cornerstone for new and revised regulations, including sustainability reporting. Despite many controversies, the EC updated the NFRD and assigned the EFRAG's European Lab to develop *EU Non-Financial Reporting Standards*. Furthermore, a Project Task Force on Non-Financial Reporting Standards was established, which suggested promptly that the term "non-financial reporting" be changed to "sustainability reporting" to emphasize that financial and sustainability data are complementary rather than opposing.[120] After the initial Proposal from 2021[121], the CSRD entered into force in 2023[122]. The development of sustainability reporting in the EU is illustrated in *Figure 2.*

[119] EC, 'The European Green Deal' COM(2019) 640 final.
[120] Baumüller and Sopp *(n 68).*
[121] Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting [2021] COM/2021/189 final (Proposed CSRD).
[122] EC 'Corporate sustainability reporting' *(n 8).*

2.4. Environmental Due Diligence in the European Union

EU's regulatory actions are significant in driving the shift towards a sustainable economy. According to Ventura, its initial indirect measures, implemented through soft law, reporting, and financial market regulation, laid the groundwork. However, the landscape shifted in 2020 by suggesting additional initiatives in company law, signaling an ex-ante and hard law approach. This resulted in the publication of the CSDDD Proposal.[123] The purpose of DD on environmental impacts is to ensure compliance with environmental and health protection laws and the company's internal environmental policies while helping companies understand potential risks and obligations stemming from their activities to avoid liability[124].

DD regulations' evolution reflects sustainability's growing significance in corporate governance. Initially, DD was employed to mitigate risks in new acquisitions and has progressed to encompass the ecological footprint of a company and the influence of its business activities on society[125].

Despite some progress, much controversy surrounds the topic, as reflected in the EU policy-making process on DD, as the EU Timber Regulation adoption process demonstrated[126]. However, the legal initiative was implemented and complemented in 2014 by the NFRD[127], introducing reporting obligations (on human and) environmental impacts and risks, and in 2017, the EU Conflict Minerals Regulation, introducing supply chain DD obligations for certain imports[128]. In addition, establishing an EU Action Plan on Responsible Business Conduct was demanded by the 2016 Council Conclusions on Business and Human Rights.[129] Shortly after, the Council and the EP called the EC to propose legislation. As a component of the European Green Deal, in 2020, initiatives on directors' duties and DD obligations were introduced in line with the Action Plan on Financing Sustainable Growth. They were incorporated into the 2021

123 Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
124 Lise Smit et al. 'Study on due diligence requirements through the supply chain. Final report.' [2020]
125 Smit et al. *(n 124).*
126 Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market [2010] OJ L 295 (EU Timber Regulation).
127 NFRD.
128 Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas [2017] OJ L 130/1 (EU Conflict Minerals Regulation).
129 Smit et al. *(n 124).*

Commission Work Programme.[130] In 2020, the EC made available two studies on mandatory DD requirements[131] and directors' duties[132] in the context of sustainable corporate governance and launched a public consultation that revealed a consensus among participants for the need for a harmonized EU legal framework.[133] Following this, in 2022, the CSDDD Proposal was adapted[134] (see Chapter 3.3).

Although the legislative process has not yet been finalized, at the present date, some Member States, like France (2017)[135] and Germany (2023)[136], have already enacted general DD laws, including on environmental matters, while discussions for similar laws are ongoing in other EU Member States and Switzerland.[137] Similarly, an analysis shows that sustainable supply chain management has increased significantly among companies in recent years[138]. With or without national regulation, in 2022, it was found that in total, 37.14 % of companies are already conducting human rights and environmental DD (16 % cover the entire value chain); 33.71% are only conducting DD in specific areas, and only 7.43% are conducting DD on environmental or climate change issues without considering other human rights. This number decreases to 4.96 % in businesses with over 1000 workers[139]. Moreover, it is argued that companies that have not yet voluntarily adhered would have the option to "comply with obligatory due diligence standards," "to comply by avoiding business relation with problematic companies in the value chain," or to "exit the market and/or shut down"[140]. In addition, it was surveyed which actions were taken most frequently by companies (*see Figure 3*) and their incentives (*see Figure 4*)[141]. Similarly, according to another publication, sustainability is

[130] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
[131] Smit et al. *(n 124).*
[132] Ernest & Young, 'Study on directors' duties and sustainable corporate governance. Final report' [2020].
[133] Ventura 'Corporate Sustainability Due Diligence' *(n 2)*
[134] Proposed CSDDD (2022).
[135] LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre (French Loi de Vigilance).
[136] Bundestag, 'Act on Due Diligence Obligations in Supply Chains of July 16 2021' (2021) https://www.csr-in-deutschland.de/SharedDocs/Downloads/EN/act-corporate-due-diligence-obligations-supply-chains.pdf?__blob=publicationFile, accessed 5 March 2024 (German Act on Due Diligence Obligations in Supply Chains).
[137] Smit et al. *(n 124).*
[138] Livia Ventura, 'Supply chain management and sustainability: the new boundaries of the firm' [2021] Unif L Rev, 26 599 (Ventura 'Supply chain management and sustainability').
[139] Smit et al. *(n 124).*
[140] Johannes Jäger, Gonzalo Durán and Lukas Schmidt 'Expected Economic Effects of the EU Corporate Sustainablity Due Diligence Directive (CSDDD)' [2023] Verlag Arbeiterkammer Wien 3.
[141] Smit et al. *(n 124).*

gaining significance for reputation and businesses' long-term competitiveness and economic well-being[142].

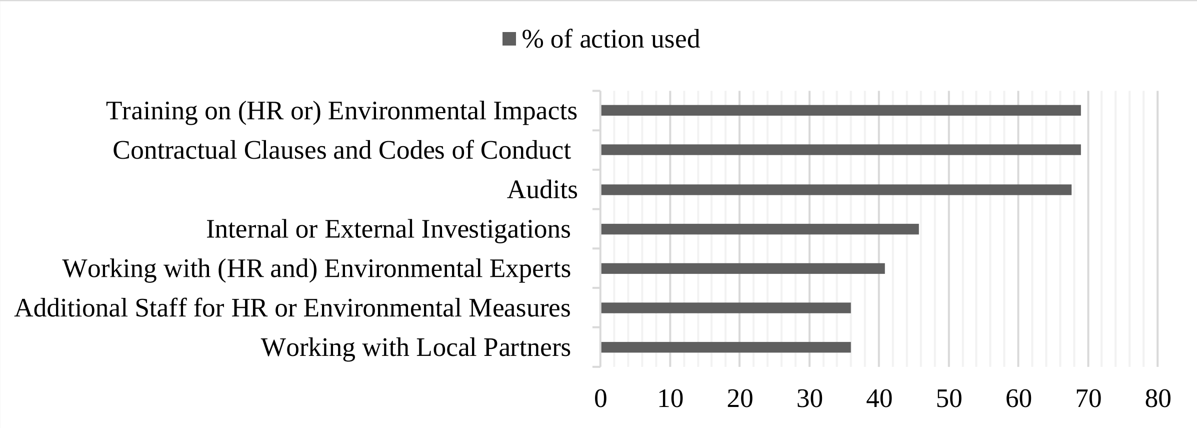

Figure 3 Due Diligence Practices in Own Operations[143].

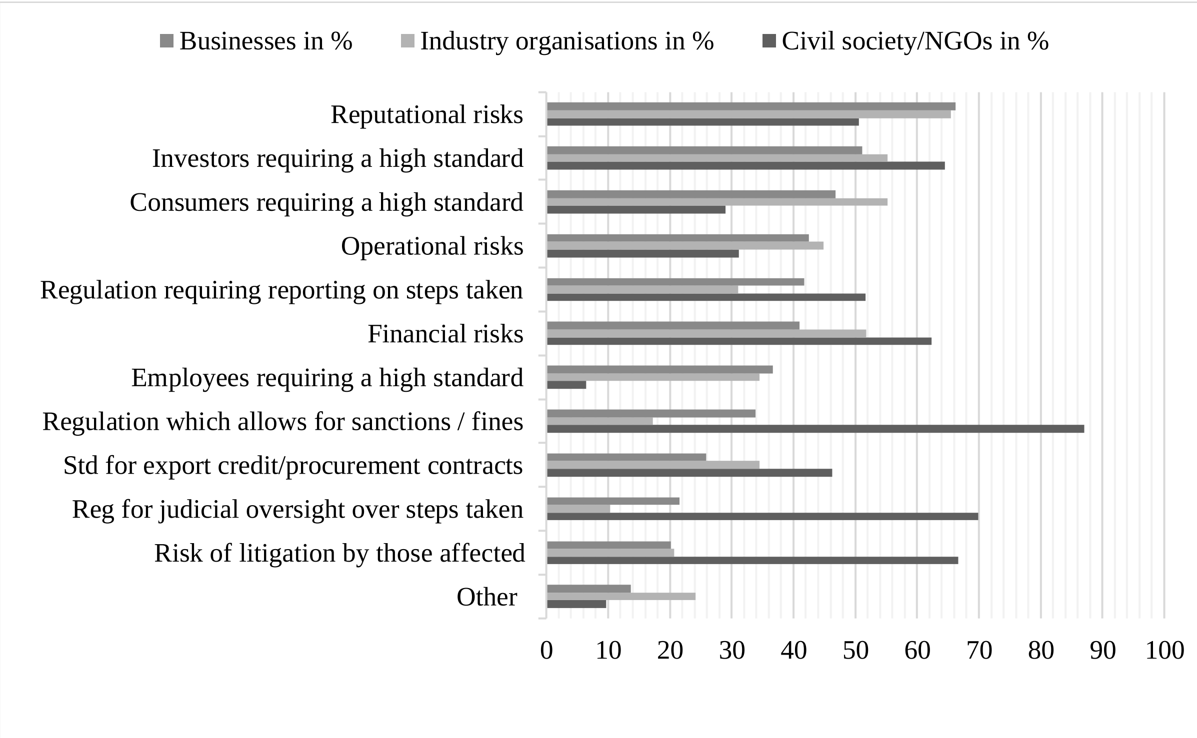

Figure 4 Incentives for Undertaking Due Diligence[144].

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142 Ventura 'Supply chain management and sustainability' *(n 138)*.
143 Smit et al. *(n 124)*.
144 Smit et al. *(n 124)*.

It is argued that companies that practice sustainable supply chain management go beyond legal boundaries. The company's boundaries would no longer be tied to ownership rights or the chain of control[145]. Jäger, Durán, and Schmidt examined the potential impacts of the CSDDD and found that it might bring economic benefits to the Global South and positive net effects on the European economy if the implementation of a CSDDD is strict and includes the financial sector[146]. On the other hand, Hanley et al. revealed that DD regulations impose considerable challenges for SMEs (suppliers) because of financial, capacity, and human resources. Despite this, it is a chance for SMEs to enhance their reputation, improve employer branding, and boost competitiveness. Hanley et al. analysis, therefore, suggests support for suppliers in developing countries and streamlined and simplified reporting for SMEs. In this context, among others, Hanley et al. clarify that improving DD starts with providing clear information about reporting requirements.[147]

[145] Ventura 'Supply chain management and sustainability' *(n 138)*.
[146] Jäger, Durán and Schmidt *(n 140)*.
[147] Aoife Hanley et al., 'The cumulative effect of due diligence EU legislation on SMEs' [2023] European Parliament Coordinator: Policy Department for External Relations.

2.4.1. Reporting on Environmental Due Diligence and Climate Change

In 2020, the British Institute of International and Comparative Law, Civic Consulting, and LSE Consulting carried out a *Study on due diligence requirements through the supply chain* for the EC, emphasizing DD and climate change. The report studies the potential impacts of new reporting requirements on the steps to identify, address, prevent, and mitigate adverse (human rights and) environmental impacts in a company's own operations and third-party business relationships. The study points out that DD-related obligations for (human rights and environmental) impacts, including climate impacts, were already introduced by the NFRD, introducing reporting on DD (see Chapter 3.1), further emphasized by the Non-Binding Guidelines on non-financial reporting.[148]

The study further states that the EC's impact assessment of the NFRD Proposal suggested that the directive, by increasing transparency and improving the quality of information on companies' environmental performance, could indirectly promote positive environmental impacts. Positive environmental impacts would be indirectly promoted through increased awareness, peer pressure, and potential reputational costs. While the study also highlights some weaknesses, such as the focus on ex-post sanctions, it emphasizes that management-driven reporting can be a significant learning opportunity to mitigate internal and external risks.[149]

In any case, it is essential to highlight that reporting laws do not comprise duties to act, and reporting laws in 2020 do not mandate adherence to the core elements of DD – namely, identification and assessment, taking actions to address, and tracking effectiveness – nor do they impose sanctions for non-compliance. In addition, NRFDs' "comply or explain" mechanism (see Chapter 3.1) was criticized, with an observed tendency to prioritize materiality to shareholders over potential risks to those directly affected.[150]

Notwithstanding, the study found that about 41 % of companies think new reporting requirements would impact the environment (about 45 % of stakeholders) (*see Figure 5*). About 53 % of companies assume an impact through mandatory DD regulation. Additionally, the study revealed that reporting regulations had a favorable effect on increasing awareness and

[148] Smit et al. *(n 124).*
[149] Smit et al. *(n 124).*
[150] Smit et al. *(n 124).*

internal discussions in businesses as well as benefits in the form of greater supply chain certainty, greater legal certainty, greater leverage over non-EU suppliers provided by a non-negotiable standard and from lower operational risks have been expected. Nevertheless, drawing from the experience with the NFRD, it is assumed that this economic impact will stay comparatively limited, and critics like the increased fragmentation, lack of enforcement, remedy, and legal certainty that go beyond reporting speak against it.[151]

Figure 5 Expected Environmental Impact under Due Diligence Reporting Requirements[152].

The evaluations of the specific environmental impacts show that the majority anticipate that the new DD reporting requirements would favor air pollution (stakeholder 60.3 %/ businesses 63.0 %) and waste (stakeholder 59.0 %/businesses 64.8 %). Furthermore, impacts on water resources (stakeholder 51.3 %/businesses 62.3 %) and the greening of the economy (stakeholder 50.6 %/businesses 56.4 %) are expected. The survey groups had different expectations in other relevant fields where positive implications were identified. For example, energy use and mix (stakeholder 48.7 %/businesses: 61.5 %) and transport (stakeholder 42.3 %/businesses 51.9 %). Additional fields for which the expected positive impact was examined were Biodiversity (stakeholder: 46.2 %/businesses: 45.3 %), Agricultural Fertilizers (stakeholder 53.9 %/businesses 47.2 %), Forests (stakeholder 50.0 %/ businesses 47.2 %) and Fisheries (stakeholder 39.8 %/businesses 43.4 %).[153]

[151] Smit et al. *(n 124).*
[152] Smit et al. *(n 124).*
[153] Smit et al. *(n 124).*

3. Legal Framework

3.1. Non-Financial Reporting Directive

In 2014, the Directive 2014/95/EU on non-financial reporting (NFRD) came into force, amending the Accounting Directive 2013/34/EU[154]. According to Baumüller and Grbenic, this was the first European sustainability disclosure regulation that has become an important tool for the EC to enhance the sustainability of the EU economy[155]. The NFRD aims to enhance cross-sector transparency, consistency, and comparability across Europe[156]. It has become a crucial component of promoting Sustainable Finance and the European Green Deal[157].

As per Article 1 (1) lit. 1 NFRD, the subjects are large public-interest entities that employ more than 500 people[158]. The Accounting Directive[159] specifies these constituent elements. It stipulates that such companies must meet at least two of the following criteria in two consecutive fiscal years: a balance sheet total of EUR 20 million or/and a net turnover of EUR 40 million or/and an average of 250 employees[160]. Additionally, these companies must be public-interest entities[161]. According to Article 2 of the Accounting Directive, public-interest entities are those subject to a member state law and have their transferable securities listed on a regulated market of a member state, credit institutions, insurance companies, or designated as public-interest entities by member states[162]. Therefore, the NFRD applies to listed companies, banks, insurance companies, and certain other designated public-interest entities with a balance sheet total of EUR 20 million, or/and a net turnover of EUR 40 million, or/and employ over 500 people. These qualifications apply to about 11,700 active businesses within the EU.[163]

[154] NFRD.
[155] Josef Baumüller and Stefan O. Grbenic 'Moving from non-financial to sustainability reporting: Analyzing the EU Commissions Proposal for a corporate sustainability reporting directive (CSRD)' [2021] FU Econ Org 18/4 369.
[156] NFRD, (6).
[157] Baumüller and Grbenic *(n 155).*
[158] NFRD, art 1 lit. 1.
[159] Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC L 182/19 [2013] (Accounting Directive).
[160] Accounting Directive, art 3 (7).
[161] NFRD, art 1 lit. 1.
[162] Accounting Directive, art 2.
[163] EC 'Corporate sustainability reporting' *(n 8)* assessed 11 May 2023.

Companies subject to the NRFD are required to publish a non-financial statement. This statement should provide details "to the extent necessary for an understanding of the undertaking's development, performance, position, and impact of its activity." It must contain information on environmental matters, social and employee-related matters, respect for human rights, anti-corruption, and bribery matters.[164] Specifically, the statement should include information about five reporting categories: business model, policies (including due diligence processes implemented), the outcomes of those policies, risks and risk management, and the relevant key performance indicators (hereafter KPIs)[165]. In addition, according to Article 2, a description of the diversity policy adopted, including information on administrative, management, and supervisory bodies related to age, gender, educational, and professional background, should be disclosed[166].

Furthermore, the NFRD requires companies to disclose information on their DD processes. Article 1 (1) lit. 1 (b) to (d) NFRD[167] mandates that the non-financial information shall include

"(b) a description of the policies pursued by the undertaking in relation to those matters, including due diligence processes implemented;
(c) the outcome of those policies;
(d) the principal risks related to those matters linked to the undertaking's operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas, and how the undertaking manages those risks;"

In (6) NFRD[168], the European legislators also specify that

"The non-financial statement should also include information on the due diligence processes implemented by the undertaking, also regarding, where relevant and proportionate, its supply and subcontracting chains, in order to identify, prevent and mitigate existing and potential adverse impacts."

[164] NFRD, art 1.
[165] NFRD, art 1.
[166] NFRD, art 2.
[167] NFRD, art 1 (1) lit. 1 (b) to (d).
[168] NFRD, (6).

Smit et al. suggest that the NFRD requires companies to report on two perspectives of environmental and climate risks. Firstly, companies must disclose the risks they face regarding their development, performance, and position related to climate change. Secondly, they must disclose the risks associated with the negative impact of their activities on climate[169].

Regarding the disclosure of environmental matters, the directive indicates very generally that companies should report the following information:

> *" [...] details of the current and foreseeable impacts of the undertaking's operations on the environment, and, as appropriate, on health and safety, the use of renewable and/or non-renewable energy, greenhouse gas emissions, water use, and air pollution."*[170]

What the NFRD does not explicitly regulate, however, are the reporting standards. It simply mandates that the information reported must be based on national, Union-based, or international frameworks.[171] Examples of frameworks include the Eco-Management and Audit Scheme (EMAS), the United Nations (UN) Global Compact, the Guiding Principles on Business and Human Rights implementing the UN 'Protect, Respect and Remedy' Framework, the OECD Guidelines for Multinational Enterprises, or the Global Reporting Initiative[172].

The regulation also has a "comply or explain" provision[173] that grants corporations flexibility by enabling them to declare clearly and reasonably that they are not taking any action.

The materiality concept, a fundamental accounting principle, is at the heart of the reporting obligation[174]. The Harvard Business School defines materiality as "an accounting principle which states that all items that are reasonably likely to impact investors' decision making must be recorded or reported in detail in a business's financial statements […]".[175] There are two types of materiality: single and double. The NFRD introduced the latter. However, there was a need for clarification, which the EC attempted to provide in the (non-binding) Guidelines on

[169] Smit et al. *(n 124).*
[170] NFRD, (7).
[171] NFRD, art 1.
[172] NFRD, (9).
[173] NFRD, art 1 (1) / art 2(a).
[174] Baumüller and Sopp *(n 68)*
[175] Harvard Business School, 'What is materiality in accounting and why is it important?' <https://online.hbs.edu/blog/post/what-is-materiality> assessed 16 January 2024.

non-financial reporting in 2019.[176] In 2022, the EC described double materiality as an obligation "to report not only on how sustainability issues might create financial risks for the company (financial materiality), but also on the company's own impacts on people and the environment (impact materiality)."[177] The EP states that the concept of double materiality is imposed by the clause "to the extent necessary for an understanding of the development, performance, position, and impact of its activities"[178] found in Article 1(1) lit 1 NFRD.[179] Baumüller and Sopp further specify that "development, performance [and] position" would refer to financial materiality, which is traditional of interest for investors, and "impact of [the company's] activities" would refer to environmental and social materiality, whose traditional addressees are citizens, consumers, employees, business partners, communities and civil society organizations, but also more and more investors putting emphasis sustainability.[180] As a result, businesses should publish both the "inside-out risks" associated with their operations and the "outside-in risks" associated with how the company influences society and the environment.[181] However, Baumüller and Sopp also point out that the individual definition of materiality can vary, which affects the scope and nature of the published information. Consequently, this impacts the effectiveness of a company's sustainability performance and the way of disclosure. On one hand, it can be interpreted as encouraging the publication of reliable information, but on the other, undermining stakeholders' interests.[182]

Despite not being mandatory, much discussion has been regarding the need for an external audit. According to Article 1(1) lit 5 NFRD, statutory auditors or audit firms are responsible for ensuring that a non-financial statement has been prepared.[183] However, independent assurance service providers are not required to verify the non-financial information.[184]

[176] Communication from the Commission, Guidelines on non-financial reporting *(n 115).*
[177] Harvard Business School *(n 165).*
[178] European Commission, 'Sustainable finance' (2022) <https://ec.europa.eu/newsroom/fisma/items/754701/en#:~:text=Double%20materiality&text=This%20means%20that%20companies%20have,the%20environment%20(impact%20materiality).> (EC 'Sustainable finance') assessed 16. January 2024.
[179] NFRD, art 1 (1) lit 1.
[180] Baumüller and Sopp *(n 68).*
[181] EC, 'Sustainable finance' *(n 168)* accessed 22 January 2024.
[182] Baumüller and Sopp *(n 68).*
[183] NFRD, art 1(1) lit 5.
[184] NFRD, art 1 (1) lit 6.

The NRFD generally provides two options for reporting formats of non-financial statements: including them in the management report or preparing a separate report under specific circumstances.[185]

Member states had until December 6, 2016, to incorporate the directive into their national laws. Companies governed by the regulation must submit their first reports for the preceding fiscal year, 2018. [186]

[185] NFRD, art 1 (1) lit 4.
[186] NFRD, art 4.

3.2. Corporate Sustainability Reporting Directive

Building on Directive 2014/95/EU (NRFD), Directive (EU) 2022/2464, also known as the Corporate Sustainability Reporting Directive, entered into force on January 5, 2023[187].

3.2.1.1. Key Provisions

The scope of companies that need to report sustainability information has expanded with the new regulations. All large companies, regardless of their legal form, and small and medium-sized public-interest entities, except micro-entities, are now covered[188]. The definition of *large* companies can be found in the Accounting Directive[189]. The size categories contained therein were amended in 2023 due to inflation. Large companies are now defined as those that exceed at least two of the three requirements for a consecutive pair of fiscal years: a balance sheet total of EUR 25 million (previously: EUR 20 million) and/or a net turnover of EUR 50 million (previously: EUR 40 million), and/or an average of 250 employees (not amended) [190]. The minimum number of 500 employees was omitted.[191] Small- and medium-sized public-interest entities[192] are also affected, except for micro-entities that do not meet at least two of the three requirements. The updated requirements for micro-entities are a balance sheet total of EUR 450,000 (previously: EUR 350,000), and/or a net turnover of EUR 900,000 (previously: EUR 700,000), and/or an average of 10 employees (not amended)[193]. Additionally, third-country undertakings that have a net turnover within the Union exceeding EUR 150 million, along with subsidiaries or branches within the Union that generated a net turnover of more than EUR 40 million or small or medium-sized subsidiaries or branches whose securities are allowed to trade on a Union-regulated market, are now required to publish sustainability information[194].

[187] EC 'Corporate sustainability reporting' (n 8) assessed 18 March 2024.
[188] CSRD, art 1.
[189] Accounting Directive, art 3 (7).
[190] Commission Delegated Directive (EU) 2023/2775 of 17 October 2023 amending Directive 2013/34/EU of the European Parliament and of the Council as regards the adjustments of the size criteria for micro, small, medium-sized and large undertakings or groups [2023] OJ L 2023/2775, art 1 (7) (Commission Delegated Directive OJ L, 2023/2775).
[191] CSRD, art 1.
[192] Definition see Accounting Directive, art 2.
[193] Accounting Directive, art 3 (1) in conjunction with Commission Delegated Directive OJ L, 2023/2775, art 1 (1).
[194] CSRD, art 1 (1) lit 5 in conjunction with art 1 (14).

While the CSRD categorizes EU companies based on the amended Accounting Directive's[195] size classification, it sets a fixed threshold of EUR 40 million for third-country undertakings[196]. Whether this provision will stay, be amended, or be systematically interpreted remains to be seen.

As a result of the amendment, the scope has increased from about 11,700 companies to almost 50,000 companies.[197] These companies contribute to approximately 75 % of the total turnover generated by EU enterprises[198]. The development of the scope and applicability of the NFRD and CSRD is illustrated in *Figure 6*.

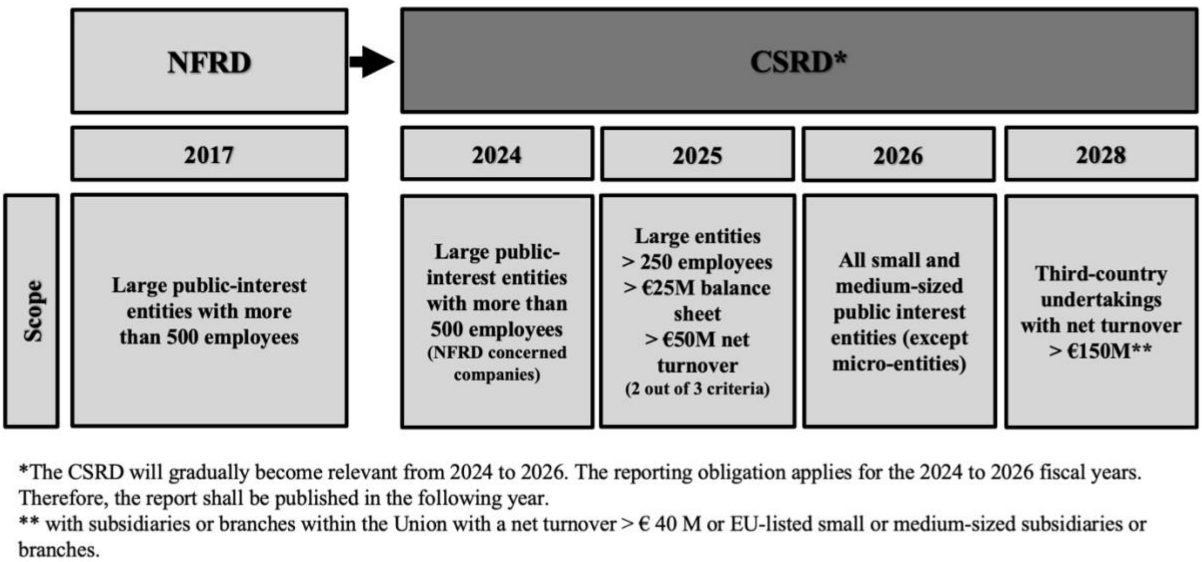

Figure 6 Development of the Scope and Applicability of the NFRD[199] and CSRD[200].

The CSRD, which builds upon the NFRD, further clarifies the double materiality principle.[201] It now explicitly requires companies to provide "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

[195] Accounting Directive, art 3.
[196] CSRD, art 1 (14).
[197] EP 'Sustainable economy' *(n 4)* accessed 22 January 2024.
[198] Rutger de Roo van Alderwerelt, (2022) 'Non-Financial Reporting Directive (NFRD) vs Corporate Sustainability Reporting Directive (CSRD)' <https://www.cpmview.com/news/csrd/nfrd-vs-csrd/> accessed 22 January 2024.
[199] NFRD, art 4.
[200] CSRD, art 5.
[201] Baumüller and Sopp *(n 68).*

position."[202] The EC describes this as the double materiality perspective, wherein risks to the company and its impact on sustainability each represent one materiality perspective.[203] Further details on double materiality can be found in the recently adopted ESRS in Annex I3[204].

Additionally, the CSRD replaces the term "non-financial reporting" with "sustainability reporting" and specifies in Article 1(4) the subjects that this data must cover, thus increasing the requirement for those subjects that are considered material.

Baumüller and Grebic have listed the additional details that need to be included in the NFRD reporting requirements as part of the new CSRD requirements. These include extended reporting contents such as aims and strategies, applicable time frames requiring retrospective and forward-looking information, and newly structured and extended reporting matters like governance matters and a greater focus on the value chain.[205]

The CSRD regulation, unlike the NFRD[206], has eliminated the general "comply or explain" provision, making it more effective. This change ensures that companies are now required to report on all topics identified as material, providing a more comprehensive view. The only information on the topical ESRS standards companies may not need to disclose is those assessed as not material. In such a scenario, however, they may provide a brief or, in the case of ESRS E1 climate change, a detailed explanation of the conclusion of the materiality assessment.[207] Information like ESRS 2 General Disclosures must be disclosed, regardless of the materiality assessment's outcome[208]. One kind of general "comply or explain" provision of the CSRD can be found in Article 1 (4) lit 3, which allows companies for the first three years of the application if not all the needed information regarding the company's value chain is available, to report on their efforts made, the reasons why they could not disclose this information, and their plans to get the required information in the future.[209]

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[202] CSRD, art 1 (4).
[203] CSRD, (29).
[204] Delegated Regulation (ESRS), Annex 13.
[205] Baumüller and Grbenic *(n 155).*
[206] NFRD, art 1 (1) / art 2(a).
[207] Delegated Regulation (ESRS), ESRS 1, Appendix E.
[208] Delegated Regulation (ESRS), ESRS 1, (29).
[209] CSRD, art 1 (4) lit 3.

Additionally, the sustainability information must now be included in the management report[210], and an audit by a statutory auditor or audit firm is required[211]. The audit effectiveness should be ensured through an (administrative) sanctions system[212]. It is also important to note that the sustainability data should be accessible in a single electronic reporting format[213].

Furthermore, companies must provide information on their intangible assets, including social, human, and intellectual capital[214]. They should adhere to Article 8 of the Taxonomy Regulation[215], which mandates companies to report the environmental sustainability of their turnover, capital expenditure, and operating expenditure[216], and report in line with the Sustainable Finance Disclosure Regulation (SFDR)[217]. Additionally, two significant revised paragraphs regarding climate change strategies and DD processes have been added.

3.2.1.2. Disclosure Obligation on Sustainability Due Diligence and Climate Change Strategies

Article 1 (4) lit 2 (f) (i) to (iii) CSRD requires undertakings to disclose:

"a description of:
(i) the due diligence process implemented by the undertaking with regard to sustainability matters, and, where applicable, in line with Union requirements on undertakings to conduct a due diligence process;
(ii) the principal actual or potential adverse impacts connected with the undertaking's own operations and with its value chain, including its products and services, its business relationships and its supply chain, actions taken to identify and monitor those impacts,

[210] CSRD, art 1 (4).
[211] CSRD, art 1 (4) in conjunction with art 1 (13).
[212] CSRD, art 2 (20).
[213] CSRD, (9) in conjunction with Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format [2019] OJ L 143, art 3 (Commission Delegated Regulation OJ L 143).
[214] CSRD, (32).
[215] CSRD, e. g. (17).
[216] 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, OJ L 198/13, art 8 (Taxonomy Regulation).
[217] CSRD, e. g. (41).

and other adverse impacts which the undertaking is required to identify pursuant to other Union requirements on undertakings to conduct a due diligence process;
(iii) any actions taken by the undertaking to prevent, mitigate, remediate or bring an end to actual or potential adverse impacts, and the result of such actions;[218]*"*

Regarding climate change strategies, CSRD Article 1 (4) lit 2 (a) (iii) and Article 1 (4) lit 2 (b) require companies to disclose:

"the plans of the undertaking, including implementing actions and related financial and investment plans, to ensure that its business model and strategy are compatible with the transition to a sustainable economy and with the limiting of global warming to 1,5 °C in line with the Paris Agreement [...] and the objective of achieving climate neutrality by 2050 [...], and, where relevant, the exposure of the undertaking to coal-, oil- and gas-related activities;[219]*"*

"a description of the time-bound targets related to sustainability matters set by the undertaking, including, where appropriate, absolute greenhouse gas emission reduction targets at least for 2030 and 2050, a description of the progress the undertaking has made towards achieving those targets, and a statement of whether the undertaking's targets related to environmental factors are based on conclusive scientific evidence;[220]*"*

For the first time, the EU has made it mandatory for companies to report on their consideration of specific climate targets, such as the 1.5°C target, in accordance with the Paris Agreement. In addition, the CSRD introduces more detailed requirements for DD reporting, linking them to other EU requirements. Notably, this applies to a company's operations, including the entire value chain of its products, services, and supply chain.

[218] CSRD, art 1 (4) lit 2 (f).
[219] CSRD, art 1 (4) lit 2 (a) (iii).
[220] CSRD, art 1 (4) lit 2 (b).

3.2.1.3. European Sustainability Reporting Standards

Another significant development has been introduced through the ESRS. The ESRS aim to ensure that reported information is of high quality through its requirements of being understandable, relevant, verifiable, comparable, and represented faithfully[221]. The standards follow the "double materiality" principle, covering both the outside-in and the inside-out perspectives. Hence, they consider the impacts of external factors on a company, as well as the impacts of a company on society and the environment. Additionally, they must align with the European Green Deal and other existing legal frameworks, such as the Sustainable Finance Disclosures Regulation (SFRD) and Taxonomy Regulation[222]. The development of these standards was delegated to the European Financial Reporting Advisory Group (hereafter EFRAG)[223], an independent specialized organization. Drawing on its drafting, the EC published the first set of ESRS in a delegated regulation on December 22, 2023.[224]

The new regulations will reduce flexibility in reporting methods and introduce more detailed and standardized reporting requirements. Despite efforts to standardize sustainability reporting, differences may persist due to the varying attitudes of those responsible and the scope of interpretation left by materiality analyses. On the other hand, the latter makes it possible for companies to adapt to their specific needs.

The ESRS standards are categorized into cross-cutting, topical, and sector-specific standards (*see Figure 7*).

[221] CSRD, art 1 (8) lit 2.
[222] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
[223] CSRD, art 1 (8).
[224] Delegated Regulation (ESRS).

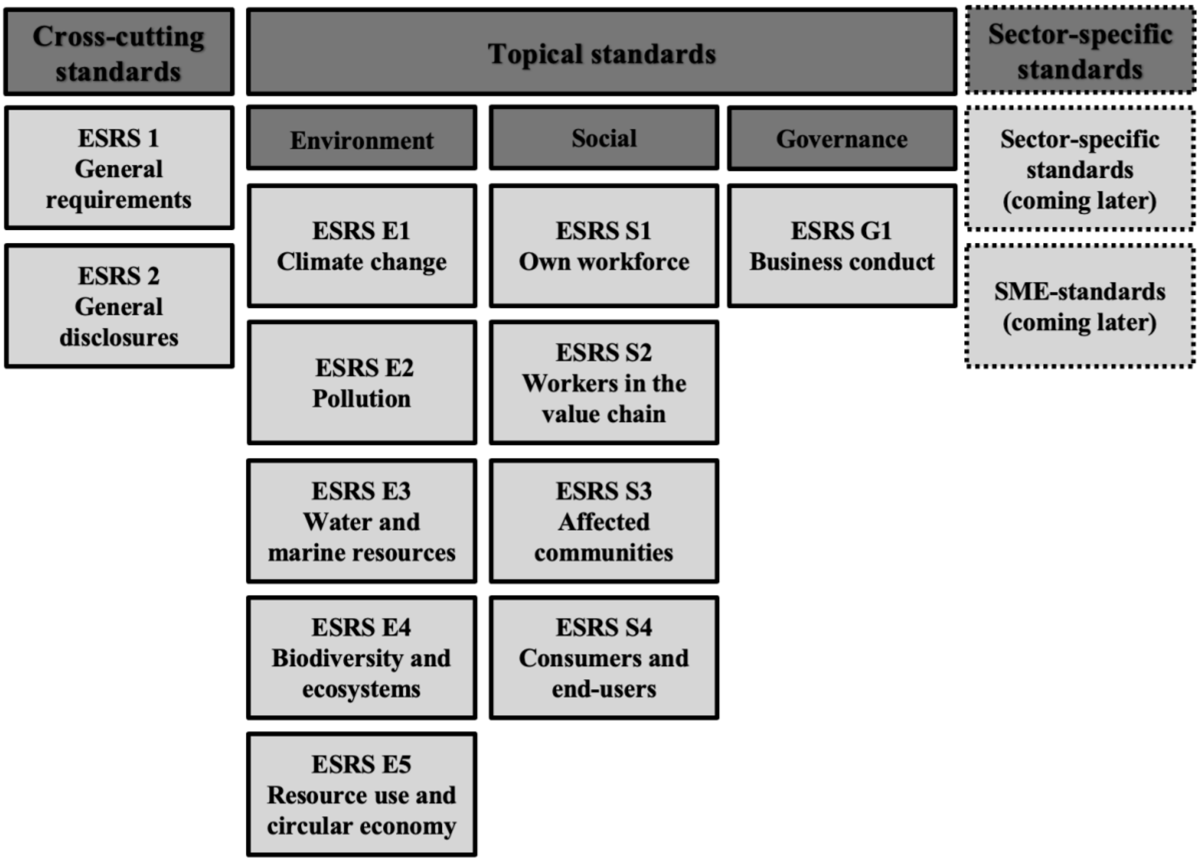

Figure 7 European Sustainable Reporting Standards at a Glance[225].

The topical and sector-specific ESRS (and also ESRS 2) are each divided into four areas: governance (GOV), strategy (SBM), impact, risk and opportunity management (IRO), and metrics and targets (MT)[226] *(see Figure 8).*

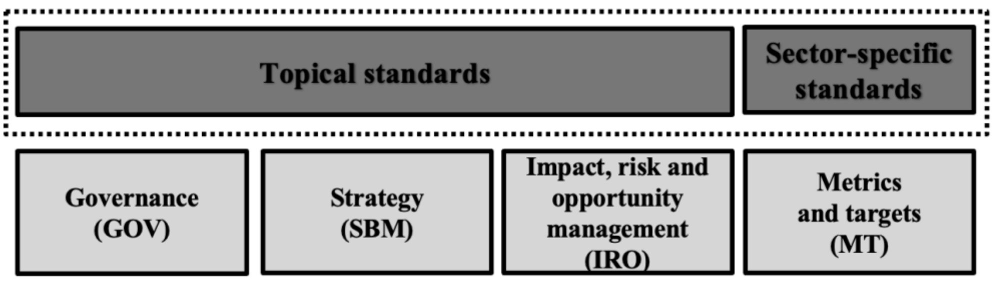

Figure 8 Reporting Areas of Topical and Sector-specific ESRS (and ESRS 2)[227].

[225] Delegated Regulation (ESRS), Annex I.
[226] Delegated Regulation (ESRS), Annex I 1.2.
[227] Delegated Regulation (ESRS), Annex I ESRS.

ESRS 2 and individual regulations in the topical standards are particularly important for DD[228], while ESRS E1 is particularly relevant for climate change strategies[229].

Disclosure Requirements on Sustainability Due Diligence

The ESRS requires a published statement on DD, as outlined in Paragraph 30 ff ESRS 2:

> *"GOV–4 - Statement on due diligence*
> *30. The undertaking shall disclose a mapping of the information provided in its sustainability statement about the due diligence process.*
> *31. The objective of this Disclosure Requirement is to facilitate an understanding of the undertaking's due diligence process with regard to sustainability matters.*
> *32. The main aspects and steps of due diligence referred to under ESRS 1 chapter 4 Due diligence are related to a number of cross-cutting and topical Disclosure Requirements under the ESRS. The undertaking shall provide a mapping that explains how and where its application of the main aspects and steps of the due diligence process are reflected in its sustainability statement, to allow a depiction of the actual practices of the undertaking with regard to due diligence (15).*
> *33. This disclosure requirement does not mandate any specific behavioral requirements with regard to due diligence actions and does not extend or modify the role of administrative, management and supervisory bodies as mandated by other legislation or regulation."*[230]

The requirement for "mapping of the information [...] about the due diligence process" is explained in detail in Appendix A, which outlines the application requirements for ESRS 2. Paragraph 2 Governance AR 8-10 stipulates that the mapping can be disclosed as a table, which should outline the key elements of DD for impacts on people and the environment. The ESRS provides the following exemplary table (see *Table 1*).

[228] Delegated Regulation (ESRS), Annex I ESRS.
[229] Delegated Regulation (ESRS), Annex I ESRS E1.
[230] Delegated Regulation (ESRS), Annex I ESRS 2 (30).

Core elements of due diligence	*Paragraphs in the sustainability statement*
a) Embedding due diligence in governance, strategy and business model	
b) Engaging with affected stakeholders in all key steps of the due diligence	
c) Identifying and assessing adverse impacts	
d) Taking actions to address those adverse impacts	
e) Tracking the effectiveness of these efforts and communicating	

Table 1 DD-Mapping suggested by the ESRS[231].

However, the company may have added extra columns to the table since multiple items may contain information on the same DD step[232]. All this information should be included in the sustainability statement[233].

ESRS 1 Chapter 4 defines DD as the ongoing process where companies identify, prevent, mitigate, and account for how actual and potential negative impacts on the environment and people associated with their operations are addressed. This process encompasses impacts related to its own operations and the upstream and downstream value chain, including products or services and business relationships. As a result, this process may lead to changes in a company's strategy, business model, activities, relationships, operating, sourcing, and selling contexts. The UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises outline the stepwise process[234]. The outcome of sustainability DD shows the evaluation of material impacts, risks, and opportunities. Notably, the ESRS does not mandate a duty for DD nor alter the roles of administrative, management, or supervisory bodies in its execution[235].

Figure 9 shows the core elements of DD and relevant disclosure requirements (hereafter DR), which can be found in ESRS 2 and other topical ESRS.

[231] Delegated Regulation (ESRS), Annex I ESRS 2 Appendix A AR 10.
[232] Delegated Regulation (ESRS), Annex I ESRS 2 Appendix A AR 10.
[233] Delegated Regulation (ESRS), Annex I ESRS 2 (30).
[234] Delegated Regulation (ESRS), Annex I 4 (59).
[235] Delegated Regulation (ESRS), Annex I 4 (58).

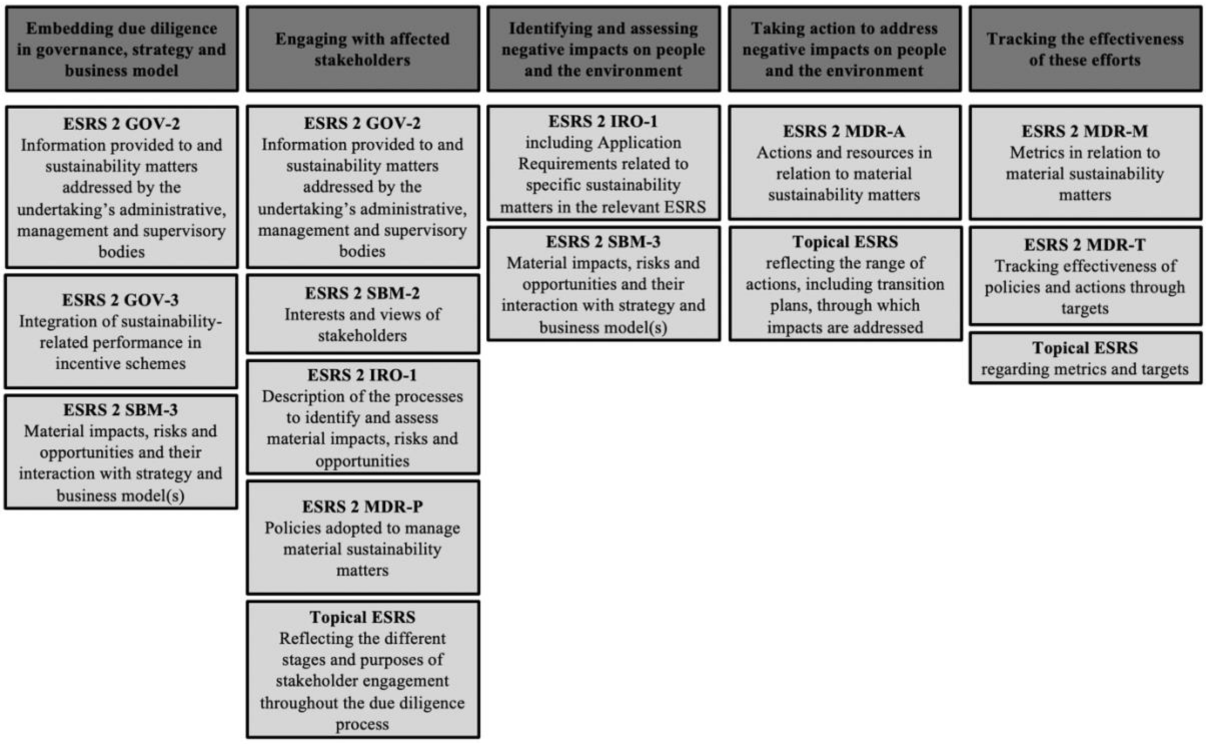

Figure 9 ESRS E2 and Topical ESRD relevant for Sustainability Due Diligence[236].

Disclosure Requirements on Climate Change

Regarding climate change, ESRS E1 requires companies to provide information about

(1) their impact on climate change, including both material positive and negative actual and potential impacts,
(2) their past, current, and future efforts to mitigate climate change in line with the Paris Agreement (or any updated international agreement on climate change) and compatible with the goal of limiting global warming to 1.5°C.
(3) their plans and capacity for adapting its strategy and business model to a sustainable economy and contributing to limiting global warming to 1.5°C,
(4) their actions taken to address and prevent, mitigate, or remediate any negative impacts, risks, and opportunities related to climate change
(5) material risks and opportunities related to their impacts and dependencies on climate change and how they are handled, including their financial effects over the short, medium, and long term.[237]

[236] Delegated Regulation (ESRS), Annex I 4 (61).
[237] Delegated Regulation (ESRS), Annex I ESRS E1.

The DRs for ESRS E1 are detailed in the Commission Delegated Regulation and structured in four specific reporting areas (see *Figure 10).*

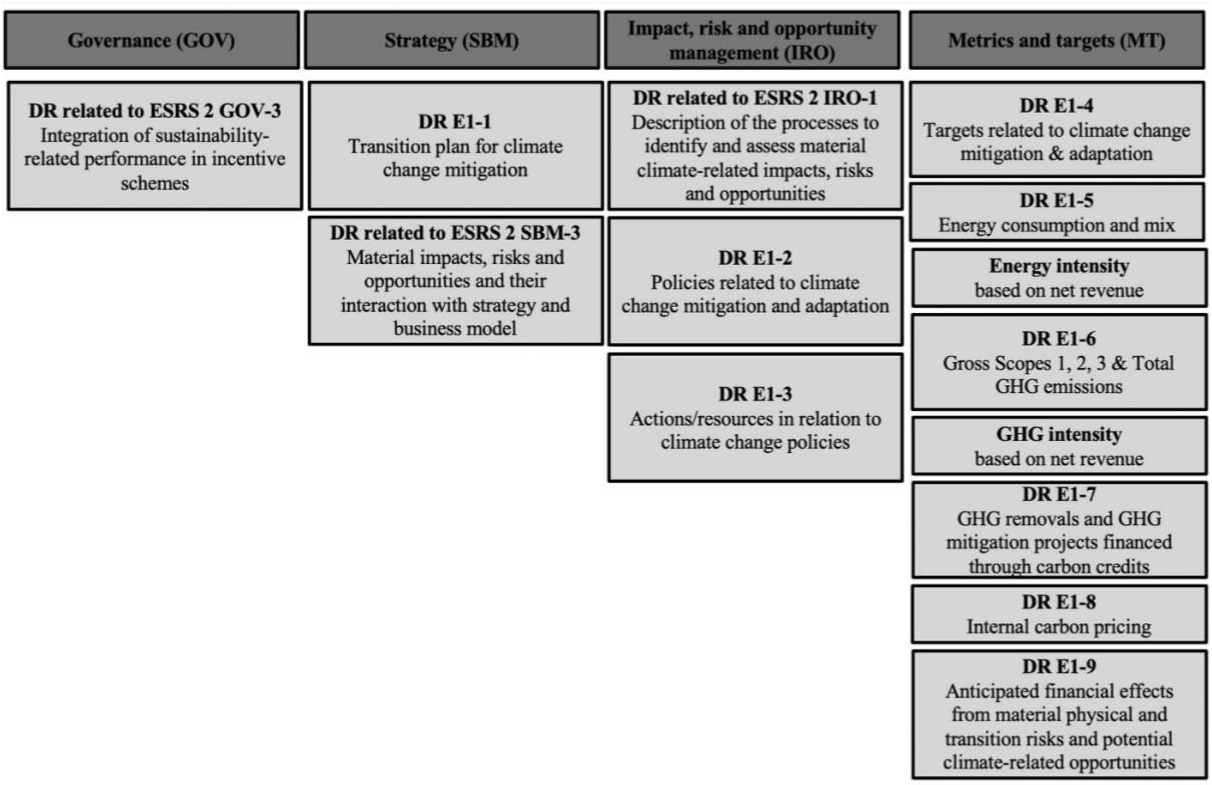

Figure 10 ESRS E1 Disclosure Requirements at a Glance[238]

Certain DRs require companies to disclose their upstream and downstream value chain information. Its information-gathering process is closely linked to environmental due diligence. The Commission Delegated Regulation (ESRS) states that ESRS 1 should be read and applied with *ESRS 1* and *ESRS 2*[239]. The latter also includes most of the DR relevant for due diligence, as shown in *Figure 9.*

For instance, the information related to the *Transition plan for climate change mitigation (DR E1-1)* must explain the identified decarbonization levers, key actions, transitions in the company's product and service portfolio, and adoption of new technologies in its own operation or value chain. This information must be linked to GHG emission reduction targets (as required by *DR E1-4*) and climate change mitigation actions (as required by *DR E1-3*).[240]

[238] Delegated Regulation (ESRS), Annex I ESRS E1.
[239] Delegated Regulation (ESRS), Annex I ESRS E1 (11).
[240] Delegated Regulation (ESRS), Annex I ESRS E1 (16 (b)).

Policies related to climate change mitigation and adaptation (DR E1-2) and *Actions and resources in relation to climate change policies (DR E1-3)* have a reference to *ESRS 2 MDR-P* or *MDR-A*, both relevant in the environmental due diligence of a company (see *Figure 9)*[241].

Similarly, the *Description of the processes to identify and assess material climate-related impacts, risks and opportunities (DR related to ESRS 2 IRO-1)* must include information on the process to identify and assess climate-related impacts, risks and opportunities, including climate-related physical risks along the value chain, as well as climate-related transition risks and opportunities in its own operation and along the value chain.[242]

The *Gross Scopes 1, 2, 3 and Total GHG emissions (DR E1-6)* must include Scope 3 GHG emissions data, which are related to the company's value chain.[243] Scope 1 GHG emissions are direct GHG emissions from sources owned or controlled by the company. Scope 2 GHG emissions are indirect emissions from purchased or acquired electricity, steam, heat, or cooling consumed by the company. Of interest for environmental DD are Scope 3 GHG emissions, which are all indirect (not included in Scope 2 GHG emissions) that occur in the value chain of the reporting company, including both upstream and downstream emissions.[244] These Scope 3 GHG emissions may be the main component of a company's GHG inventory and driver of a company's transition risks[245].

The *Targets related to climate change mitigation and adaptation (DR E1-4)* must include GHG emission reduction targets for Scope 1, 2, and 3 GHG emissions, separately or combined[246], and have, therefore, touchpoints with the company's own operation and value chain.

Finally, the *GHG removals and GHG mitigation projects financed through carbon credits (DR E1-7)* must include GHG removals and storage resulting from projects developed in the company's own operation or value chain.

[241] Delegated Regulation (ESRS), Annex I 4 (61).
[242] Delegated Regulation (ESRS), Annex I ESRS E1 (20 (b) (c)).
[243] Delegated Regulation (ESRS), Annex I ESRS E1 (45).
[244] Delegated Regulation (ESRS), Annex II Table 2.
[245] Delegated Regulation (ESRS), Annex I ESRS E1 (45).
[246] Delegated Regulation (ESRS), Annex I ESRS E1 (34 (b)).

3.3. Proposed Directive on Corporate Sustainability Due Diligence

On February 23, 2022, the EC proposed the Corporate Sustainability Due Diligence Directive, aimed at enhancing corporate governance practices, preventing fragmentation, boosting corporate accountability, facilitating access to remedies for affected parties, and serving as a comprehensive tool for business processes and value chains. The Proposal is a response to the EU's acknowledgment of companies' crucial role in achieving a climate-neutral future, as outlined in the European Green Deal and UN Sustainable Development Goals. However, given the reliance of numerous EU companies, particularly larger ones, on global value chains, identifying and mitigating risks related to human rights and environmental impacts can be challenging. Simultaneously, companies engaged in global value chains bear a responsibility. While increasing number of companies are conducting voluntary DD procedures (see Chapter 2.4), legal certainty needs to be improved. Several countries have recently imposed obligations, bearing the risk of fragmentation. The CSDDD proposes a strengthened EU-wide DD obligation as a solution[247]. In December 2023, the Council and the EP concluded a provisional agreement on the CSDDD[248]. Shortly after, on March 15, 2024, the CSDDD was approved by the Council[249] and an unofficial final version published[250], which is the reference for this chapter. The amended Proposal will now go to the EP for approval. Therefore, the Proposal can be subject to further amendments.

3.3.1.1. Key Provisions

The Proposed CSDDD applies to EU companies with an average of more than 1000 employees and a net turnover of more than EUR 450 million in the last financial year. This also applies to the ultimate parent company of a group that meets these thresholds or to a company that entered into franchising or licensing agreements in the EU with third-party companies. These agreements must ensure a common identity, a uniform joint business method, and royalties that are higher than EUR 22.5 million in the last financial year. If this is the case and

[247] Proposed CSDDD (2022).
[248] Council of the European Union, 'Corporate sustainability due diligence: Council and Parliament strike deal to protect environment and human rights' (2023) <https://www.consilium.europa.eu/en/press/press-releases/2023/12/14/corporate-sustainability-due-diligence-council-and-parliament-strike-deal-to-protect-environment-and-human-rights/> accessed 30 January 2024.
[249] McGowan *(n 14)*.
[250] Proposed CSDDD (unofficial version, 2024).

the company or the ultimate parent company of a group that had a net turnover of over EUR 80 million, they are also subject to the CSDDD.[251] If a company reaches the threshold, the directive shall only apply if this occurs in two consecutive financial years.[252] Non-EU companies or their ultimate parent company generating the same net turnover in the EU or comparable franchise companies will also fall within the scope of the CSDDD[253], potentially except ultimate parent companies, whose main activity is holding shares in operational subsidiaries[254]. In this context, Ventura points out that the Proposal aims to "overcome limits of states' regulatory power" because of globalization, business mobility, and the practice of forum and legal system shopping by extending its application to some extent beyond territorial borders. No minimum number of employees is specified for non-EU companies, which is due to the challenges arising from the lack of an universal international definition[255].

Accordingly, the scope has been significantly modified compared to the original Proposal[256] and provisional approval in December[257] *(see Figure 11)*. While following the EC, approximately 12,800 EU and 4,000 third-country companies would have been impacted by the Proposal scope 2022[258], representing about one-third of the companies subject to the CSRD; with this new scope, it is estimated that the number of impacted companies to 30 % of the original scope, which corresponds to about .05 % of companies operating in the EU[259]. Although the CSDDD does not directly cover SMEs, they may be indirectly affected through their value chain position or reporting requirements (see Chapter 2.4.1).

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[251] Proposed CSDDD (unofficial version, 2024), art 2 lit. 1.
[252] Proposed CSDDD (unofficial version, 2024), art 2 lit 3a.
[253] Proposed CSDDD (unofficial version, 2024), art 2 lit 2.
[254] Proposed CSDDD (unofficial version, 2024, art 2 lit 2a.
[255] Ventura 'Corporate Sustainability Due Diligence' *(n 2)*
[256] Proposed CSDDD (2022).
[257] European Parliament, 'Corporate due diligence rules agreed to safeguard human rights and environment' (2023) <https://www.europarl.europa.eu/news/en/press-room/20231205IPR15689/corporate-due-diligence-rules-agreed-to-safeguard-human-rights-and-environment> (EP 'Corporate due diligence rules') accessed 30 January 2024.
[258] European Commission, 'Corporate sustainability due diligence' <https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en?prefLang=de> accessed 30 January 2024 (EC, 'Corporate sustainability due diligence').
[259] McGowan *(n 14).*

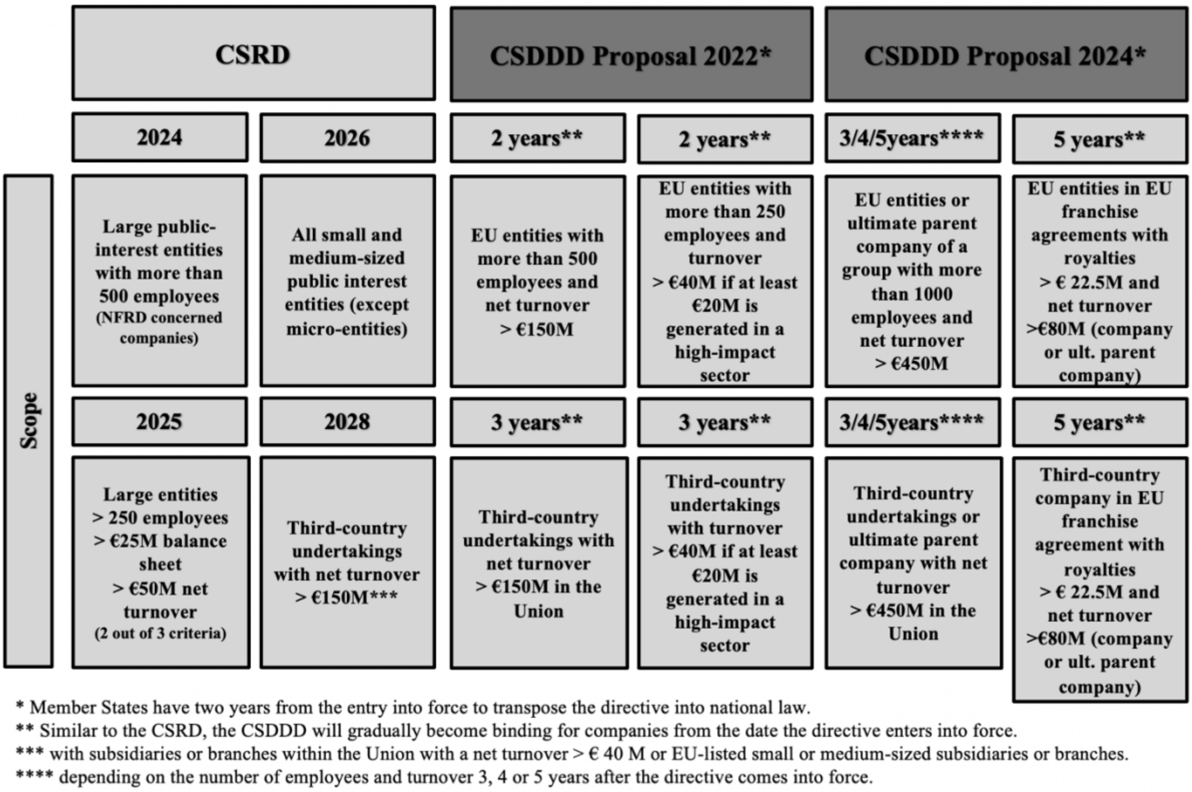

Figure 11 Scope and Applicability of the NFRD, CSRD, and proposed CSDDD at a Glance[260].

Different sources provide varying timelines for companies to comply with the mandatory transposition of the CSDDD Proposal 2022. *Figure 11* contains the most recent information published by KPMG[261]. The amended CSDDD has also significantly extended the transposition. However, Article 11 CSDDD Proposal 2024, which regulates reporting, is excluded.[262]

Despite the 2024 amendments diluting the scope and content of the regulations, companies are still obligated to carry out environmental DD and adopt a transition plan. The directive imposes duties on companies regarding their operations, subsidiaries, and chain of activities.[263]

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[260] Proposed CSDDD (2022) (2) (a) (b); Proposed CSDDD (unofficial version, 2024), art 30.
[261] KPMG, 'Progress on the EU Corporate Sustainability Due Diligence Directive' <https://kpmg.com/xx/en/home/insights/2024/02/progress-on-the-eu-corporate-sustainability.html> accessed 24 February 2024.
[262] Proposed CSDDD (unofficial version, 2024), art 30.
[263] Proposed CSDDD (unofficial version, 2024).

While the proposed CSDDD 2022 extended the DD requirement to companies' upstream and downstream activities across their value chain and introduced the concept of "established business relationship"[264], the proposed CSDDD 2024 suggests a new concept of "chain of activities," which has a narrower focus. The chain of activities covers

> *"(i) activities of a company's upstream business partners related to the production of goods or the provision of services by the company [...], and*
>
> *(ii) activities of a company's downstream business partners related to the distribution, transport and storage of the product, where the business partners carry out those activities for the company or on behalf of the company [...]"*[265]

A " business partner" is a company

> *"(i) with whom the company has a commercial agreement related to the operations, products or services of the company or to whom the company provides services [...] (direct business partner), or*
>
> *(ii) which is not a direct business partner but which performs business operations related to the operations, products or services of the company (indirect business partner)"*[266]

[264] Proposed CSDDD (2022), art 3.
[265] Proposed CSDDD (unofficial version, 2024), art 3 (g).
[266] Proposed CSDDD (unofficial version, 2024), art 3 (e).

3.3.1.2. Obligation on Environmental Due Diligence and Climate Change Strategies

Obligation on Environmental Due Diligence

In line with the UN Guiding Principles on Business and Human Rights[267] and the OECD Due Diligence Guidance for Responsible Business Conduct[268], Article 4 of the proposed CSDDD requires affected companies to

> *"conduct risk-based [...]environmental due diligence [...] by carrying out the following actions:*
> *(a) integrating due diligence into their policies and risk management systems in accordance with Article 5;*
> *(b) identifying and assessing actual or potential adverse impacts in accordance with Article 6 [...];*
> *(c) preventing and mitigating potential adverse impacts, and bringing actual adverse impacts to an end and minimising their extent in accordance with Articles 7 and 8;*
> *(cb) providing remediation to actual adverse impacts in accordance with Article 8c;*
> *(cc) carrying out meaningful engagement with stakeholders in accordance with Article 8d;*
> *(d) establishing and maintaining a notification mechanism and complaints procedure in accordance with Article 9;*
> *(e) monitoring the effectiveness of their due diligence policy and measures in accordance with Article 10;*
> *(f) publicly communicating on due diligence in accordance with Article 11."*[269]

Article 4 lit 2-3a of the proposed CSDDD contains information and resource sharing rules.[270] Moreover, Article 4a on *Due diligence support at a group level* was added.[271]

[267] United Nations, 'Guiding Principles on Business and Human Rights' (2011) <https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf> accessed 24 February 2024.
[268] OECD, 'OECD Due Diligence Guidance for Responsible Business Conduct' (2018) <https://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf> accessed 24 February 2024.
[269] Proposed CSDDD (unofficial version, 2024), art 4.
[270] Proposed CSDDD (unofficial version, 2024), art 4 lit 2-3a.
[271] Proposed CSDDD (unofficial version, 2024), art 4a.

According to Article 4 (a) in conjunction with Article 5 of the Proposed CSDDD, companies should integrate DD into their policies and risk management systems and have a DD policy that ensures risk-based DD. This policy, developed in collaboration with employees and their representatives, should outline the company's approach to DD, its code of conduct, and the processes for implementation. Companies must annually review this policy.[272]

As per Article 4 (b) in conjunction with Article 6 of the Proposed CSDDD, companies must take appropriate measures to identify and assess actual and potential environmental impacts, both from their operations and subsidiaries, as well as from their chains of activities[273].

Companies must "take appropriate measures to prevent, or where prevention is not possible or not immediately possible, adequately mitigate potential [...] adverse impacts that have been, or should have been, identified [...]", as stated in Article 4 (c) in conjunction with Article 7 of the Proposed CSDDD. These actions include collaborating with industry or multi-stakeholder initiatives to develop and implement a prevention action plan, seeking contractual assurances from direct business partners, and extending these assurances throughout the chain of activities.[274] However, it is important to note that these actions should not be seen as mere box-ticking but as proactive measures to prevent adverse impacts. Furthermore, companies should make essential investments, amend their business plans, strategies, and operations, and assist SME business partners. Suppose potential adverse impacts cannot be prevented or mitigated. Companies should seek contractual assurances in that case. If not effective, refrain from entering into new relations or extending existing ones with partners connected to this chain of activities. They may also temporarily suspend ties[275].

Companies are required to "take appropriate measures to bring actual adverse impacts that have been, or should have been, identified [...] to an end" or "where the adverse impact cannot immediately be brought to an end, [...] minimize the extent of such an impact" under Article 4(c) in conjunction with Article 8 of the Proposed CSDDD. They are expected to either end such impacts or minimize their extent. Suppose the adverse impact cannot be immediately resolved. In that case, companies should implement a corrective action plan and obtain

[272] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 5.
[273] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 6.
[274] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 7.
[275] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 7.

contractual assurances from their business partners to comply with the code of conduct. These assurances should be extended throughout the chain of activities. Additionally, companies should make essential investments, amend their business plans, strategies, and operations, assist SME business partners, and provide remediation.[276] Article 8(c)[277] outlines the remediation process for actual adverse impacts, while Article 8(d)[278] emphasizes the importance of engaging stakeholders meaningfully.

Art 4 (d) in conjunction with Article 9 of the Proposed CSDDD, stipulates that companies are required to establish a procedure that allows persons and organizations with legitimate concerns about the adverse impacts of the company's operations, subsidiaries, or business partners in the chains of activities to file complaints. [279]

Companies are mandated by Art 4 (e) in conjunction with Article 10 of the Proposed CSDDD to regularly assess their operations, subsidiaries, and business partners related to the chains of activities. The purpose of these assessments is to evaluate the adequacy and effectiveness of DD on at least an annual base.[280]

Art 4 (f) in conjunction with Article 11 of the Proposed CSDDD outlines the reporting requirements for companies not subject to the CSRD. These companies are expected to publish an annual statement on their website. The EC will define the reporting content and criteria through delegated acts by March 31, 2027.[281] Article 11a on the *Accessibility of information on the European Single Access Point (ESAP)* has been added.[282]

If a company intentionally or negligently fails to adhere to the responsibilities prescribed in Articles 7 and 8 of the Proposed CSDDD, when the right, prohibition, or obligation listed in Annex I is aimed to protect the natural or legal person, or as a result of such a failure, a damage to the natural or legal person's legal interest protected under national law was caused the company should be held liable (civil liability). However, a company is not responsible if the

[276] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 8.
[277] Proposed CSDDD (unofficial version, 2024), art 8c.
[278] Proposed CSDDD (unofficial version, 2024), art 8d.
[279] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 9.
[280] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 10
[281] Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 11.
[282] Proposed CSDDD (unofficial version, 2024), art 11a.

damage caused by its business partners in its chain of activities. Article 22 lit 2-5 of the Proposed CSDDD contains further specifications.[283]

Obligation on Climate Change Strategies

Apart from the DD responsibilities, the proposed directive aims to establish an obligation to combat climate change. Therefore, Article 15 of the Proposed CSDDD requires companies to

> *"adopt and put into effect a transition plan for climate change mitigation which aims to ensure, through best efforts, that the business model and strategy [...] are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement and the objective of achieving climate neutrality as established in Regulation (EU) 2021/1119, including its intermediate and 2050 climate neutrality targets, and where relevant, the exposure of the company to coal-, oil- and gas-related activities."*[284]

The new phrase "aims to ensure, through best efforts," weakens the provision of the Proposed CSDDD 2022[285]. Nevertheless, the amendment includes information on the content of the transition plan. The plan should include time-bound targets and also specify absolute emission reduction targets for GHG emissions for scopes 1, 2, and 3, information on decarbonization levers and key actions, planned investments, and a description of the role of administrative, management, and supervisory bodies[286]. It is worth noting that companies that already comply with the CSRD are exempt from this obligation[287].

Each member should establish a supervisory authority to ensure compliance with the DD obligations (Articles 5 to 11) and the climate change strategy obligation (Article 15).[288] This authority should be empowered to request information, conduct investigations, order cessation

[283] Proposed CSDDD (unofficial version, 2024), art 22.
[284] Proposed CSDDD (unofficial version, 2024), art 15.
[285] Proposed CSDDD (2022), art 15.
[286] Proposed CSDDD (unofficial version, 2024), art 15 lit 1.
[287] Proposed CSDDD (unofficial version, 2024), art 15 lit 3.
[288] Proposed CSDDD (unofficial version, 2024), art 17.

of infringements, abstention from any repetition or remedial action, impose penalties, and adopt interim measures[289].

While the proposed directive 2022 initially included a duty of care for directors, requiring directors to consider the consequences of their decisions on sustainability[290], and a director responsibility to establish and oversee the company's DD actions[291], both these provisions have been removed in the amended version 2024.[292]

3.3.1.3. Material Scope: Adverse Environmental Impact

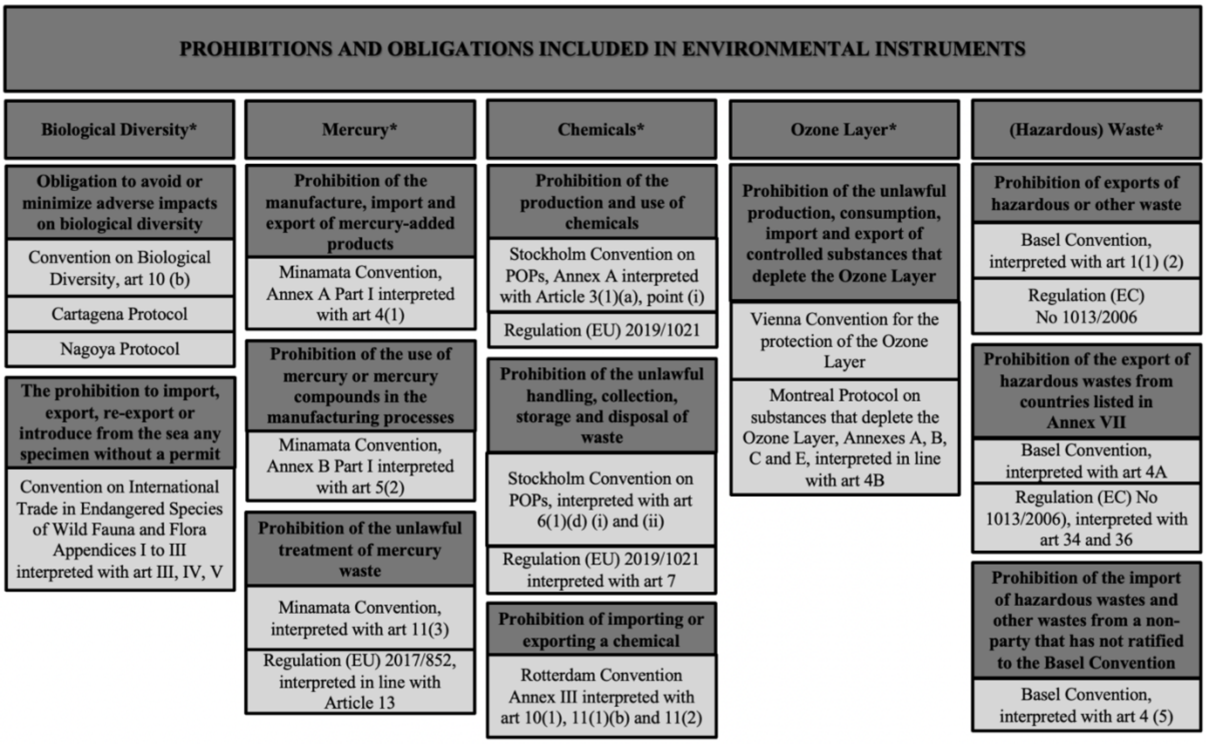
The Proposal defines "adverse environmental impact" as "an adverse impact on the environment resulting from the breach of the prohibitions and obligations listed in Part I, points 18 and 19, and Part II of Annex I, [...]."[293] The additions, "Part I, points 18 and 19", were incorporated through the latest amendment.

Part 1 includes a list of rights and prohibitions contained in international human rights instruments. Point 18 prohibits actions leading to measurable environmental degradation, including soil, water, or air pollution, excessive water use, land degradation, and deforestation that significantly disrupt food production and preservation, deprive individuals of access to safe drinking water, hinder access to or destroy sanitary facilities, or endanger health, safety, or lawful property, or substantially adversely affect ecosystem services.[294]

Point 19 safeguards the rights of individuals, groups, and communities to land and resources and not be deprived of subsistence. It prohibits unlawful eviction or seizure of land, forests, and waters during their acquisition, development, or utilization, including actions like deforestation.[295]

[289] Proposed CSDDD (unofficial version, 2024), art 18.
[290] Proposed CSDDD (2022), art 25.
[291] Proposed CSDDD (2022), art 26.
[292] Proposed CSDDD (unofficial version, 2024).
[293] Proposed CSDDD (unofficial version, 2024), art 3 (b).
[294] Annex to the Proposed CSDDD (unofficial version, 2024).
[295] Annex to the Proposed CSDDD (unofficial version, 2024).

Part 2 outlines a series of environmental law prohibitions and obligations established by various international environmental conventions. *Figure 12* provides an overview of the topics covered in Part 2: biodiversity, mercury, chemicals, ozone layer, and hazardous waste.[296]



* The classification is based on the author's assessments.

Figure 12 Annex, Part II at a Glance[297].

[296] Annex to the Proposed CSDDD (unofficial version, 2024).
[297] Annex to the Proposed CSDDD (unofficial version, 2024).

3.4. Reciprocal Indication of the CSRD and CSDDD and its Differences

Chapter 2.4.1 underscores the close connection between reporting and sustainable corporate governance. The EC's Proposal for a CSDDD 2022 further underscores this, noting that while the NFRD indirectly did enhance responsible business operation, it failed to tackle adverse effects in value chains adequately. In contrast, the CSRD broadens the scope and imposes a substantive corporate duty on certain companies to report on the (human rights and) environmental DD in their own operations, subsidiaries, and value chains and on climate change strategies (see Chapter 3.2).[298] This extension highlights the crucial role of the CSRD in addressing the limitations of the NFRD regarding DD and climate change.

The Proposal 2022 also identifies several synergies: (1) The reporting process to be set up is similar to the DD process. (2) The CSRD represents the last step of DD, namely reporting. (3) The proposed CSDDD directly requires companies to have a climate change plan, which must be reported under the CSRD. (4) The proposed CSDDD's direct obligations should positively impact the completeness and effectiveness of the CSRD reporting obligation. (5) Finally, both directives should complement each other, increase effectiveness, and foster behavioral change in companies[299]. In addition, a study has pointed out that reporting and DD requirements are mutually reinforcing, with reporting on DD steps taken as evidence of compliance with DD obligations. Mandatory DD would not impose a significant additional burden on companies that already report on carefully carried out DD. However, for those who only report but do not have a substantial DD policy, an assessment of whether adequate risk management measures are in place for both DD and reporting requirements would be required.[300] Besides, companies subject to the CSRD are excluded from Article 15 Combating Climate Change in its current version[301], which underlines the impact of the CSRD.

It is critically questioned whether a common regulation and a common set of relevant sustainability standards for reporting requirements, DD requirements, financial market requirements, valuations, and ratings would not be the solution. Furthermore, because 99 % of

[298] Proposed CSDDD (2022), Explanatory Memorandum.
[299] Proposed CSDDD (2022).
[300] Smit et al. *(n 124).*
[301] Proposed CSDDD (unofficial version, 2024), art 15 lit 3.

the European economy comprises SMEs, a standard scope within the meaning of the CSRD is put forward, ensuring that all essential companies, including SMEs, are considered.[302]

Nevertheless, there are some differences between the CSRD and CSDDD regulations. For example, while the CSRD introduces reporting obligations[303] – steering behavior indirectly[304]– the CSDDD mandates a direct obligation to implement climate change strategies[305] and perform environmental DD[306]. However, the environmental law catalog in Annex Part II[307] significantly restricts the responsibility for environmental DD. Such a limitation is absent in the ESRS, which provides a general definition of DD. Another key difference is the enforcement mechanism. The CSRD imposes administrative sanctions for non-compliance with reporting requirements[308], whereas the CSDDD proposes civil liability to enforce compliance[309].

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302 International Federation of the Economy for the Common Good, 'Position paper on the Corporate Sustainability Due Diligence Directive' (2022) <https://www.ecogood.org/wp-content/uploads/2022/09/ECG-Position-Paper-on-CSDDD-August-2022.pdf> assessed 26 February 2024.
303 CSRD, art 1 (4).
304 Smit et al. *(n 124)*.
305 Proposed CSDDD (2022), art 4.
306 Proposed CSDDD (2022), art 15.
307 Annex to the Proposed Sustainability Due Diligence Directive.
308 CSRD, art 2 (20).
309 Proposed CSDDD (unofficial version, 2024), art 22.

4. Research Methodology and Design

4.1. Research Design

This research takes a comprehensive approach, employing a qualitative literature analysis, to delve into the state of research and sustainability reporting regulation on environmental DD and climate change strategies within the EU. The first section of the thesis is built on a review of publications, literature, and legal acts, laying the groundwork for understanding the CSRD and the CSDDD Proposal. This was followed by developing a set of comparative indicators and a readiness assessment model (see 4.3 Assessment Model – Measuring Readiness), mirroring the theoretical framework of an established maturity assessment model. This model is designed to measure readiness based on company publications in three steps:

i. Analysis of the sample companies' current environmental DD practices and climate change strategies
ii. Evaluation of the sample companies' level of compliance with CSRD reporting requirements on environmental DD and climate change strategies
iii. Discussion of results and the potential impact of the CSRD on the sample companies' current approach to environmental DD and climate change strategies.

Additionally, in the discussion chapter, the implications of the CSRD on environmental DD and climate change strategies are derived and discussed based on the findings of the literature and legal and readiness analyses (see Chapter 6.2). A comparative study of two sample companies was based on their publicly assessable publications to provide practical relevance. These publications are comprehensive resources, easily accessible on the companies' websites, and rich in information. Moreover, considering that both directives require the future publication of specific information, the review of reports just before the implementation of the new obligations provides an opportune moment to assess companies' readiness for compliance. The chosen research instrument offers certain advantages, particularly regarding time efficiency and the ability to delve into the complexity of corporate sustainability commitments. However, it is essential to note that the results may vary when selecting different sample companies, and the outcomes of a readiness assessment based on the publications of the same companies might differ when using alternative models. These limitations should be considered when interpreting this study's findings (see also Chapter 6.4).

4.2. Data Collection

The data collection process in this study entailed a mixed method[310], combining qualitative and quantitative data collection and qualitative analysis of secondary sources to answer the research question. As secondary resources, publications of selected retail companies, particularly annual and sustainability reports and publicly accessible corporate policies, were examined. Once the assessment model had been developed and the sample companies had been selected, relevant information was identified in the publications above. This information was then linked to individual indicators, and the author evaluated its content using a designated assessment key (see Chapter 4.3).

[310] Ranjit Kumar, 'Research Methodology : A Step-by-Step Guide for Beginners. 14' (5th edition. London: SAGE Publications, 2019).

4.3. Assessment Model – Measuring Readiness

According to research, there are several ways to interpret organizational readiness. Beyond its psychological connotations, readiness also refers to structural characteristics, including organizational capabilities and resources[311]. The first step in developing a solid assessment model involves creating a set of composite indicators (hereafter CIs). The indicators were developed based on the *Handbook on Constructing Composite Indicators. Methodology and User Guide*[312] authored by the OECD and the Econometrics and Applied Statistics Unit of the Joint Research Centre (JRC) of the EC. Initially designed to establish indicators to compare and rank country performance, recommendations drawn from this handbook were adapted for this study.

The readiness indicators are designed for ease of use. Therefore, additional information from other topical standards was excluded, focusing solely on the ESRS 2 and ESRS E1. In addition, the DRs of ESRS 2 and ESRS E1 have been summarized and simplified. This approach leads to certain limitations (see 6.4); however, it ensures that the model is straightforward and user-friendly.

Against this background, a framework of CIs was developed to measure the comparative readiness of the selected sample companies: By analyzing the relevant ESRS standards identified in the chapter Legal Framework (see Chapter 3.2.1.3), a theoretical framework was derived (*see Table 2*), resulting in two dimensions: (1) Reporting on Environmental Due Diligence and (2) Reporting on Climate Change Strategies, each with further sub-components. Indicators in subdimension (1) reflect the core elements of DD found in ESRS 2, while the indicators in subdimension (2) mirror the DRs of ESRS E1. For simplicity, additional information in other topical standards has been disregarded, and all used ESRS were simplified and interpreted in the context of this study (*see Attachments Table 20 and Table 21*). As a result, this sub-categorization, based on the ESRS, allows a differentiated evaluation. Please refer to *Attachments Table 20 and Table 21* for a detailed definition of each indicator.

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[311] Bryan J Weiner, Halle Amick and Shoou-Yih Daniel Lee, 'Review: Conceptualization and Measurement of Organizational Readiness for Change: A Review of the Literature in Health Services Research and Other Fields' [2008] Med Care Rev 65/4 379.

[312] OECD, 'Handbook on Constructing Composite Indicators. Methodology and user guide.' [2008] (OECD 'Handbook').

Dimension	Subdimension	Indicator
Reporting on Environmental DD	DD-Mapping	DD-Mapping
	Embedding DD in Governance, Strategy and Business Model	Governance disclosure
		Sustainability incentivization
		Material IRO and interaction with SBM
	Engaging with affected Stakeholders	Governance disclosure
		Stakeholder perspectives
		DD processes
		Sustainability policies
	Identifying and Assessing Adverse Environmental Impacts	DD processes
		Material IRO and interaction with SBM
	Taking Actions to Address Adverse Environmental Impacts	Sustainability initiatives
	Tracking the Effectiveness of these Efforts and Communicating	Sustainability metrics
		Performance monitoring
Reporting on Climate Change Strategies	Governance (GOV)	Climate-related incentivization
	Strategy (SBM)	Transition plan
		Material climate-related IRO and interaction with SBM
	Impact, Risk and Opportunity Management (IRO)	Climate-related DD processes
		Climate policies
		Climate initiatives
	Metrics and Targets (MT)	Climate targets
		Energy profile
		GHG emissions
		Carbon offset initiatives
		Carbon pricing
		Climate-related financial effects

Table 2 Framework of Composite Indicators.

A differentiated evaluation approach was required to assess the readiness of the target companies. As specific indicators, especially those of a descriptive nature, could not be quantified, a readiness assessment model was created. This model is based on the *Proposed Industry 4.0 Maturity Model* that Akdil, Ustundag, and Cevikcan established[313]. It categorized

[313] Kartal Yagiz Akdil, Alp Ustundag and Emre Cevikcan 'Maturity and Readiness Model for Industry 4.0 Strategy' in Alp Ustundag and Emre Cevikcan (eds) Industry 4.0: Managing The Digital Transformation (Springer Series in Advanced Manufacturing 2018).

Maturity into four levels: *Absence*, *Existence, Survival,* and *Maturity,* and assigned weights ranging from 0 for *Absence* to 3 for *Maturity* to assess a maturity level. Akdil, Ustundag, and Cevikcan's model was created based on a detailed examination of other existing models. Due to time and resource limitations and for the purposes of this thesis, the model was adapted and simplified.

Beginner	(0 points)	indicates a level that does not fulfill the ESRS/CSRD requirements or whose required information was not found in the publications studied.
Intermediate	(1 point)	is a level at which the company discloses information in outline form, demonstrating knowledge of the disclosure content of a particular indicator, but does not provide substantive information on it or state that it will report on this indicator from a later financial year.
Experienced	(2 points)	represents a level at which a company predominantly discloses information on the regulatory content of a particular indicator in a way that demonstrates a substantive engagement with the topic and provides the addressee with a fundamental picture.
Expert	(3 points)	is a readiness level at which a company discloses information on the regulatory content of a particular indicator in a comprehensive and comprehensible manner.

Table 3 Evaluation Key for Readiness Level Determination.

Based on the evaluation key *(see Table 3)*, each indicator in this readiness assessment model is scored with 0-3 points. Subsequently, the evaluated data points are assigned to the corresponding indicators under dimensions and sub-dimensions to determine the degree of readiness on an individual and an overall basis. The following equations were applied to assess the readiness level: (1) For each sub-dimension, the values of its assigned indicators were summed up. This total was then divided by the number of indicators within that sub-dimension, giving us the mean value (=Readiness-Level) for each sub-dimension. (2) For each dimension, the mean values of its sub-dimensions were summed up. This sum was then divided by the number of sub-dimensions within that dimension, resulting in each dimension's mean value (=Readiness-Level). (3) To calculate the overall readiness score, the mean values of all dimensions were summed up. This total was then divided by the total number of dimensions, resulting in an overall readiness score. Inspired by the *Proposed Industry 4.0 Maturity Model* by Akdil, Ustundag, and Cevikcan[314], *Table 4* provides limit values for each level, serving as a basis for the classification and assessing the readiness level.

[314] Akdil, Ustundag and Cevikcan *(n 313).*

	Limit values	
Readiness Level	Low	High
Level 0: Beginner	0.00	0.90
Level 1: Intermediate	0.90	1.80
Level 2: Experienced	1.80	2.70
Level 3: Expert	2.70	3.00

Table 4 Limit Values for the Readiness Level Determination.

A performance benchmarking approach was used to get comparative results, measure how advanced a company is compared to another, and identify improvement strategies. Herby, Bhutta and Huq's suggestions about benchmarking were taken into consideration[315]; however, due to the limited scope of this thesis, the approach was simplified. For example, the analysis was not done by a team but by the author herself (see Chapter 4.6).

4.4. Ethical Considerations

This research used a mixed methodology, utilizing various publicly available data sources. The study's ethical considerations were considered, with a firm commitment to ethical guidelines and principles. The privacy and confidentiality of the companies were ensured. Neither the companies nor their representatives were involved in the study, leading to the anonymization of the companies and the exclusion of any identifying information. Furthermore, the author is committed to neutrality and aware of bias.

[315] Mohammed Khurrum S. Bhutta and Faizul Huq, 'Benchmarking – Best Practices: An Integrated Approach' [1999] Benchmarking: An International Journal 6/3 254.

4.5. Sample Selection

The field of mandatory reporting on environmental DD and climate change strategies still needs to be explored in more detail. Consequently, the sample design for this study relies on judgment sampling or purposive sampling[316].

The comparative analysis is centered around the food retail sector due to its significant impact on resource consumption and global CO2 emissions. This impact is caused directly and primarily through its supply chain. A McKinsey & Company and EuroCommerce study revealed that the manufacturing and transporting of livestock, crops, and food contribute to 25 % of global GHG emissions, use up 50 % of arable land, and consume the majority of freshwater[317]. Other researchers estimate that global food-system emissions comprise 30 % of the world's GHG emissions. This is a significant concern, particularly in light of the growing worldwide population and the rising demand for diverse food.[318] Notably, as of 2022, 33 % of the top fifty European retailers and wholesalers have established science-based decarbonization targets[319].

Another reason for focusing on the food retail sector is its size, bargaining power, and strategic position in the supply chain. Food retailers are critical players in promoting sustainable food systems as they can drive sustainability in both production and consumption.[320]

Despite recent initiatives by retailers to introduce responsible practices in their supply chain, challenges remain[321]. Reports suggest that sustainability efforts in the retail sector remain marginal, fragmented, and unsystematic[322]. The CSRD and proposed CSDDD play a role in

[316] Kumar *(n 310).*
[317] Sebastian Gatzer and Daniel Roos, 'Disruption and Uncertainty – The State of Grocery Retail 2021: Europe' (2021) <https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/the%20path%20forward%20for%20european%20grocery%20retailers/disruption-and-uncertainty-the-state-of-grocery-retail-2021-europe-final.pdf> accessed 14 November 2023.
[318] Li et al. *(n 17).*
[319] Bartosz Jesse et al., 'Transforming the EU retail & wholesale sector' (2022) <https://www.mckinsey.com/industries/retail/our-insights/transforming-the-eu-retail-and-wholesale-sector#/,> assessed 22 February 2024.
[320] Ytterhus, Arnestad and Lothe *(n 18).*
[321] Hall [2001] and Johnson [2004] cited in Olga Chkanikova and Oksana Mont 'Corporate Supply Chain Responsibility: Drivers and Barriers for Sustainable Food Retailing' [2012] Corp Soc Responsib Environ Mgmt 22, 65.
[322] BIO Intelligence Service [2009]; European Commission [2010], cited in: Chkanikova and Mont *(n 321).*

this context. A study analyzing the drivers and barriers for retailers to introduce sustainability in their supply chains found that regulatory, resource, social, and market factors influenced retailers' sustainability agendas[323]. The CSRD and the proposed CSDDD as compulsory regulations are regulatory factors deriving from (inter-) national government pressure, which outlines a particular sustainability agenda and aims to harmonize across Europe. Moreover, both regulations can be contextualized with resource factors, as they are closely related to shareholder, supplier, and investor demands, and financial and human resources. With their relevance for ethical consumer behavior and reputation, the regulations can be considered in the context of social factors stemming from society, NGOs, media, academia, and court pressure. The CSRD and proposed CSDDD also impact market factors from customers, competitors, industry associations, and service providers' pressure, such as demands, competition, and industrial norms. An example of a recent trend in consumer demand identified in a study by Ernest & Young is the growth of private-label products[324]. These goods are sold using the store's name rather than the manufacturer's[325]. The same study showed that 53 % of customers aim to reduce food expenses, with 36 % intending to buy more private-label products than in 2022. Additionally, 84 % of respondents believe private labels are equal or higher in quality than branded products.[326] While this trend might be an opportunity for economic growth, it might also prompt food retailers to take a closer look at their food supply chain and use their bargaining power and strategic position in conjunction with the CSRD or CSDDD to contribute to more sustainability in the food sector.

When selecting sample companies within the food retail sector, two companies were considered: Company 1 (hereafter C1) and Company 2 (hereafter C2). Five elements were considered for the selection *(see Table 5).*

[323] Chkanikova and Mont *(n 321).*
[324] McKinsey & Company, 'Living with and responding to uncertainty – State of Grocery Retail 2023: Europe' (2023) <https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/state%20of%20grocery%20europe%202023%20living%20with%20and%20responding%20to%20uncertainty/living-with-and-responding-to-uncertainty-the-state-of-grocery-retail-2023-europe.pdf> accessed 14 November 2023.
[325] Cambridge University Press, 'Meaning of private-label in English' <https://dictionary.cambridge.org/dictionary/english/private-label#:~:text=Meaning%20of%20private%2Dlabel%20in%20English&text=used%20to%20describe%20goods%20that,brands%20with%20private%2Dlabel%20products> accessed 14 November 2023.
[326] McKinsey & Company *(n 324)* accessed 14 November 2023.

CSRD Affectedness	Based on their annual reports, both C1 and C2 had a balance sheet total of over 25 million, net sales of over 50 million, and more than an annual average of 250 employees[327]. Therefore, as large companies, they will have to report by the CSRD from 2025 onwards[328].
Non-public-interest entities	Although both C1 and C2 have a balance sheet total of over EUR 20 million, a net turnover of over EUR 40 million, and more than an average of 250 employees[329], they are not publicly listed[330]. As a result, they will have to fulfill extended sustainability reporting obligations for the first time.
Located in a country with a local supply chain act	Both C1 and C2 are registered in Germany, where the German Supply Chain Act came into force on January 1, 2023[331]. Therefore, both companies already have to deal with their supply chain governance.
Market relevance	Both sample companies are among the highest-turnover food retailers in Europe and have an extensive assortment of private brands. Due to this fact, they significantly impact the total food value chain.
Publicly available sustainability information	Both C1 and C2 have sustainability reports, annual reports, and corporate responsibility policies that are publicly accessible on their websites. These reports provide comprehensive sources of environmental information necessary to assess their readiness.

Table 5 Sample Selection Criteria.

Due to ethical considerations, the assessed companies were anonymized (see Chapter 4.4). However, the quality of the assessment and this thesis's aims are not affected. Due to resource restraints, the sample size was limited to two sample companies; however, it was sufficient to receive comparative results.

4.6. Data Analysis

This chapter describes the data examined and the individual evaluation results and analyzes them using the indicators. The analysis was conducted by the author herself, with great emphasis on neutrality. However, bias cannot be completely ruled out to a certain extent. As stated in Chapters 4.2 and 4.5, the analysis refers to published data from the past. Therefore, the sample companies may have adopted new processes or strategies not considered in this research (see Chapter 6.4). Please note that all results have been rounded to two decimal places. For detailed calculations, see Attachments *Figure 18* and *Figure 19*.

[327] Commission Delegated Directive OJ L, 2023/2775..
[328] CSRD, art 1 in conjunction with art 5.
[329] NFRD, art 1 lit. 1 in conjunction with Accounting Directive, art 3 (7).
[330] NFRD, art 1 lit. 1 in conjunction with Accounting Directive, art 2.
[331] German Act on Due Diligence Obligations in Supply Chains

Reporting on Environmental Due Diligence

In this section, the score of the sample companies is determined for each environmental DD indicator. Tables 6 to 11 show the relevant scores for each dimension of environmental DD. A brief justification for the individual scores achieved follows each table.

	DD-Mapping	
# of question	Score (C1)	Score (C2)
1	0	0
Readiness Score	0	0

Table 6 Scoring: DD-Mapping.

#1 DD-Mapping: Both companies, C1 and C2, adhere to the GRI Reporting Framework[332] in their reports and have published GRI Indexes. However, they have not explicitly provided a DD mapping required under the CSRD. Despite this, the logic of the GRI Content Index provides a reliable foundation for DD mapping. The scoring for #1 DD-Mapping can be found in *Table 6.*

	Embedding DD in Governance, Strategy and Business Model	
# of question	Score (C1)	Score (C2)
1	1	2
2	0	1
3	2	2
Readiness Score	1.00	1.67

Table 7 Scoring: Embedding Due Diligence in Governance, Strategy and Business Model.

#1 Governance disclosure: C1 outlines the formation of a specialized department tasked with overseeing specific policies, their composition, and how they operate and cooperate with other departments. It also identifies the position responsible for sustainability matters. However, how CSR is organized needs more information about management and supervisory bodies, how they are informed, and what matters they address. Therefore, it is less comprehensive than required by DR GOV-2. C2 provides a more detailed description of

[332] Global reporting initiative *(n 40)* assessed 1 March 2024.

sustainability responsibilities across various positions and levels, as well as the group's organizational structure and distribution between departments. Nonetheless, there is a need for further explanation on how administrative, management, and supervisory bodies are informed about sustainability matters and what information and matters they addressed during the reporting period, as requested by DR GOV-2. The scoring for #1 Governance disclosure can be found in *Table 7*.

#2 Sustainability incentivization: The analysis found no evidence of integrating sustainability-related performance in incentive schemes in C1's and C2's latest annual or sustainability reports. However, C2 provided general information about key management's remuneration and its breakdown, which can serve as a foundation for future development, even though it does not explicitly link to sustainability issues. The scoring on #2 Sustainability incentivization is shown in *Table 7*.

#3 Material IRO and interaction with SBM: Two companies, C1 and C2, conducted a materiality assessment to identify important sustainability issues. C1 has published its approach, but it could be more specific in linking its strategy to the identified material topics. C2, on the other hand, presents its materiality analysis and material topics clearly and concisely. The company has formed various pillars such as packaging, climate protection, and working conditions for structuring purposes that form the basis for individual strategic approaches. C2 also links its risks and opportunities to its operations and demonstrates a detailed strategic approach. However, both companies should include a statement on the current and expected financial effects of material risks and opportunities on their financials. The scoring on #3Material IRO and interaction with SBM is shown in *Table 7*.

	Engaging with affected Stakeholders	
# of question	Score (C1)	Score (C2)
1	1	2
2	2	3
3	1	3
4	3	3
Readiness Score	1.75	2.75

Table 8 Scoring: Engaging with Affected Stakeholders.

#1 Governance disclosure: For information on Government disclosure, see above. The scoring on #1 Governance disclosure is shown in *Table 8.*

#2 Stakeholder perspectives: C1 conducted a materiality assessment through an online stakeholder survey and desk research. The survey focused on four general groups of stakeholders. C1 also engages in dialogue and cooperation with stakeholders, as described in its sustainability approach and guidelines. It participates in multi-stakeholder initiatives and maintains close communication with suppliers. C2 publishes a detailed and comprehensive description of its stakeholders and stakeholder engagement in various formats and forums, with input from a special sustainability board. It also publishes a detailed list of stakeholder groups and information on their inclusion. Additionally, it presents the cooperation with its stakeholders in its materiality analysis in detail. Moreover, it discloses the role of stakeholders in environmental matters in the supply chain. The scoring on #2 Stakeholder perspectives is shown in *Table 8.*

#3 DD processes: C1 has conducted a materiality assessment and involved its stakeholders. One paragraph stated that it has undertaken a sustainability risk analysis on human rights and considered environmental matters in its supply chain. Based on this, actions should be taken. However, C1's risk assessments only focus on human rights impacts. While certain aspects of the social examinations address adverse environmental impacts, they did not conduct a specific evaluation of environmental impacts. C1 puts forward contractual requirements for suppliers, but its policy is rather general. C2, on the other hand, publishes a detailed description of its materiality assessment and stakeholder dialogue. It reports explicitly on its supply chain's environmental dimension and discloses its risk analysis procedure in detail, including its stakeholders and step-by-step process. C2's process not only addresses its own operations but also its supply chain. It has a Code of Conduct for Suppliers and supports its business partners with training. C2's procedure covers all essential DD steps. Moreover, it conducts risk analysis focusing on its private-label products. The scoring on #3 DD processes is shown in *Table 8.*

#4 Sustainability Policies: Both C1 and C2 have established sustainability policies and guidelines, which are available on their websites. The scoring on #4 v is shown in *Table 8.*

	Identifying and Assessing Adverse Environmental Impacts	
# of question	Score (C1)	Score (C2)
1	1	3
2	2	2
Readiness Score	1.50	2.50

Table 9 Scoring: Identifying and Assessing Adverse Environmental Impacts.

<u>#1 DD processes:</u> For information on DD processes, see above. The scoring on #1 DD processes is shown in *Table 9.*

<u>#2 Material IRO and interaction with SBM:</u> See above for information on Material IRO and interaction with SBM. The scoring on #2 Material IRO and interaction with SBM is shown in *Table 9.*

	Taking Actions to Address Adverse Environmental Impacts	
# of question	Score (C1)	Score (C2)
1	2	2
Readiness Score	2.00	2.00

Table 10 Taking Actions to Address Adverse Environmental Impacts.

<u>#1 Sustainability initiatives:</u> C1 and C2 reported their sustainability targets in a table format under different categories. C1 offers further information on these targets in the relevant topical sections of their sustainability report. However, it needs to be more specific in providing certain information required by MDR-A and should link its initiatives to particular measures taken. On the contrary, C2 has published a table with explicit references to the measures taken to achieve specific targets and an overview of the actions taken. The presentations of the initiatives are structured and easy to understand. However, there is still room for improvement in meeting the CSRD requirements. The scoring on #1 Sustainability initiatives is shown in *Table 10.*

	Tracking the Effectiveness of these Efforts and Communicating	
# of question	Score (C1)	Score (C2)
1	3	3
2	2	3
Readiness Score	2.50	3.00

Table 11 Scoring: Tracking the Effectiveness of These Efforts and Communicating.

#1 Sustainability metrics: Both companies surveyed, C1 and C2, demonstrated exemplary performance in effectively tracking and communicating their sustainability metrics. They provide a detailed overview of their sustainability metrics to address significant sustainability concerns. The scoring on #1 Sustainability metrics is shown in *Table 11.*

#2 Performance monitoring: C1 has published a list of goals it intends to achieve within a specific time frame, along with the current status of the related projects. This list is a solid basis for monitoring the company's sustainability performance. However, to comply with the CSRD, C1 needs to include more targets and establish a clear relationship between these targets and the policy objectives. On the other hand, C2's target list is comprehensive and includes specific measures and status tracking, enabling detailed performance monitoring. The scoring on #2 Performance monitoring is shown in *Table 11.*

The analysis shows that the sample companies examined have significantly progressed in some areas. In contrast, information on other areas that have yet to be published must be supplemented *(see Figure 13).* Overall, both already have a solid basis on which they can build with regard to the CSRD. In addition, the analysis shows the areas in which the companies need to sharpen up.

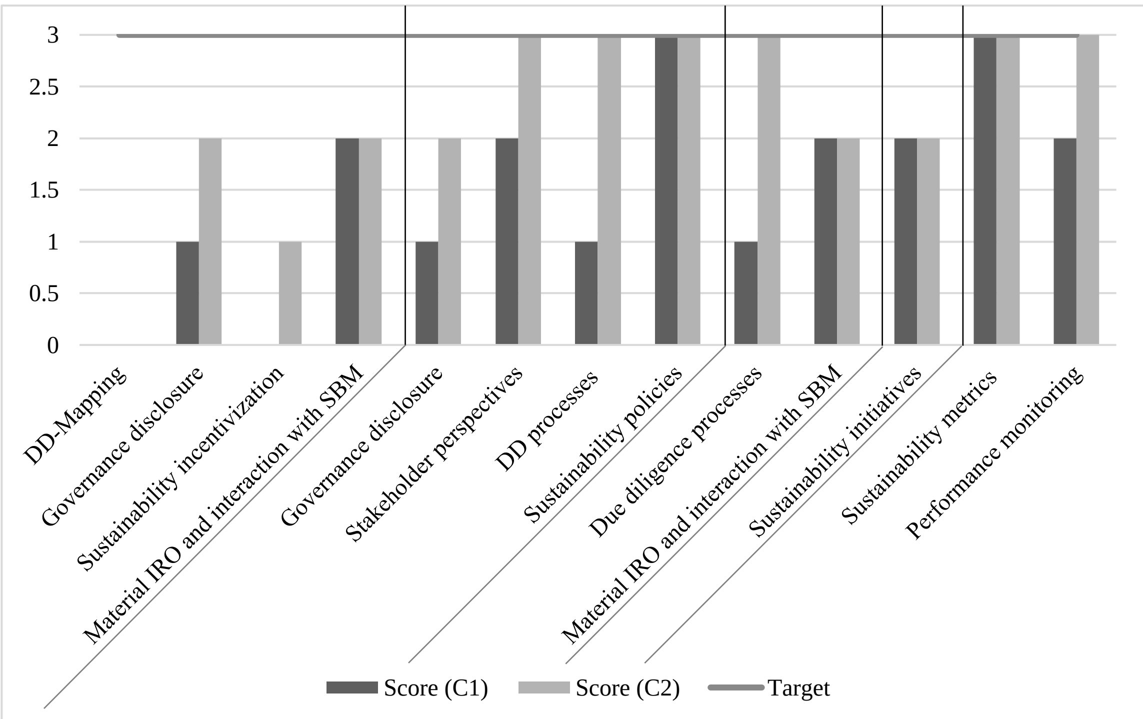

Figure 13 Scoring on Environmental DD Disclosure for Each Sample Company as a Target-Performance Comparison Chart.

Reporting on Climate Change Strategies

The second round of data analysis was conducted to assess the score of the sample companies reporting on their climate change strategies. Tables 12-15 provide the scores for each dimension of climate change strategies. Additionally, a brief justification for the individual scores achieved follows each table.

	Governance (GOV)	
# of question	Score (C1)	Score (C2)
1	0	0
Readiness Score	0	0

Table 12 Scoring: Governance (GOV).

#1 Climate-related incentivization: It was not found in the latest publications of C1 and C2 that climate-related performance is integrated into incentive schemes. However, C2 revealed key management's general remuneration, including a breakdown. Although there is no explicit link to climate-related issues, it can still serve as a foundation for further development. The scoring on #1 Climate-related incentivization is shown in *Table 12*.

	Strategy (SBM)	
# of question	Score (C1)	Score (C2)
1	3	3
2	1	2
Readiness Score	2.00	2.50

Table 13 Scoring: Strategy (SBM).

#1 Transition plan: As a member of the Science Based Targets Initiative (hereafter SBTI), C1 reports on a transition plan that aligns with the Paris Agreement's goal of limiting global warming to 1.5°C. The plan includes ambitious reduction goals for the next few decades, which could lead to achieving climate neutrality by 2050 (though not explicitly stated). C1 reports its organizational approaches for achieving these targets and outlines its past achievements and future reduction goals while detailing GHG emissions in Scope 1, 2 (market and location-based), and 3. It publishes its carbon footprint, including an overview of where these emissions stem from and explicit measures for reaching its goal. In addition to its explicitly stated aim to limit global warming to 1.5°C, C2 also acknowledges the impacts of climate change. It has been actively reducing emissions across various categories and upstream supply chains. The company has established different concepts and measures to achieve its goal and has set measurable targets and key performance indicators, including joining the SBTI. Just as C1 C2 publishes its GHG emissions in Scope 1, 2, and 3, breaking them down into further categories and their origin. Its progress is monitored through annual carbon footprints. The scoring on #1 Transition plan is shown in *Table 13.*

#2 Material climate-related IRO and interaction with SBM: C1 has reported that it is currently setting up a climate risk assessment. At the same time, C2 claims to have a comprehensive and standardized risk management system and acknowledges the presence of physical and transitional risks related to climate. However, the company does not integrate climate-related risks and opportunities into its management report. Nonetheless, it is actively working towards addressing this issue. The scoring on #2 Material climate-related IRO and interaction with SBM is shown in *Table 13.*

	Impact, Risk and Opportunity Management (IRO)	
# of question	Score (C1)	Score (C2)
1	1	2
2	2	2
3	2	2
Readiness Score	1.67	2.00

Table 14 Scoring: Impact, Risk and Opportunity Management (IRO).

#1 Climate-related DD processes: C1 reported that it had yet to conduct a dedicated evaluation of environmental impacts. However, it is in the process of setting up a climate risk assessment. Meanwhile, C2 has a comprehensive and standardized risk management system in place. The company states its awareness of the physical and transitional risks related to climate change. Moreover, C2 has established a comprehensive risk analysis approach to climate protection in its (upstream) supply chain, focusing on private-label products and applying a detailed step-by-step process. This process covers all essential DD steps and climate-related measures. Despite this significant progress, information on scenario analyses is to be supplemented. The scoring on #1 Climate-related DD processes is shown in *Table 14.*

#2 Climate policies: Both C1 and C2 have policies that include climate protection and publish their climate change mitigation and adaptation measures, energy efficiency, and renewable energy deployment. However, both should be formulated and worded more concretely. The scoring on #2 Climate policies is shown in *Table 14.*

#3 Climate initiatives: According to the assessment, C1 and C2 disclosed their actions to mitigate and adapt to climate change but needed to provide information on resources allocated for their implementation. The scoring on #3 Climate initiatives is shown in *Table 14.*

	Metrics and Targets (MT)	
# of question	Score (C1)	Score (C2)
1	3	3
2	3	3
3	3	3
4	1	1
5	1	1
6	0	1
Readiness Score	1.83	2.00

Table 15 Scoring: Metrics and Targets (MT).

#1 Climate targets: C1 and C2 have disclosed their climate-related goals for Scope 1, 2, and 3. These goals are stated in absolute values or percentages from a specific base year. Nevertheless, due to the requirements of the CSRD, information on decarbonization levers should be added. The scoring on #1 Climate targets is shown in *Table 15.*

#2 Energy profile: C1 and C2 reported their absolute energy consumption, energy source, energy efficiency, and share of renewable energy in their overall energy mix. The scoring on #2 Energy profile is shown in *Table 15.*

#3 GHG emissions: Both examined sample companies have disclosed their Scope 1, 2, and 3 GHG emissions and total GHG emissions in metric tonnes of CO2 equivalents. More details should be included concerning the climate-related transition risks and information on GHG emissions in metric tonnes of CO2eq per net revenue. The scoring on #3 GHG Emissions is shown in *Table 15.*

#4 Carbon offset initiatives: C1 addresses offset by purchasing certificates, but there needs to be a comprehensive concrete disclosure on GHG removals and storage in metric tonnes of CO2eq. This disclosure should cover GHG emissions reduction or removal in C1's own operations and value chain, as well as the amount financed by C1 for GHG emission reduction or removal from climate change mitigation projects outside its value chain (e. g., carbon credits), as per the request of ESRS DR E1-7. C2 reports rudimentary compensation through contributing to climate protection projects in its supply chain and cites some projects. However, the disclosure does not include concrete figures. The scoring on #4 Carbon offset initiatives is shown in *Table 15.*

#5 Carbon pricing: C1 has stated that it has created an in-house CO2 price, including information on the calculation process, how it will be utilized, and the goals it aims to achieve. However, how it supports the companies' decision-making and incentivizes implementing climate-related policies and targets must also be addressed. C2 has referenced CO2 pricing concerning its risk management strategy, but there is no clear indication of whether an in-house CO2 pricing system has been established. The scoring on #5 Carbon pricing is shown in *Table 15.*

#6 Climate-related financial effects: In Company 1's publications, no information about Climate-related Financial Effects (ESRS DR E1-9) was found. Company 2's risk management addresses financial risks on a fundamental level; however, to comply with ESRS DR E1-9, C2 may add a specific paragraph on anticipated climate-related financial effects and potential benefits from material climate-related opportunities. The scoring on #6 Climate-related financial effects is shown in *Table 15.*

These benchmarking results showcase two companies' climate change strategies and reporting efforts before the CSRD became relevant. The data analysis indicates that companies C1 and C2 have already made significant progress. However, the study also suggests that the financial aspect of the indicators could be improved. *Figure 14* highlights the specific areas that require more focus.

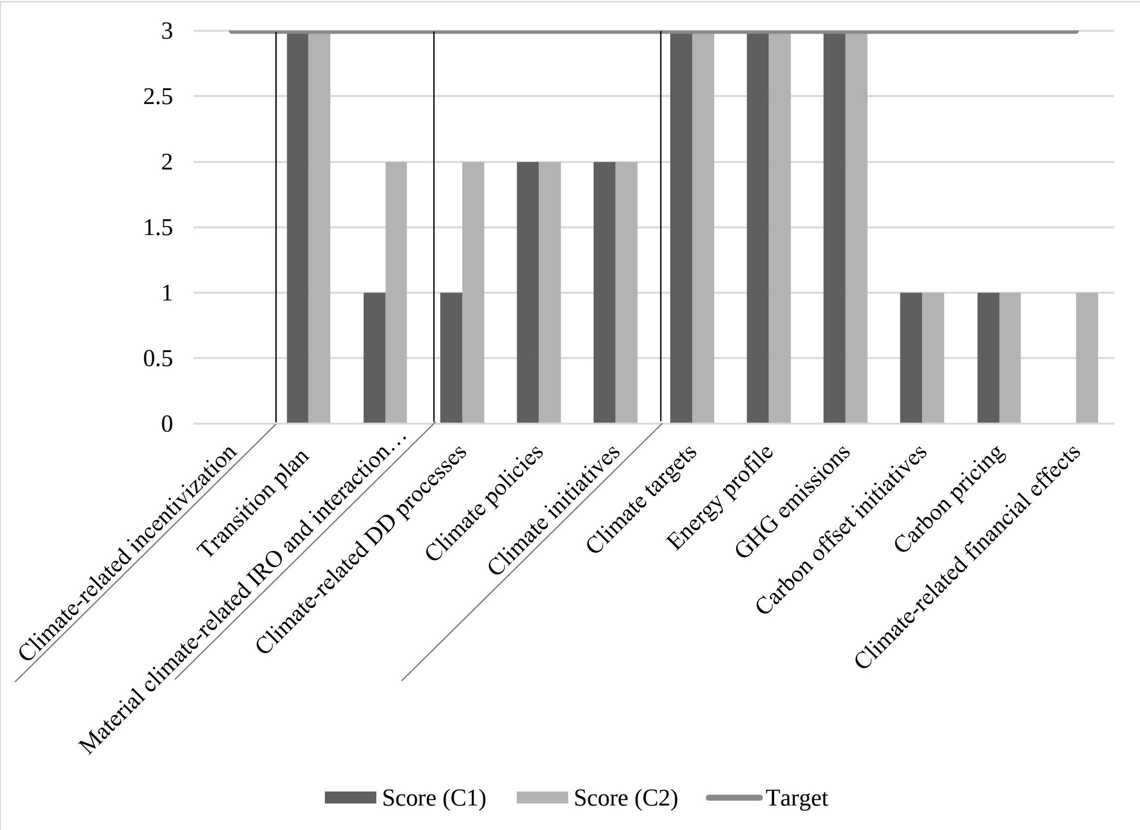

Figure 14 Scoring on Climate Change Disclosure for Each Sample Company as a Target-Performance Comparison Chart.

5. Findings

This chapter assesses the results of data analysis (see Chapter 4.6) on environmental DD and climate change strategies. The individual readiness levels of food retail companies are calculated and presented in a structured comparative manner. This chapter aims to provide a clear picture of the sample companies' CSRD preparedness.

Key Findings from Readiness Assessment on Environmental Due Diligence

The environmental DD readiness assessment reveals that the companies' readiness levels vary across dimensions. While the sub-dimension *DD-Mapping* is currently absent, both companies disclose information in the sub-dimensions *Embedding DD in Governance, Strategy and Business Model*, *Engaging with affected Stakeholders*, *Identifying and Assessing Adverse Environmental Impacts*, *Taking Actions to Address Adverse Environmental Impacts*, and *Tracking the Effectiveness of these Efforts and Communicating*, suggesting both companies are already dealing with environmental DD. As a result, C1 reached *Intermediate* (score of 1.5) while C2 reached the level of *Experienced* (score of 1.99). The detailed results can be found in *Table 16* and *Figure 15* and will be discussed further below based on individual sub-dimensions. For detailed calculations, see Attachments *Figure 18* and *Figure 19*.

Dimension/ Sub-dimension	Readiness level (C1)	Readiness score (C1)	Readiness level (C2)	Readiness score (C2)
Environmental DD	**Level: Intermediate**	**1.46**	**Level: Experienced**	**1.99**
DD-Mapping	Level: Beginner	0	Level: Beginner	0
Embedding DD in Governance, Strategy and Business Model	Level: Intermediate	1.00	Level: Intermediate	1.67
Engaging with affected Stakeholders	Level: Intermediate	1.75	Level: Expert	2.75
Identifying and Assessing Adverse Environmental Impacts	Level: Intermediate	1.50	Level: Experienced	2.50
Taking Actions to Address Adverse Environmental Impacts	Level: Experienced	2.00	Level: Experienced	2.00
Tracking the Effectiveness of these Efforts and Communicating	Level: Experienced	2.50	Level: Expert	3.00

Table 16 Readiness Score and Level for each Dimension/Sub-Dimension on Reporting on Environmental Due Diligence.

The in-depth analysis found that both companies were rated as *Beginners* in the *DD-mapping* category, as neither had published such mapping.

However, the assessment showed that both companies addressed the topic of *Embedding DD in Governance, Strategy and Business Model* in broad terms. As a result, both companies achieved an *Intermediate* level. Company C2 scored 1.67, which was higher than Company C1's score of 1.00, indicating that it was better at integrating DD into its governance, strategy, and business model.

Company C1 scored 1.75 and published its *Stakeholder Engagement* information at the *Intermediate* level, while company C2 scored 2.75 and published at the *Expert* level. The latter showed a deeper understanding of DRs, indicating a more advanced and mature approach to stakeholder engagement in environmental matters. These results indicate differences in the stakeholder engagement strategies of the two companies.

Regarding the sub-dimension *Identifying and Assessing Adverse Environmental Impacts*, the analysis revealed that Company C1 achieved an *Intermediate* level score of 1.50. In contrast, Company C2 reached the *Experienced* level with a score of 2.00. This indicates that both companies know the importance of implementing mechanisms to identify and assess adverse environmental impacts, but Company C2 is better prepared.

Both companies showed a strong commitment and readiness to take *Actions to Address Adverse Environmental Impacts*. They ranked at the *Experienced* level, indicating a solid level of preparedness for communicating their actions to address environmental concerns. Both companies scored the same (at 2.00), which suggests a comparable advanced approach to tackling environmental issues.

In the sub-dimension of *Tracking the Effectiveness of these Efforts and Communicating*, Company C2 scored 3.00, indicating a higher level of readiness (*Expert*) than Company C1's score of 2.50, which is at the *Experienced* level. This score suggests that Company C2 has more advanced communication practices for tracking its efforts' effectiveness.

To sum up, the readiness assessment highlights the differences in the readiness levels of the two companies in terms of various sub-dimensions related to environmental DD. C2, in general, exhibits a higher level of readiness compared to the other company, especially in areas such as *Engaging with affected Stakeholders*, *Identifying and Assessing Adverse Environmental Impacts*, and *Tracking the Effectiveness of these Efforts and Communicating* about them.

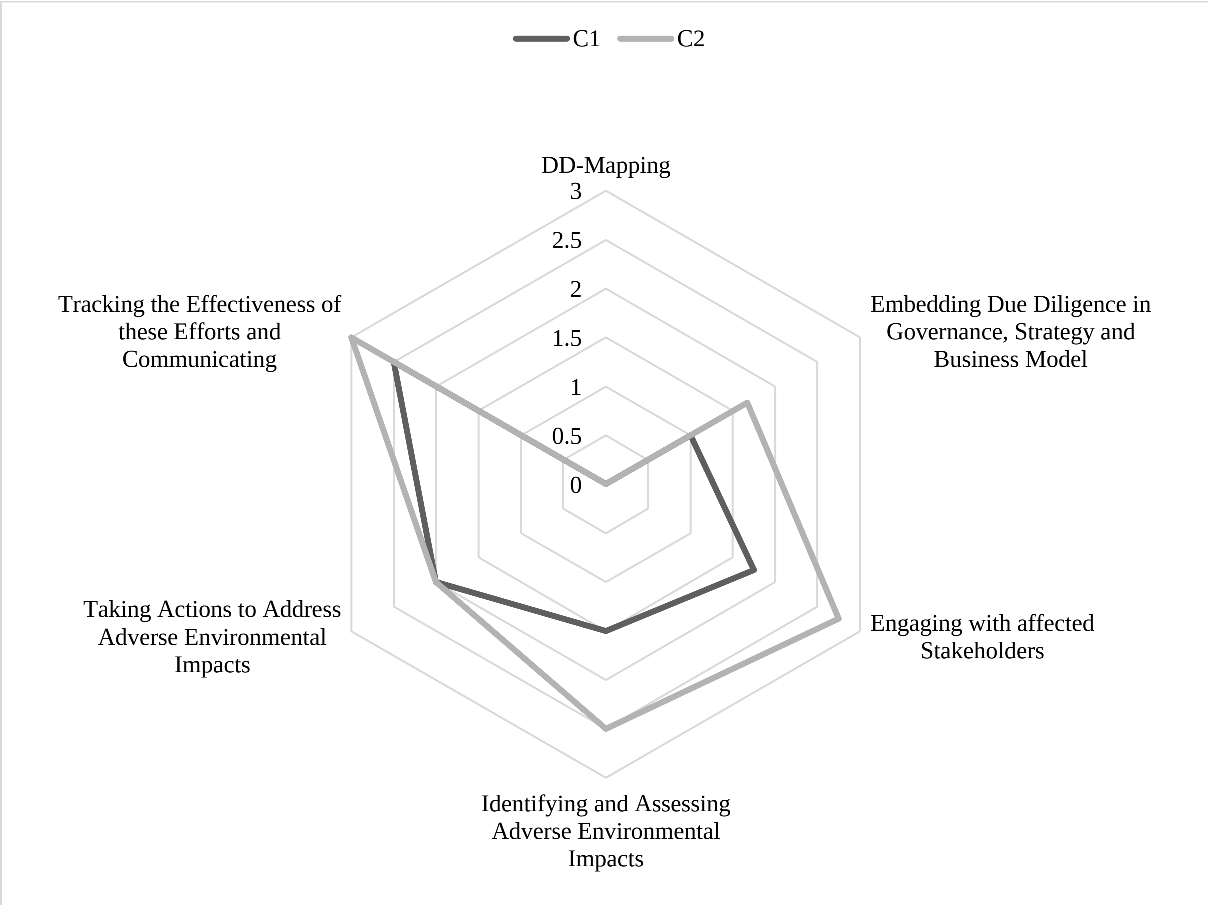

Figure 15 The Readiness Level of the Sample Companies' Environmental Due Diligence Disclosure in a Radar Chart.

Key Findings from the Readiness Assessment on Climate Change Strategies

Company C1 and Company C2 have reached *Intermediate* readiness levels, with scores of 1.38 and 1.63 respectively. This finding suggests that both companies have a strong foundation for tackling climate change. It is worth noting that while both companies failed to provide sufficient information in the *Governance (GOV)* category, they performed well in sub-dimensions such as *Strategy (SBM), Impact, Risk and Opportunity Management (IRO)*, and *Metrics and Targets (MT)*. The detailed results can be found in *Table 17* and *Figure 16* and will be discussed further below based on the individual sub-categories. For detailed calculations, see Attachments *Figure 18* and *Figure 19*.

Dimension/ Sub-dimension	Readiness level (C1)	Readiness Score (C1)	Readiness level (C2)	Readiness Score (C2)
Climate Change Strategy	**Level: Intermediate**	**1.38**	**Level: Intermediate**	**1.63**
Governance (GOV)	Level: Beginner	0	Level: Beginner	0
Strategy (SBM)	Level: Experienced	2.00	Level: Experienced	2.50
Impact, Risk and Opportunity Management (IRO)	Level: Intermediate	1.67	Level: Experienced	2.00
Metrics and Targets (MT)	Level: Experienced	1.83	Level: Experienced	2.00

Table 17 Readiness Score and Level for each Dimension/Sub-Dimension on Reporting Climate Change Strategies.

While both companies have demonstrated their commitment to climate change readiness, there is room for improvement in the *Governance (GOV)* category. This area, which focuses on integrating climate change considerations into their governance structures, was identified as a readiness level *Beginner*. By addressing this, both companies can further enhance their climate change readiness.

C1 and C2 companies have made significant progress in the *Strategy (SBM)* dimension, scoring at the *Experienced* level. C1 scored 2, and C2 scored 2.5, indicating that they have successfully integrated advanced climate change considerations into their overall business strategies. This is a promising achievement that underscores their commitment to tackling climate change.

In the Impact, Risk, and Opportunity Management (IRO) sub-dimension, C1 achieved an *Intermediate* level with a score of 1.67, whereas C2 attained an *Experienced* level of 2.00. This implies differences in the readiness levels of the two companies for communicating how they manage the impacts, risks, and opportunities associated with climate change.

Both companies operate at the *Experienced* level. C1 scored 1.83, while C2 scored 2 in the *Metrics and Targets* sub-dimension. This indicates that they have a solid approach to communicating about setting and monitoring climate-related metrics and targets.

The readiness assessment identified minor differences between the two organizations regarding their readiness to report on climate change strategies. In general, Company C2 has demonstrated a higher level of preparedness, particularly in managing impacts, risks, and opportunities. Understanding these differences can provide valuable insights into improving the communication of climate-related sustainability practices in both companies and highlight areas for future action. For more information, see Chapter 6.1.

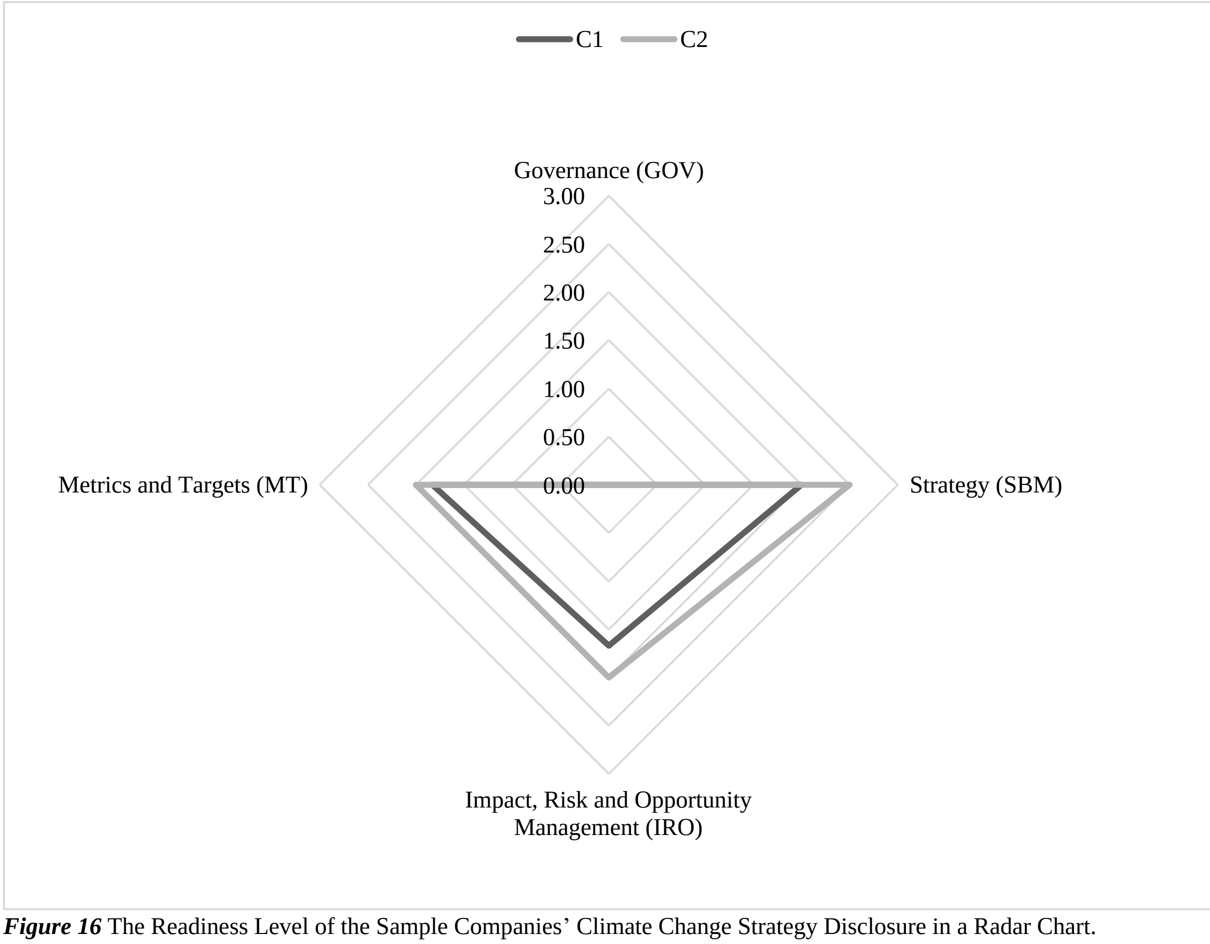

Figure 16 The Readiness Level of the Sample Companies' Climate Change Strategy Disclosure in a Radar Chart.

Findings on the Average Level of Readiness on Environmental DD

The analysis reveals that the average readiness level for both companies' environmental DD is 1.72, indicating an *Intermediate* level of preparedness. *Table 18* offers a more nuanced view of this analysis. However, it is crucial to acknowledge that this analysis does not represent the entire German food retail sector, as a larger sample size would be necessary (see Chapter 6.4).

Dimension/ Sub-dimension	Ø Readiness level	Ø Readiness score
Environmental DD	**Level: Intermediate**	**1.72**
DD-Mapping	Level: Beginner	0.00
Embedding DD in Governance, Strategy and Business Model	Level: Intermediate	1.33
Engaging with affected Stakeholders	Level: Experienced	2.25
Identifying and Assessing Adverse Environmental Impacts	Level: Experienced	2.00
Taking Actions to Address Adverse Environmental Impacts	Level: Experienced	2.00
Tracking the Effectiveness of these Efforts and Communicating	Level: Expert	2.75

Table 18 The Average Level of Readiness in terms of Environmental Due Diligence.

Findings on the Average Level of Readiness on Climate Change Strategies

The average level of preparedness for reporting on climate change strategies for both companies is 1.50, indicating an *Intermediate* level of readiness. *Table 19* provides more detailed findings.

Dimension/ Sub-dimension	Ø Readiness level	Ø Readiness score
Climate Change Strategy	**Level: Intermediate**	**1.50**
Governance (GOV)	Level: Beginner	0.00
Strategy (SBM)	Level: Experienced	2.25
Impact, Risk and Opportunity Management (IRO)	Level: Experienced	1.83
Metrics and Targets (MT)	Level: Experienced	1.92

Table 19 The Average Level of Readiness in Terms of Climate Change Strategies.

6. Discussion

The objective of this master's thesis was to examine sustainability reporting and environmental DD obligations in the EU, assess the readiness of food retail companies to adhere to the new environmental DD and climate change reporting obligations, and explore the implications of the CSRD on actual environmental DD procedures and climate change strategies (see Chapter 1.1). The latter will be discussed in detail in this chapter.

By reviewing the literature and analyzing the legal framework, a new model for assessing readiness was created. This model was then used to evaluate food retail companies` preparedness to comply with the CSRD`s obligations related to environmental DD and climate change strategies.

The key findings of this thesis are:

(1) The examined food retail companies have, on average, a solid foundation (*Intermediate* readiness level) for the upcoming reporting obligation on environmental DD and climate change strategies.

(2) Implications can be derived for various areas, including (1) the establishment of environmental DD practices and climate change strategies; (2) the design of environmental DD systems and climate change policies; (3) the processes of environmental DD and climate change strategies; and (4) the CSDDD legislative process.

To answer the research question, "How do the reporting obligations for companies within the scope of the CSRD affect their corporate due diligence processes on adverse environmental impacts and their climate change strategy? How prepared are companies in the food retail sector?" This chapter discusses the findings and previous studies, as well as the validation, verification, and limitations of this research.

6.1. Readiness Assessment of Sample Companies

The readiness assessment results found that C1 and C2 have attained an *Intermediate* level in reporting on climate change strategies. This finding implies that both companies have already established solid reporting on climate change strategies, which must only be extended to a manageable extent to comply with the CSRD.

In reporting on environmental DD, C1 reached an *Intermediate* level while C2 even achieved an *Experienced* level. This finding depicts that C2's communication on environmental DD already incorporates much of the required data and has established a strong foundation regarding the impending reporting obligation. On the other hand, C1 has also demonstrated that it is already dealing with the publication of environmental DD, but it should expand its publication concerning CSRD.

The fact that both sample companies are already reporting on these matters can be attributed to their operation in a sector strongly linked to global CO2 emissions, mainly stemming from their supply chain. Additionally, they are highly exposed to public perception as essential socially known B2C companies. For several years, this sector's strategic position in the supply chain has necessitated their engagement with climate change strategies and DD issues along their supply chains. The recent rise in demand for private-label products might further enhance their commitment. Moreover, they possess the leverage to drive sustainability (see Chapter 4.5), having the power to make a difference and lead by example.

While both C1 and C2 have demonstrated a solid level of readiness for the CSRD, several recommendations can still be derived from the readiness assessment results. Though inconclusive, these recommendations present an opportunity for further enhancement and preparation for the upcoming reporting obligation.

Recommendations to Further Develop Reporting on Environmental Due Diligence:

→ As per the requirements of ESRS 2[333], both companies should explicitly include a *DD-Mapping*. Herby, the logic of the GRI Index can help companies create such a mapping. In concrete terms, the company should provide an overview of the information disclosed in its DD processes in its sustainability statement. A DD mapping will help the report's target group find information on the company's DD processes and will facilitate an understanding of the company's DD efforts concerning environmental issues. Moreover, it can provide management with an overview and can thus serve as a control element.

→ Regarding *Embedding DD in Governance, Strategy and Business Model*, both companies should provide detailed information on how administrative, management, and supervisory bodies are informed about sustainability – specifically environmental – issues and a list of how these are addressed during the reporting period (*Governance disclosure*).[334] Furthermore, information on whether a sustainability-related performance is integrated into incentive schemes is required, and if so, detailed information, such as on characteristics, targets, and metrics (*Sustainability incentivization*).[335] This ensures transparency and fosters a sense of responsibility and involvement among the management. When disclosing information about *Material IRO and interaction with SBM*, it is essential to include details on whether impacts, risks, or opportunities arise from the company's activities or form its business relationships. Additionally, the disclosure should provide information about the current and anticipated financial effects of the company's material risks and opportunities on its financial position.[336]

→ *Engaging with affected Stakeholders*: It is essential to provide detailed information on how the interests and views of stakeholders are taken into account, particularly in the context of DD processes and/or materiality assessment processes (*Stakeholder perspectives*). Therefore, the companies should have a comprehensive list of stakeholders, as C2 already has, and explain how it is organized, what its purpose is, and how the outcomes of the stakeholder engagement process are taken into account by the company.[337] When disclosing

[333] Delegated Regulation (ESRS), Annex I ESRS 2, (30).
[334] Delegated Regulation (ESRS), Annex I ESRS 2, (24).
[335] Delegated Regulation (ESRS), Annex I ESRS 2, (27).
[336] Delegated Regulation (ESRS), Annex I ESRS 2, (46).
[337] Delegated Regulation (ESRS), Annex I ESRS 2, (43).

information about *Due Diligence processes* to identify and assess adverse environmental impacts, describing the step-by-step process in detail is crucial. This disclosure should cover both the company's activities and its supply chain. If there have been any changes to the process compared to the prior reporting period, these should also be disclosed.[338] This advice is particularly relevant to C1, which is currently implementing such a process. Careful attention should be paid to ensure all pertinent information is included in the disclosure.

→ Both companies have demonstrated their commitment to *Taking Action to Address Adverse Environmental Impacts* through various *Sustainability initiatives*. In the next step, it is essential to link these topics clearly and provide additional information on the scope of the key actions. If applicable, information on their operating expenditure (Opex) and/or capital expenditure (Capex) should also be added.[339]

<u>Recommendations to Further Develop Reporting on Climate Change Strategies:</u>

→ *Governance (GOV):* Both companies, C1 and C2, should disclose whether and how they consider climate-related factors while remunerating their administrative, management, and supervisory bodies (*Climate-related incentivization*). They should also mention if their performance has been assessed against the targets for reducing GHG emissions and the remuneration percentage linked to climate-related considerations.[340] Such disclosure can indirectly encourage decision-makers to prioritize climate-conscious decision-making.

→ When reporting on the *Transition plan* in the sub-dimension *Strategy (SBM)*, it is essential to include information on locked-in GHG emissions.[341] Furthermore, concerning the indicator *Material impacts, risks and opportunities and their interaction with strategy and business model,* both companies should ensure that they report not only on their material climate-related risks and opportunities but also clarify whether it is a climate-related physical risk or a climate-related transition risk. Additionally, they should elaborate on the

[338] Delegated Regulation (ESRS), Annex I ESRS 2, (51).
[339] Delegated Regulation (ESRS), Annex I ESRS 2, (66).
[340] Delegated Regulation (ESRS), Annex I ESRS E 1, (13).
[341] Delegated Regulation (ESRS), Annex I ESRS E 1, (14).

resilience of their strategy and business model regarding climate change. The disclosure should include a climate scenario analysis, resilience analysis, and results.[342]

→ *Impact, Risk and Opportunity Management (IRO)*: The process of *Climate-related Due Diligence* should be described step-by-step and in detail. In particular, this recommendation is related to impacts on climate change (the undertaking's GHG emissions), climate-related physical risks, and climate-related transition risks. Additionally, the disclosure should contain information on a scenario analysis.[343] Furthermore, both companies should disclose the significant amount of money required for CapEx and OpEx to implement their *Climate policies*.[344]

→ Both companies excel in disclosing their *Climate targets*, *Energy profile*, and *GHG emissions* in the *Metrics and Targets* sub-dimension. However, more information must be added regarding climate-related transition risks and GHG emissions in metric tonnes of CO2eq per net revenue.[345] Further adjustments are required for *Carbon offset initiatives*, including information on GHG removals and storage in metric tonnes of CO2eq for their operations and value chain. This should also include the amount of GHG emission reductions or removals from climate change mitigation projects outside their value chain.[346] Additionally, if applicable, *Carbon pricing* information should be included detailing how they support decision-making and incentivize the implementation of climate-related policies and targets.[347] Moreover, companies should include information on the anticipated financial effects from material physical risks, anticipated financial effects from material transition risks, and the potential to benefit from material climate-related opportunities (*Climate-related financial impacts*).[348]

[342] Delegated Regulation (ESRS), Annex I ESRS E 1, (18).
[343] Delegated Regulation (ESRS), Annex I ESRS E 1, (20).
[344] Delegated Regulation (ESRS), Annex I ESRS E 1, (22).
[345] Delegated Regulation (ESRS), Annex I ESRS E 1, (44).
[346] Delegated Regulation (ESRS), Annex I ESRS E 1, (56).
[347] Delegated Regulation (ESRS), Annex I ESRS E 1, (62).
[348] Delegated Regulation (ESRS), Annex I ESRS E 1, (64).

General Recommendations for CSRD Compliance:

→ Both sample companies meet the size requirements set by Article 1 (4) CSRD in conjunction with Article 2 Accounting Directive[349] and are, therefore, required to report for the first time in 2025[350]. Until then, they must update their sustainability reporting, including environmental DD[351] and climate change strategies[352]. Additionally, both companies must ensure that their reporting adheres to the double materiality principle[353], which is the foundation for sustainability disclosures[354].

→ C1 and C2 have stated that they currently report in accordance with GRI. However, they need to ensure that they report based on ESRS in the future. Both should pay particular attention to the critical changes identified by Baumüller and Grebic. These include extended reporting contents such as aims and strategies, applicable time frames requiring retrospective and forward-looking information, and newly structured and extended reporting matters like governance matters and a greater focus on the value chain. [355]

→ The information for the readiness assessment has been gathered from multiple sources, including the annual report, sustainability report, and company policies (see Chapter 4). To comply with CSRD requirements, information from these sources must be included in the management report in the future[356] and made available in a single electronic reporting format[357]. Additionally, the CSRD mandates an audit obligation[358], enhancing the data's quality and credibility.

As Chapter 2 of the literature review mentioned, a study revealed that almost half of the respondents believed reporting obligations on DD would have an impact on the environment. Only a slightly more significant percentage of people stated that mandatory DD would have an

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[349] CSRD, art 1 in conjunction with Accounting Directive, art 3. (1) in conjunction with Commission Delegated Directive OJ L, 2023/2775, art 1 (7).
[350] CSRD, art 5.
[351] CSRD, art 1 (4) lit 2 (f).
[352] CSRD, art 1 (4) lit 2 (a) (iii) in conjunction with art 1 (4) lit 2 (b).
[353] CSRD, art 1 (4).
[354] See also Delegated Regulation (ESRS), ANNEX I.
[355] Baumüller and Grbenic *(n 155).*
[356] CSRD, art 1 (4).
[357] CSRD, (9) in conjunction with Commission Delegated Regulation OJ L 143, art 3.
[358] CSRD, art 1 (4) in conjunction with art 1 (13).

effect.[359] These findings align with Ventura's assumption that reporting obligations indirectly contribute to greater sustainability.[360] Based on these results, reporting obligations would have a constituting effect on environmental DD practices and climate change strategies. This potential effect and further implications, derived from the conducted analysis, will be discussed in the following chapter, Chapter 6.2.

6.2. Implications of the CSRD on Environmental Due Diligence Practices and Climate Change Strategies

A thorough examination of the literature, the legal framework, and the readiness analysis identified implications in four dimensions: (1) Establishment of Environmental DD Practices and Climate Change Strategies, (2) Design of Environmental DD Systems and Climate Change Policies, (3) Processes of Environmental DD and Climate Change Strategies (4) CSDDD Legislative Process *(see Figure 17).*

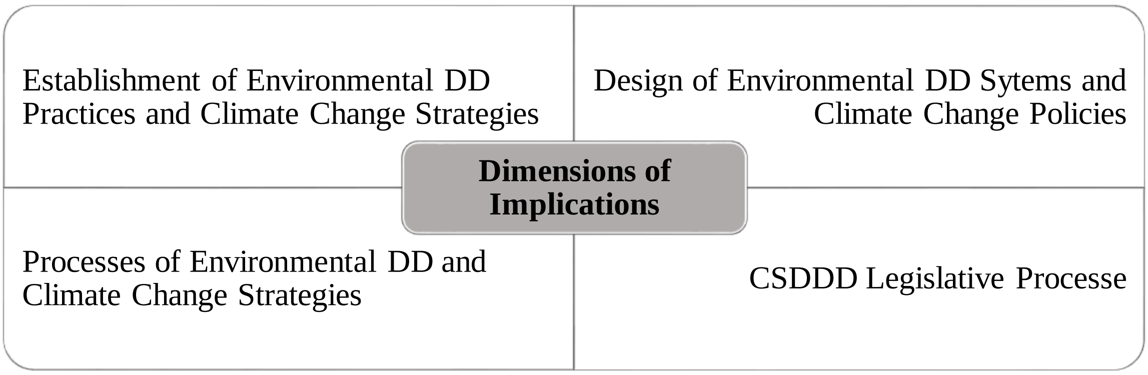

Figure 17 Dimensions of Implications of the CSRD on Environmental Due Diligence Practices and Climate Change Strategies.

[359] Smit et al. *(n 124).*
[360] Ventura 'Corporate Sustainability Due Diligence' *(n 2).*

(1) Establishment of Environmental DD Practices and Climate Change Strategies

As the literature review in Chapter 2 revealed, the NRFD marked a significant milestone by introducing one of the first general obligations on sustainability and DD reporting[361]. Researchers have found that the NFRD positively impacts strategic awareness[362] and indirectly impacts greater sustainability[363]. These assumptions are further supported by EC's impact assessment of the NFRD Proposal, which reached a similar conclusion, stating an indirect positive environmental impact is due to increasing peer pressure and growing reputational costs for misconduct.[364]

These findings align with a 2020 study that shows the primary motivations for conducting environmental DD are meeting the high standards set by investors and consumers, fulfilling reporting obligations, and avoiding reputational risks.[365] By implication, the possibility of maintaining or increasing the company's reputation and meeting investors' and consumers' demands incentivizes companies to conduct environmental DD.

Suppose one follows the opinion of the authors who advocate a positive correlation between the discourse on CSR and business performance[366]. In that case, it can be assumed that this represents a further company incentive.

Against this backdrop, sustainable supply chain management has increased, with 37.14 % of companies carrying out DD in 2020.[367] However, only 7.43 % (4.96 % in businesses with more than 1000 workers) conduct DD on environmental or climate change issues without considering other human rights[368].

If one considers the factors that motivate companies to deal with the sustainability of their supply chain, one recognizes that a reporting obligation is an important driver. Proper reporting can serve as an instrument to build a reputation and satisfy investor and consumer information

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361 NFRD.
362 Aureli et al. *(n 85).*
363 Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
364 Smit et al. *(n 124).*
365 Smit et al. *(n 124).*
366 Alareeni and Hamdan *(n 79);* Li, Zheng and Wang *(n 80);* Dhaliwal et al. *(n 71);* Cheng, Ioannou, and Serafeim *(n 82).*
367 Smit et al. *(n 124).*
368 Smit et al. *(n 124).*

needs. These effects are enforced by investors' growing demand for sustainability information[369] and increased consumer appeal[370]. Additionally, a study has shown that the expected impact on the climate is similar for direct DD obligations to DD reporting obligations[371].

The NFRD has already made a positive contribution. However, with the CSRD extending the reporting requirements in both scope[372] and content[373], including on environmental DD[374] and climate change[375], the reputational risk, peer pressure, and stakeholder demand are anticipated to increase significantly. The CSRD is more effective as it removed the "comply or explain" mechanism from the NFRD[376] and introduced a common reporting standard with the ESRS[377] (see Chapter 3.2). This development underscores the urgency for companies to adapt to the new standards and meet the heightened stakeholder expectations.

In conclusion, introducing a more comprehensive reporting obligation, such as the CSRD, will strengthen the indirect encouragement of companies to adopt environmental DD practices and climate change strategies.

The CSRD provides another positive aspect for environmental DD Practices and climate change strategies by mandating external assurance on sustainability data.[378] This demand was previously identified in connection with voluntary sustainability reporting[379]. Verified and reliable data support conducting environmental DD and the quality of information related to climate change strategies that affect the supply chain and help to prevent the dissemination of misleading or false information. In addition, following the opinions that advocate a positive relationship between voluntary reporting and performance[380], it can be assumed that disclosure on environmental DD and climate change strategies can also help improve a company's

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369 Eccles, Lee and Stroehle *(n 33);* Brooke et al. *(n 47);* Liao et al. *(n 48);* PricewaterhouseCoopers *(n 49).*
370 McKinsey and NielsenIQ *(n 51)* accessed 01 December 2023*;* PricewaterhouseCoopers *(n 49).*
371 Smit et al. *(n 124).*
372 EC 'Corporate sustainability reporting', assessed 3 March 2024.
373 CSRD, art 1 (4).
374 CSRD, art 1 (4) lit 2 (f).
375 CSRD, art 1 (4) lit 2 (a) (iii) in conjunction with art 1 (4) lit 2 (b).
376 Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
377 Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
378 CSRD, art 1 (4) in conjunction with art 1 (13).
379 Ruhnke and Gabriel *(n 75).*
380 Alareeni and Hamdan *(n 79);* Li, Zheng and Wang *(n 80);* Dhaliwal et al. *(n 71);* Cheng, Ioannou and Serafeim *(n 82).*

performance and represent a competitive advantage. However, companies must balance the extent of disclosure and the actual carrying out of CSR activities to avoid a negative impact on public perception[381].

It is argued that reporting obligations influence the behavior of companies ex-post, while direct obligations, as proposed by the CSDDD, address the issue ex-ante[382]. Although their regulatory objective[383] and enforcement mechanisms[384] are different, these approaches complement each other as identified by the EC[385]. The CSRD provides a solid foundation for DD and climate change strategies.

(2) <u>Design of Environmental DD Systems and Climate Change Policies</u>

Parallel to the conceptual frameworks for distinguishing CSR and ESG, the proposed CSDDD and the CSRD differ in their nature. The CSDDD, with its focus on integrating "social and environmental concerns into corporate activities[386]" and the "responsibility of companies for their impact on society[387]," reflects the characteristics of the CSR concept. The CSRD, on the other hand, indirectly incorporates this conceptual framework. However, primarily through its ESRS, the CSRD provides the data basis required for any "framework or criteria for measuring sustainability[388]." This aspect is crucial in the context of the ESG concept, where sustainability measurement is a central element. Like CSR and ESG, the CSDDD and CSRD are closely related and interact, offering mutual benefits for companies.

EC emphasized in its proposed CSDDD that both directives – the CSRD and CSDDD – are designed to complement each other, increase each other's effectiveness, mutually reinforcing, and foster behavioral change[389]. In addition to the implications of establishing environmental DD practices and climate change strategies closely related to "foster behavioral change," further substantive synergies can be identified.

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381 Viererbl and Koch *(n 84).*
382 Ventura 'Corporate Sustainability Due Diligence' *(n 2).*
383 CSRD; Proposed CSDDD (unofficial version, 2024).
384 CSRD, art 2 (20); Proposed CSDDD (unofficial version, 2024), art 22.
385 Proposed CSDDD (2022), Explanatory Memorandum
386 United Nations Industrial Development Organization *(n 24)* accessed 23 November 2023.
387 EC, 'Corporate sustainability and responsibility?' *(n 25)* accessed 23 November 2023.
388 EC, 'Corporate sustainability and responsibility?' *(n 25)* accessed 23 November 2023.
389 Proposed CSDDD (2022), Explanatory Memorandum

The analysis of the legal basis, particularly the ESRS, and the readiness assessment based on it has shown that environmental DD and climate change strategies have points of contact with the materiality analysis and stakeholder management (see *Attachments Table 20 and Table 21)*. The materiality analysis, for instance, can help companies just starting to establish environmental DD and climate change strategies to gain an overview of the key impacts and risks. A company can then use this data to design comprehensive environmental DD processes and climate change strategies. In addition, for a materiality analysis, it is necessary to draw up a list of stakeholders[390] and include them in the process, which creates a foundation for involving business partners in the DD and in the data generation process needed to set up a solid climate change strategy – e.g., collecting data of business partners is essential for the calculation of Scope 3 emissions. This inclusive approach strengthens stakeholder relationships, providing qualitative insights into a business partner's approach to sustainability.

Performing environmental DD along the supply chain requires identifying the business partners to be analyzed. These partners can be included as potential stakeholders to be surveyed in the materiality analysis, which in turn can enhance the analysis. Furthermore, DD procedures also help businesses understand the potential risks and obligations associated with their operations[391]. In addition, to improve the materiality analysis, the actual or potential adverse impacts identified by DD can be included in the analysis as possible material matters.

A criticism of the proposed CSDDD is that the environmental infringements listed in the Annex to the CSDDD[392] are insufficient and fragmented[393]. However, analysis of the ESRS for environmental DD and climate change strategies has shown that it describes exactly what information is relevant with regard to environmental DD practices[394] and climate change[395] (see Chapter 3.2.1.3). Companies can benefit from the detailed nature of the ESRS in two ways. Firstly, they can use the increased transparency of other business partners that fall under the scope of the CSRD to establish or enhance their DD practices and climate change strategies.

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390 Delegated Regulation (ESRS), Annex A AR 6.
391 Smit et al. *(n 124).*
392 Annex to the Proposed CSDDD (unofficial version, 2024).
393 European Coalition for Corporate Justice, 'European Commission's proposal for a directive on Corporate Sustainability Due Diligence. A comprehensive analysis' (2022) <https://corporatejustice.org/wp-content/uploads/2022/04/ECCJ-analysis-CSDDD-proposal-2022.pdf> assessed 25 February 2024.
394 Delegated Regulation (ESRS), Annex I ESRS 2.
395 Delegated Regulation (ESRS), Annex I ESRS E 1.

One example is to include specific data-based minimum standards in their corporate policies. Setting goals and creating a strategy need having solid baseline data. Moreover, the ESRS standardization approach simplifies the assessment of business partners' sustainability efforts, and through the CSRDs audit obligation, the reliability thereof is strengthened. Secondly, the structure and information requirements of the ESRS can help companies set up or revise data-based, thorough environmental DD processes and a data-based, thorough climate change strategy. Businesses may more effectively detect ESG issues by utilizing comprehensive sustainability reporting. Companies may use this information to ensure more effective risk management procedures by focusing their DD on these particular risks. In both cases, the ESRS contributes to informed decision-making, empowering companies to make strategic choices based on comprehensive sustainability reporting.

In addition, further useful instruments for companies can be derived from the ESRS, as demonstrated by developing the readiness assessment in this master's thesis (See Chapter 4.3). The indicators can be used not only to assess readiness for the reporting obligation but also as a basis to review the company actions that are reported on. This comprehensive approach, facilitated by the ESRS, ensures that companies are well-informed about their actions.

(3) <u>Processes of Environmental DD and Climate Change Strategies</u>

According to the Proposal of the CSDDD, the reporting process in CSRD is similar to the DD process, and reporting – according to the CSRD, if a company falls under its scope – represents the last step of DD[396]. Thus, the existing structures established for the reporting system or DD can be used in a mutually beneficial way.

The strategic potential of the CSDDD and CSRD reporting processes is evident in how they interact with and reinforce each other. This strategic potential is further enhanced by the possibility of being set up as resource-efficient, as demonstrated by the example of materiality analysis and the stakeholder inclusion process (See (2) Design of Environmental DD Systems and Climate Change Policies).

Moreover, Smit et al. highlighted that management-driven reporting can represent a critical learning opportunity to mitigate internal and external risks[397]. The early enforcement of the reporting obligation for environmental DD and climate change strategies[398] is a chance for management to prepare for the CSDDD. The same authors stated that mandatory DD would not impose a significant additional burden on companies that already report on carefully carried out DD[399]. In addition, companies that report a transition plan under the CSRD are not subject to any further obligations under Article 15 of the CSDDD, as they are exempt.[400] Hence, a proactive management approach can lead to resource and cost savings in the long term, providing a competitive advantage.

Article 4 (f), in conjunction with Article 11 of the proposed CSDDD, outlines the final step, which is publicly communicating on DD[401]. This can be done in line with the CSRD or, if not included in the scope, through an annual statement on the website. This reporting is crucial as it provides evidence of compliance with DD obligations[402] and communicates the company's

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396 Proposed CSDDD (2022), Explanatory Memorandum
397 Smit et al. (*n 124).*
398 CSRD, art 4.
399 Smit et al. *(n 124).*
400 Proposed CSDDD (unofficial version, 2024), art 15.
401 Proposed CSDDD (unofficial version, 2024), art 4 in conjunction with art 11.
402 Proposed CSDDD (2022), Explanatory Memorandum

climate change plan to stakeholders. Due to this close connection between the directives, utilizing the synergy effects of the processes is advisable.

The CSRD and CSDDD differ in their enforcement mechanisms. The CSRD introduces administrative sanctions for non-compliance with reporting requirements[403], while the CSDDD takes enforcement a step further, proposing the introduction of civil liability[404]. The combination of these two mechanisms can have a powerful reinforcing effect.

Looking ahead, the CSRD has a broader scope[405], than the CSDDD[406]. This means that the implications of the CSRD will also apply to companies not affected by the CSDDD. The CSRD will require approximately 50,000 companies to engage with environmental DD and climate change strategies[407]. That is about ten times as many European companies as are expected to be affected by the CSDDD (about 5,000 EU companies)[408]. This highlights the importance of sustainability reporting in indirectly encouraging companies to establish DD processes and climate change strategies.

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403 CSRD, art 2 (20).
404 Proposed CSDDD (unofficial version, 2024), art 22.
405 CSRD, art 1.
406 Proposed CSDDD (unofficial version, 2024), art 2.
407 EP 'Sustainable economy' *(n 4)* accessed 22 January 2024.
408 Jennifer Younan and Elise Edson, 'EU Council waters down Corporate Due Diligence Directive (CS3D)' (2024) <https://www.shearman.com/en/perspectives/2024/03/eu-council-waters-down-corporate-sustainability-due-diligence-directive--cs3d> assessed 19 March 2023.

(4) CSDDD Legislative Process

The evolution of the EU sustainability reporting requirements (see Chapter 2.3) demonstrates that the EU expanded these obligations gradually. The NFRD applied to a relatively small group of companies[409] and did not include any reporting standards[410] (see Chapter 3.1). However, with the introduction of the CSRD[411], the scope of application was significantly broadened, and the reporting requirements, particularly the introduction of the ESRS[412], were greatly expanded and sharpened (see Chapter 3.2).

This systematic approach could serve as a model for the long-term-legislative approach of the CSDDD. The proposed CSDDD initiative would initially impact a comparatively small group[413] and refers to a general and concise catalog of international environmental conventions[414] (see Chapter 3.3.1.3). If the EU follows the same approach when introducing the reporting obligation, the CSDDD obligation would be expanded and sharpened in the next step – for example, by increasing its scope and developing a European environmental law catalog.

It is yet to be determined what the CSDDD in its final version will entail and how the EU legislation will develop. However, the CSRD imposes a stipulated reporting requirement on several companies' environmental DD and climate change strategies[415], which has indirect implications, as this chapter showed.

[409] EP 'Sustainable economy' *(n 4)* accessed 22 January 2024.
[410] NFRD, art 1.
[411] CSRD, art 4.
[412] Delegated Regulation (ESRS).
[413] Proposed CSDDD (unofficial version, 2024), art 2.
[414] Annex to the Proposed CSDDD (unofficial version, 2024).
[415] CSRD, art 4.

6.3. Readiness Assessment Model Validation and Verification

There are different ways to assess readiness. One research that assesses CSRD readiness is based on a mixed approach employing interviews to evaluate readiness[416]. However, the concept of organizational readiness can have multiple interpretations[417]. Against this background and based on similar existing frameworks[418], a new framework was developed (see Chapter 4.3)

The selection of indicators and the framework used to measure readiness are crucial for obtaining accurate and meaningful results. As such, it is essential to define the selection criteria precisely. This study's selection criteria were derived from a thorough analysis of the ESRS (see Chapter 3.2.1.3). Therefore, the developed indicators are strongly related to the structure and substantive requirements of the ESRS[419]. The definition (see *Attachments Table 20 and Table 21*) aims to provide the reader with a comprehensive understanding of each indicator[420], and the selection of dimensions and sub-dimensions helps the user to understand the driving forces and areas of improvement behind a composite indicator and weigh different factors[421].

The advantage of the chosen performance benchmarking approach is that it is a beneficial tool for improvement as it provides comparative results[422] and quantifiable data and can be applied across various industries. This approach only requires the analysis of company publications, making it a time and resource-efficient method. Furthermore, the indicators mirroring the ESRS used in this approach can be modified to assess the readiness of any reporting topic of the CSRD. However, it is essential to note that this type of data collection assumes that the company already publishes sustainability data, and the model itself has some limitations (see Chapter 6.4).

[416] Øystein Tuntland, 'Readiness assessment for the transition into meeting new requirements of the European Sustainability Reporting Standards' [2023] Master Thesis Faculty of Science and Technology University of Stavanger.
[417] Weiner, Amick and Lee *(n 311).*
[418] Akdil, Ustundag and Cevikcan *(n 313).*
[419] Delegated Regulation (ESRS).
[420] OECD 'Handbook' *(n 312).*
[421] OECD 'Handbook' *(n 312).*
[422] Bhutta and Huq *(n 315).*

6.4. Limitations of the Readiness Assessment Model

The limited information and research on CSRD reporting requirements on DD and climate change and companies' CSRD preparedness are constraints for this thesis. The limited information and research are due to the novelty of the regulation, which does not have to be implemented until 2024. As a result, the research may provide more accurate results after the first companies start reporting in compliance with the CSRD. Additionally, the ESRS indicators used in this work were summarized and simplified (*see Chapter 4.3 and Attachments Table 20 and Table 21*), which may result in inaccuracies in the outcome, and no differentiated statement can be made about the disclosure of individual data points. Nonetheless, this work provides a solid framework for further research and the development of a more differentiated model.

Also, the benchmarking approach has its limitations. It cannot depict a company's attitude; it only shows how far specific actions have progressed. Additionally, the company's employees are uninvolved, making it a one-time non-ongoing exercise[423].

Due to time and resource constraints, only two companies were examined so that no general conclusions can be drawn for the sector as a whole. Furthermore, the author only carried out the benchmarking exercise (instead of a team) due to the same constraints. When researchers conduct relational analysis, they should possess interpretation skills to eliminate potential inaccuracies[424]. According to Tversky and Kahneman, personal beliefs, prior experience, or motivation could influence the researcher's findings[425]. Additionally, human error[426] cannot be completely ruled out. These are the theoretical limitations of the chosen methodology and the conducting researcher, which might influence the accuracy of the results. Nevertheless, the author has emphasized its neutrality and aimed to attain the highest information accuracy possible.

[423] Bhutta and Huq *(n 315).*
[424] Hiteshkumar Aacharya 'Content analysis' [2022] EPRA International Journal of Research and Development 7/4 177.
[425] Amos Tversky and Daniel Kahneman, 'Judgment under Uncertainty: Heuristics and Biases' [1974] Science, New Series 185/4157 1124.
[426] James T. Reason, 'Human Error' (Cambridge :: Cambridge University Press 2009).

7. Conclusion

This master's thesis analyzed the EU's environmental DD and sustainability reporting obligations, focusing on the CSRD's obligations on environmental DD and climate change strategies. It assessed the readiness of companies in the food retail sector to comply with the CSRD and investigated the implications of reporting requirements on actual environmental DD practices and climate change policies.

The readiness assessment was developed based on the CSRD and ESRS legal analyses. It identified an average readiness level of *Intermediate* among the examined food retail sector companies. This level indicates a foundational preparedness for CSRD reporting obligations. However, given the forthcoming reporting obligation, both companies must further sharpen their reporting on environmental DD and climate change strategies. In particular, they should improve the structured presentation of information (e.g., DD mapping) and disclosure of governance aspects, information on material climate-related risks and opportunities, and financial aspects (e.g., anticipated climate-related financial effects). Moreover, both companies must comply with general requirements such as including information in the management report, the external audit, and the computer-readable format by 2025.

In light of these findings, it has become evident that companies should pay closer attention to their approach to environmental DD and climate change strategies. The engagement with the CSRD presents an opportunity for companies to establish a solid environmental DD system and climate change strategy. A readiness analysis, as applied in this master's thesis, can help companies identify areas where reporting and implementation need improvement.

Companies should utilize the synergies between the CSRD and the proposed CSDDD. Knowing about the implications of the CSRD on actual practices might be helpful. In this thesis, the author identified implications in four dimensions:

(1) Establishment of Environmental DD Practices and Climate Change Strategies
(2) Design of Environmental DD Systems and Climate Change Policies
(3) Processes of Environmental DD and Climate Change Strategies
(4) CSDDD legislative process

In summary, the CSRD can encourage companies to establish and improve their environmental DD and climate change strategies, and the ESRS can support companies in establishing a thorough environmental DD process and climate change strategy. Materiality analyses and stakeholder inclusion are also important and can be used as an interface between the CSRD and the CSDDD. In particular, materiality analysis and stakeholder inclusion are two areas where reporting and DD procedures interact and reinforce one another. A supportive management approach is essential to driving real change. Furthermore, the transition from the NFRD to the CSRD, which demonstrated the systematic growth of reporting requirements, offers a possible model for the CSDDD legislative process.

The study's limitations indicate that further research is necessary to confirm, enhance, and increase the generalizability of the findings. In light of the limitations and conclusions of the study, the following suggestions for further research are proposed:

- To obtain a more differentiated result, further diversify the indicator set of the readiness assessment framework
- To achieve the generalizability of the findings, conduct larger-scale studies with more sample companies in the food retail industry
- To minimize the likelihood of subjectivity and bias, utilize a team to undertake the benchmarking
- To include the attitudes and views of the people responsible, combine alternative research methods, such as qualitative analysis through questionnaires
- To empirically prove the implications identified, conduct further studies
- To assess the impact of the reporting requirements on environmental DD and climate change strategies, undertake follow-up studies once the CSRD reports are published

In conclusion, this master thesis provides an overview of companies' current status in the food retail industry in terms of their compliance with the CSRD. Additionally, it highlights the interconnection between the CSRD and the CSDDD and how they can work together to help companies establish effective and resource-saving environmental DD processes and climate change strategies. The synergies between these directives can enhance the quality of each other's practices and contribute to promoting corporate sustainability in Europe.

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Attachments

ESRS 2 GENERAL DISCLOSURES	
Indicator	**Definition**
DD-Mapping	DR GOV-4 – Statement on due diligence: The undertaking shall disclose a mapping of the information provided in its sustainability statement about the due diligence process.[427]
Governance disclosure	DR GOV-2 – Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies: The undertaking shall disclose how the administrative, management and supervisory bodies are informed about sustainability matters and how these matters were addressed during the reporting period.[428]
Sustainability incentivization	DR GOV-3 – Integration of sustainability-related performance in incentive schemes: The undertaking shall disclose information about the integration of its sustainability-related performance in incentive schemes.[429]
Material IRO and interaction with SBM	DR SBM-3 – Material impacts, risks and opportunities and their interaction with strategy and business model(s): The undertaking shall disclose its material impacts, risks and opportunities and how they interact with its strategy and business model.[430]
Governance disclosure	DR GOV-2: see above
Stakeholder perspectives	DR SBM-2 – Interests and views of stakeholders: The undertaking shall disclose how the interests and views of its stakeholders are taken into account by the undertaking's strategy and business model.[431]
Due diligence processes	DR IRO-1 – Description of the processes to identify and assess material impacts, risks and opportunities: The undertaking shall disclose its process to identify its impacts, risks and opportunities and to assess which ones are material.[432]
Sustainability policies	MDR-P – Policies adopted to manage material sustainability matter: The undertaking discloses information about policies adopted to manage material sustainability matters.[433]
Due diligence processes	DR IRO-1: see above

[427] Delegated Regulation (ESRS), Annex I ESRS 2, (30).
[428] Delegated Regulation (ESRS), Annex I ESRS 2, (24).
[429] Delegated Regulation (ESRS), Annex I ESRS 2, (27).
[430] Delegated Regulation (ESRS), Annex I ESRS 2, (46).
[431] Delegated Regulation (ESRS), Annex I ESRS 2, (43).
[432] Delegated Regulation (ESRS), Annex I ESRS 2, (51).
[433] Delegated Regulation (ESRS), Annex I ESRS 2, (63).

Material IRO and interaction with SBM	DR SBM-3: see above
Sustainability initiatives	MDR-A – Actions and resources in relation to material sustainability matters: The undertaking shall apply the requirements for the content of disclosures in this provision when it describes the actions through which it manages each material sustainability matter including action plans and resources allocated and/or planned.[434]
Sustainability metrics	MDR-M – Metrics in relation to material sustainability matters: The undertaking shall disclose any metrics that it uses to evaluate performance and effectiveness, in relation to a material impact, risk or opportunity.[435]
Performance monitoring	MDR-T Tracking effectiveness of policies and actions through targets: The undertaking shall apply the requirements for the content of disclosures in this provision when it discloses information about the targets it has set with regard to each material sustainability matter.[436]

Table 20 Individual Indicators on Environmental Due Diligence including their Description.

[434] Delegated Regulation (ESRS), Annex I ESRS 2, (66).
[435] Delegated Regulation (ESRS), Annex I ESRS 2, (73).
[436] Delegated Regulation (ESRS), Annex I ESRS 2, (78).

ESRS E1 CLIMATE CHANGE	
Indicator	**Definition**
Climate-related incentivization	DR related to ESRS 2 GOV-3 – Integration of sustainability-related performance in incentive schemes: The undertaking shall disclose whether and how climate-related considerations are factored into the remuneration of members of the administrative, management and supervisory bodies, including if their performance has been assessed against the GHG emission reduction targets reported under Disclosure Requirement E1-4 and the percentage of the remuneration recognized in the current period that is linked to climate related considerations, with an explanation of what the climate considerations are.[437]
Transition plan	DR E1-1 – Transition plan for climate change mitigation: The undertaking shall disclose its transition plan for climate change mitigation.[438]
Material climate-related IRO and interaction with SBM	DR related to ESRS 2 SBM-3: – Material impacts, risks and opportunities and their interaction with strategy and business model: The undertaking shall explain for each material climate-related risk it has identified, whether the entity considers the risk to be a climate-related physical risk or climate-related transition risk. The undertaking shall describe the resilience of its strategy and business model in relation to climate change.[439]
Climate-related diligence processes	DR related to ESRS 2 IRO-1 – Description of the processes to identify and assess material climate- related impacts, risks and opportunities: The undertaking shall describe the process to identify and assess climate-related impacts, risks and opportunities.[440]
Climate policies	DR E1-2 – Policies related to climate change mitigation and adaptation: The undertaking shall describe its policies adopted to manage its material impacts, risks and opportunities related to climate change mitigation and adaptation.[441]
Climate Initiatives	DR E1-3: Actions and resources in relation to climate change policies: The undertaking shall disclose its climate change mitigation and adaptation actions and the resources allocated for their implementation.[442]
Climate targets	DR E1-4 – Targets related to climate change mitigation and adaptation: The undertaking shall disclose the climate-related targets it has set.[443]

[437] Delegated Regulation (ESRS), Annex I ESRS E 1, (13).
[438] Delegated Regulation (ESRS), Annex I ESRS E 1, (14).
[439] Delegated Regulation (ESRS), Annex I ESRS E 1, (18).
[440] Delegated Regulation (ESRS), Annex I ESRS E 1, (20).
[441] Delegated Regulation (ESRS), Annex I ESRS E 1, (22).
[442] Delegated Regulation (ESRS), Annex I ESRS E 1, (26).
[443] Delegated Regulation (ESRS), Annex I ESRS E 1, (30).

Energy profile	DR E1-5 – Energy consumption and mix: The undertaking shall provide information on its energy consumption and mix.[444]
GHG emissions	DR E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions: The undertaking shall disclose in metric tonnes of CO2eq its: (a) gross Scope 1 GHG emissions; (b) gross Scope 2 GHG emissions; (c) gross Scope 3 GHG emissions; and (d) total GHG emissions.[445]
Carbon offset initiatives	DR E1-7 – GHG removals and GHG mitigation projects financed through carbon credits: The undertaking shall disclose: (a) GHG removals and storage in metric tonnes of CO2eq resulting from projects it may have developed in its own operations, or contributed to in its upstream and downstream value chain; and (b) the amount of GHG emission reductions or removals from climate change mitigation projects outside its value chain it has financed or intends to finance through any purchase of carbon credits.[446]
Carbon pricing	DR E1-8 – Internal carbon pricing: The undertaking shall disclose whether it applies internal carbon pricing schemes, and if so, how they support its decision making and incentivize the implementation of climate-related policies and targets.[447]
Climate-related financial effects	DR E1-9: Anticipated financial effects from material physical and transition risks and potential climate-related opportunities: The undertaking shall disclose its: (a) anticipated financial effects from material physical risks; (b) anticipated financial effects from material transition risks; and (c) potential to benefit from material climate-related opportunities.[448]

Table 21 Individual Indicators on Climate Change including their Description.

[444] Delegated Regulation (ESRS), Annex I ESRS E 1, (35).
[445] Delegated Regulation (ESRS), Annex I ESRS E 1, (44).
[446] Delegated Regulation (ESRS), Annex I ESRS E 1, (56).
[447] Delegated Regulation (ESRS), Annex I ESRS E 1, (62).
[448] Delegated Regulation (ESRS), Annex I ESRS E 1, (64).

Indicator	Scoring	Sub-dimension	Readyness Score Subdimension	Dimension	Readyness Score Dimension
		C1 – Enviromental DD			
DD-Mapping	0	DD-Mapping	0	Reporting on Environmental Due Diligence	1,4583
Governance disclosure	1	Embedding Due Diligence in Governance, Strategy and Business Model	1,0000		
Sustainability incentivization	0				
Material IRO and interaction with SBM	2				
Governance disclosure	1	Engaging with affected Stakeholders	1,7500		
Stakeholder perspectives	2				
Due diligence processes	1				
Sustainability policies	3				
Due diligence processes	1	Identifying and Assessing Adverse Environmental Impacts	1,5000		
Material IRO and interaction with SBM	2				
Sustainability initiatives	2	Taking Actions to Address Adverse Environmental Impacts	2,0000		
Sustainability metrics	3	Tracking the Effectiveness of these Efforts and Communicating	2,5000		
Performance monitoring	2				
		C2 – Enviromental DD			
DD-Mapping	0	DD-Mapping	0,0000	Reporting on Environmental Due Diligence	1,9861
Governance disclosure	2	Embedding Due Diligence in Governance, Strategy and Business Model	1,6667		
Sustainability incentivization	1				
Material IRO and interaction with SBM	2				
Governance disclosure	2	Engaging with affected Stakeholders	2,7500		
Stakeholder perspectives	3				
Due diligence processes	3				
Sustainability policies	3				
Due diligence processes	3	Identifying and Assessing Adverse Environmental Impacts	2,5000		
Material IRO and interaction with SBM	2				
Sustainability initiatives	2	Taking Actions to Address Adverse Environmental Impacts	2,0000		
Sustainability metrics	3	Tracking the Effectiveness of these Efforts and Communicating	3,0000		
Performance monitoring	3				

Ø Sub-dimensions	Ø Readyness Score Dimensions	Ø Readyness
DD-Mapping	0,0000	1,7222
Embedding DD in Governance, Strategy and Business Model	1,3333	
Engaging with affected Stakeholders	2,2500	
Identifying and Assessing Adverse Environmental Impacts	2,0000	
Taking Actions to Address Adverse Environmental Impacts	2,0000	
Tracking the Effectiveness of these Efforts and Communicating	2,7500	

Figure 18 Calculation of the Readiness Assessment for Environmental Due Diligence.

Indicator	Score	Subdimension	Readyness score Subdimension	Dimension	Readyness score Dimension
C1 – Climate Change Strategies					
Climate-related incentivization	0	Governance (GOV)	0,0000	Reporting on Climate Change Strategies	1,3750
Transition plan	3	Strategy (SBM)	2,0000		
Material climate-related IRO and interaction with SBM	1				
Climate related Due diligence processes	1	Impact, Risk and Opportunity Management (IRO)	1,6667		
Climate policies	2				
Climate initiatives	2				
Climate targets	3	Metrics and Targets (MT)	1,8333		
Energy profile	3				
GHG emissions	3				
Carbon offset Initiatives	1				
Carbon pricing	1				
Climate-related financial impacts	0				
C2 – Climate Change Strategies					
Climate-related incentivization	0	Governance (GOV)	0,0000	Reporting on Climate Change Strategies	1,6250
Transition plan	3	Strategy (SBM)	2,5000		
Material climate-related IRO and interaction with SBM	2				
Climate related Due diligence processes	2	Impact, Risk and Opportunity Management (IRO)	2,0000		
Climate policies	2				
Climate initiatives	2				
Climate targets	3	Metrics and Targets (MT)	2,0000		
Energy profile	3				
GHG emissions	3				
Carbon offset Initiatives	1				
Carbon pricing	1				
Climate-related financial impacts	1				

Ø Sub-dimensions	Ø Readyness Score Dimensions	Ø Readyness
Governance (GOV)	0,0000	1,5000
Strategy (SBM)	2,2500	
Impact, Risk and Opportunity Management (IRO)	1,8333	
Metrics and Targets (MT)	1,9167	

Figure 19 Calculation of the Readiness Assessment for Climate Change Strategies.