
Possible organisational changes in connection with achieving compliance with the Corporate Sustainability Reporting Directive (CSRD)

- A case study of three
Danish companies

Environmental Management
and sustainability science

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STUDENT REPORT



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STUDENT REPORT

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Title:

Possible organisational changes in connection with achieving compliance with the Corporate Sustainability Reporting Directive (CSRD) - A case study of three Danish companies

Theme:


Master's Thesis

Project Period:

2nd February 2023 - June 1, 2023

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Copies: 1

Page Numbers: 107

Date of Completion:

June 1, 2023

Synopsis:

This thesis examines organisational changes in three case companies which are subject to the CSRD. This was found relevant to investigate on the basis of a state-of-the-art literature review as well as an investigation of the current debate in Denmark regarding the CSRD through webinars, podcasts and interviews. This led to the following research questions: *How does the requirement in the CSRD and the new ESRS standards affect the way in which the case companies internally work with sustainability and sustainability reporting, and which organisational changes are necessary for them to become compliant with the CSRD?* To answer this research question, a document analysis was conducted of the CSRD as well as other relevant legislation and supplementary documents. This was in order to investigate which requirements were set for the companies through the CSRD. Additionally, a case study of three large Danish manufacturing companies was carried out. This case study applies the constructed conceptual framework to investigate which challenges the companies face and which organisational changes may be necessary to achieve compliance with the CSRD. It is concluded that the CSRD causes organisational changes, such as system changes and changes associated with data handling. The thesis further concludes that the organisational changes can be classified as developmental and transitional changes rather than transformational changes in the case companies.

The content of this report is freely available, but publication (with reference) may only be pursued due to agreement with the author.

Preface

This master's thesis is written as the semester report of the 4th semester of the educational program; Environmental Management and Sustainability Science at Aalborg University, from the 1st of February to the 2nd of June 2023.

Through this thesis, several interviews have been conducted in order to obtain knowledge and perspectives related to the examined How the CSRD affects Danish companies. In association with these interviews, a big ***thank you*** goes to all the respondents for devoting their time and sharing their knowledge and perspectives related to the examined topic. This includes employees at the three case companies: *Victor Sejling Kubel, Liselotte Gjerdrum Carlsen and Vasileia Stavrakaki*.

Additionally, also a special thanks you to *Ellen Marie Friss Johansen, Ida Kirstine Andersen Boe and Simon Hillbrandt Jacobsen* who, as professionals and consultants working within sustainability, have contributed with a unique perspective to this thesis.

The GDPR rules are taken into account in connection with the fulfilment of the obligation to inform the collection, handling and storage of personal data through the conducted interviews. This was done by request for consent to process personal data which are accepted by all respondents.

Finally, thank you to our supervisor Anja Marie Bundgaard for great and professional supervision of this thesis.

Reading Guide

This thesis utilises, the Harvard method as reference style and will be indicated by (Author, year) or (Author, year, page number), the page number will be included in quotes and references from books. The figures and tables used throughout the thesis will be referred to via chapter number and thereafter the sequential number.

Aalborg University, June 1, 2023

List of Abbreviations

Abbreviation	Description
B2B and B2C	B2B (business-to-business) and B2C (businesses and consumers)
CBMI	Circular Business Model Innovation
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
CSDDD	Directive on Corporate Sustainability Due Diligence - COM/2022/71
CSR	Corporate social responsibility
CSRD	Corporate Sustainability Reporting Directive - 2022/2464/EU
EFRAG	The European Financial Reporting Advisory Group
ESG	Environmental, Social and Governance
ESRS	European Sustainability Reporting Standards
FISMA	Financial Stability, Financial Services and Capital Markets Union
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
IIRC	International Integrated Reporting Council
ISO	International Organization for Standardization
KPI	Key Performance Indicator
NFI	Non-Financial Information
NFRD	Non-Financial Reporting Directive - 2014/95/EU
PIEs	Public Interest Entities
R&D	Research and Development
SASB	Sustainability Accounting Standards Board
SBTi	Science Based Target Initiative
SDG	Sustainable Development Goals
UNGC	United Nations Global Compact

Table 1. Abbreviations in alphabetical order

Dansk resume

Gennem et litteratur review af videnskabelige artikler står det klart at der gennem de seneste 10 år er foretaget adskillige opgraderinger af europæisk lovgivning vedrørende virksomheders bæredygtighedsrapportering. Corporate Sustainability Reporting Directive (CSRD) og de tilhørende European Sustainability Reporting Standards (ESRS) udgør de nyeste krav og rammer for rapportering af ESG-informationer. På baggrund af foretaget litteraturen review, omhandlende ESG-rapportering og tilhørende udfordringer kan det konstateres at der er stort fokus på udviklingen af området frem til CSRD.

CSRD først er vedtaget i 2022 og udgør dermed et relativt nyt forskningsområde, hvorfor der begrænset videnskabelig litteratur udgivet omhandlende CSRD. Derfor er webinarer, podcasts og interviews anvendt til at supplere den videnskabelige litteratur, samt til at kortlægge den aktuelle debat i Danmark omkring CSRD. Den aktuelle debat i Danmark understøtter pointen om, at CSRD betragtes som en opgradering af tidligere lovgivning og rammer for bæredygtighedsrapportering. På baggrund af hhv. den videnskabelige litteratur og debat i Danmark vedrørende CSRD, kan det konstateres, at CSRD'en vil give udfordringer for danske virksomheder. Derudover vil de nye krav til bæredygtighedsrapportering i danske virksomheder i nogle tilfælde føre til organisatoriske forandringer for at sikre virksomheden overensstemmelse med kravene CSRD'en. Derfor er følgende problemformulering opsat;

Hvordan påvirker kravet i CSRD og de nye ESRS-standarder måden, hvorpå case virksomhederne internt arbejder med bæredygtigheds- og bæredygtighedsrapportering, samt hvilke organisatoriske ændringer er nødvendige for, at de er i overensstemmelse med CSRD'en?

Specialet er udformet som et kvalitativt forsknings design, og anvender et casestudie af tre danske virksomheder. Udvalgelses strategien for casestudiet tager udgangspunkt i en maksimal variation samt kritisk case-udvælgelse. Dette førte til tre forskellige danske produktionsvirksomheder, der alle kan klassificeres som "best-in-class". Den empiriske dataindsamling er foretaget gennem interviews. Der er yderligere foretaget en dokumentanalyse af de enkelte virksomheders seneste ESG informationer, gennem enten deres bæredygtighedsrapport eller deres integrerede rapport indeholdende både ESG- og finansielle informationer.

Der er ligeledes gennemført en dokumentanalyse af CSRD'en og de tilhørende 12 ESRS standarder for at opnå en forståelse for, hvilke krav der stilles til virksomhederne. På baggrund af denne analyse kan det konkluderes at CSRD'en både stiller nye og mere specifikke krav til virksomhedernes rapportering af ESG-information. Derudover står det klart at den ramme og struktur for rapportering som ESRS'erne fastsætter, understøtter enstrengningen og sammenligneligheden af de ESG-informationer der skal rapporteres.

For at undersøge de organisatoriske forandringer i de tre case virksomheder er der udviklet en teoretisk ramme (Conceptual Framework) indeholdende de mest etentiselle elementer, der er vurderet relevante at undersøge i forbindelse med organisatoriske ændringer, som kunne forventes at opstå på grund af CSRD.

På baggrund af casestudierne af de tre virksomheder, kan det konkluderes at casevirksomhederne alle står over for udfordringer, de skal håndtere for at sikre overensstemmelse med kravene CSRD'en. Disse organisatoriske forandringer er primært procesrelaterede og kan derfor klassificeres som udviklingsmæssige- og overgangs forandringer.

Presset for at gennemføre disse forandringer kommer primært fra deres kunder der efterspørger ESG data og ikke kun fra CSRD'en som ellers var antaget at udgøre det indlysende pres på virksomhederne. Der er en intern motivation i alle tre casevirksomheder for at foretage de organisatoriske forandringer, idet de ønsker at kunne identificere sig som virksomhederne der prioritere bæredygtige. Det kan konkluderes at de organisatoriske forandringer primært omhandler formelle og uformelle procedure og processer for dataindsamling, håndtering og verifikation, samt IT-systemer til håndtering af data. Derudover handler det for virksomhederne om træning af og vidensdeling blandt medarbejdere for i højere grad at kunne integrere bæredygtighed i beslutnings-processer.

Endelig kan det konkluderes, at kravene i CSRD'en og de nye ESRS standarder påvirker måden, hvorpå casevirksomhederne internt arbejder med bæredygtigheds- og bæredygtighedsrapportering, i flere henseender som følge af.

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1.1 Introduction to Disclosure of Corporate Sustainability

In 2020 the European Green Deal (Green Deal) was unveiled, as a new growth strategy to achieve a sustainable economy in the EU ([European Commission, 2019](#)). The focus of the Green Deal is to ensure; no net emissions of greenhouse gases in 2050 and a decoupling of economic growth and resource use ([European Commission, 2019](#)).

A key part of reaching the policy objectives set under the Green Deal is the integration of sustainability in financial policies across Europe. In an EU policy context, sustainable finance is viewed as finance that takes environmental, social and governance (ESG) considerations into account while still supporting economic growth ([FISMA, n.a.](#)). A part of why the European Commission is including the financial and corporate sector in the fulfilment of the Green Deal, as a mean to fund the transition to a climate-neutral, resource-efficient and fair economy through sustainable investments ([FISMA, n.a.](#)). This financing is through ensuring innovation and technological development as well as investing in green initiatives ([FISMA, n.a.](#); [WBCSD, n.a.](#)). The corporate sector, therefore, has a key position in ensuring this transformation into a sustainable economy ([European Commission, 2018](#)). This view is further supported by the European "Action Plan: Financing Sustainable Growth" from 2018. Through this communication from the European Commission, the importance of the link between the financial sector and sustainability was emphasised ([European Commission, 2018](#)).

Included in the understanding of sustainable finance is an emphasis on corporate sustainability and transparency in corporate disclosure, and with the *Corporate Sustainability Reporting Directive - 2022/2464/EU* (CSRD), a greater emphasis on disclosure of non-financial information (NFI) ([The European Parliament and The Council Of The European Union, 2022a](#)). The legislation that preceded the CSRD was the *Non-Financial Reporting Directive - 2014/95/EU* (NFRD), which introduced requirements for certain large European companies entities to disclose NFI ([The European Parliament and The Council Of The European Union, 2014](#)). Through the legislation, both NFRD and CSRD, the term NFI is used, as a European legal technical term that covers sustainability information, which in turn covers ESG information.

Denmark was the first to adopt legislation for mandatory public disclosure of environmental information through the Green Accounts legislation in 1995 ([Miljøministeriet, 1995](#); [Holgaard and Jørgensen, 2005](#)). However, this legislation on Green Accounts was repealed in 2015 and the same information is now reported under the PRTR (Pollutant Release and Transfer Register) ([Miljøministeriet, 2015](#); [European Commission, 2006](#)). In addition to Green Accounts, the largest Danish companies have since 2009 been subject to national non-financial reporting requirements, that up until the proposed CSRD, had remained

wider than the NFRD, given the scope of companies was broadened when the NFRD were implemented into Danish law ([The European Parliament and The Council Of The European Union, 2014](#); [Schmith et al., 2022](#)). Currently, stated in *Section §99a of the Danish Financial Statements Act - LBK nr 1441 from 14/11/2022*, large Danish companies in accounting class C and accounting class D must disclose their social responsibility work, either integrated into the annual financial report or separately ([Erhvervsstyrelsen, 2022](#)). As of writing the CSRD is not transposed into Danish law, and the thesis will therefore take a point of departure in the official European legislation text of the CSRD ([The European Parliament and The Council Of The European Union, 2022a](#); [Erhvervsstyrelsen, 2023](#)). However, exactly how these large companies, both European and Danish, were to conduct their disclosure of NFI was left to the companies ([EPRS, 2021](#)).

This has led to a growth in the number offered of sustainability reporting framework, which either completely or partially deals with the disclosure of NFI. Table 1.1 shows the most common standards used for corporate sustainability reporting by large companies ([Yosifova and Petrova-Kirova, 2022](#); [Sklias, 2022](#)).

Common Standards for Sustainability Reporting	Abbreviation	Focus Area of the Reporting Standards	Scope of Standards
The Global Reporting Initiative	GRI	General Sustainability	Universal standards and are developing sector specific standards
United Nations Global Compact	UNGC	Human Rights, Labour, Environment and Anti-corruption,	Universal standards
Carbon Disclosure Project	CDP	Climate, Supply Chain, Forest and Water	Universal standards and high-impact specific standards
International Organisation for Standardisation's Standard for Social responsibility	ISO 26000	Social Responsibilities, Value Chain and Environmental Impact.	Universal standards
The Task Force on Climate-related Financial Disclosures	TCFD	ESG and Climate Financial Risk	Universal standards
The Sustainability Accounting Standards Board Standards (including The International Integrated Reporting Framework)	SASB (IIRC)	General Sustainability Accounting and ESG Financial Risk	Sector specific

Table 1.1. shows a table of the most common sustainability reporting standards, both in full name and abbreviation, as well as the focus area and scope for the standards ([Yosifova and Petrova-Kirova, 2022](#); [Sklias, 2022](#)). The last sustainability reporting standard, the SASB standard is developed by International Sustainability Standards Board (ISSB) under The International Financial Reporting Standards (IFRS), and will continue to be used as a reporting tool until they are replaced with the IFRS Sustainability Disclosure Standard [ISSB \(n.a.b\)](#); [Stormer \(2022a\)](#). Source references for table: ([GRI, n.a.](#); [UNGC, n.a.](#); [CDP, n.a.](#); [ISO, n.a.](#); [TCFD, n.a.](#); [ISSB, n.a.b](#))

The effect of NFRD, on both Corporate Social Responsibility (CSR) activities and the quality of these activities, has been shown to be positive ([Zarzycka and Krasodomska, 2022](#); [Jackson et al., 2020](#)). However, what has come from the freedom of choice of framework associated with the disclosure of non-financial in the NFRD, is a difficulty in effective comparison of corporations ([Zarzycka and Krasodomska, 2022](#)). By ensuring an increase in comparability and transparency of reporting regarding non-financial data, the CSRD is seen as an upgrade to the NFRD and not just a replacement ([Primec and Belak, 2022](#)). In acknowledgement of that it is, among other things, the lack of a common sustainability reporting framework that hinders effective comparability and transparency, the European Commission found it necessary to set a framework for this reporting ([The European Parliament and The Council Of The European Union, 2022a](#)). During the preparation of the CSRD, no existing standard or framework satisfied the European Commission

regarding sustainable reporting ([The European Parliament and The Council Of The European Union, 2022a](#)). Based on criteria about a double materiality perspective, a need to cover a wider extent of sustainability matters and an alignment with other obligations under EU law ([The European Parliament and The Council Of The European Union, 2022a](#)). Based on this realisation, the commission endorsed The European Financial Reporting Advisory Group (EFRAG) to publish recommendations for sustainability reporting standards ([The European Parliament and The Council Of The European Union, 2022a](#); [EFRAG and EFRAG SRB, 2022](#)). As of 2022, the EFRAG Sustainability Reporting Board (EFRAG SRB) has published twelve drafts of European Sustainability Reporting Standards (ESRS) covering a wide scope of the ESG areas ([EFRAG and EFRAG SRB, 2022](#)). These ESRS drafts are set to be adopted as delegated acts in the summer of 2023, thereby ensuring uniform standards in sustainability reporting before the first report under the CSRD is to be published in 2025 ([The European Parliament and The Council Of The European Union, 2022a](#); [EFRAG and EFRAG SRB, 2022](#)).

1.2 State of the Art Literature Review on Corporate Sustainability Reporting

A state of the art literature review was carried out to identify and outline the field of research, which is corporate sustainability reporting.

The purpose of the state of the art was to map out the current and relevant knowledge within the chosen subject in a structured way, which can form a justification for further research. The methodology and further description of the process carried out for the state of the art literature review can be found in section 3.2.1.

Emerging from the literature review, was the understanding that corporate sustainability reporting is a topic of interest for several academic disciplines; including environmental, social sciences and sustainability research in addition to corporate management, accounting, law, and economics research. The overlap of academic disciplines is due to the overlap between financial reporting and corporate social responsibility (CSR), both of which have been developed to include a disclosure of corporate sustainability information. Corporate sustainability information is also most often referred to as sustainability information or Environment, Social and Governance (ESG) information ([The European Parliament and The Council Of The European Union, 2022a](#); [FISMA, n.a.](#)).

This multiplicity in academic disciplines has led to a broad literature review of the state of the art of research related to corporate sustainability reporting, however, four overarching themes have been found that recur in the literature:

- Developments in legislation regarding corporate sustainability reporting
- Requirements for and the use of standards for corporate sustainability reporting
- Assurance and audit of corporate sustainability reporting
- The Board of Directors and/or Managements role in relation to corporate sustainability reporting

Each of these themes will in the following be described further and can be seen in table 1.2 with an indication of which literature discuss which themes.

	Assurance/ Audit	Competences	Development in Legislation	Requirements/ Standards	Competences	Board/CEO / Management
Primec, A. & Belak, J. (2022)			X	X	X	X
Pulino, S. C. et al. (2022)	X					X
Arvidsson, S. & Dumay, J. (2022)			X	X		X
Janicka, M. & Sajnog, A. (2022)			X	X		
Baid, V. & Jayaraman, V. (2022)			X			
Antoine, P. et al. (2022)					X	
Vander Bauwhede, H. & Van Cauwenberge, P. (2022)	X					
Ottenstein, P. et al. (2022)				X		
Camoletto, S. et al. (2022)			X			
Fiandrino, S. et al. (2022)		X		X		
Myers, C. & Czarnecki, J. J. (2021)	X				X	
Czaja-Cieszyńska, H. et al. (2021)				X		
Lenz, R. & Hoos, F. (2023)	X	X				
Balp, G. & Strampelli, G. (2022)			X			
International Financial Law Review (2022)			X			
Paolone, F. et al. (2023)						X
Yosifova, D. & Petrova-Kirova, M. (2022)			X	X		
Willekes, E. et al. (2022)		X				
Afolabi, H. et al. (2022)				X		
De Cristofaro, T. & Gulluscio, C. (2023)				X		
Reedtz, P. M. (2021)			X			
Zetsche, D. A. & Anker-Sørensen, L. (2022)			X			X
Bergman, M. & Rogers, J. (2021)			X			
Maechler, S. (2022)	X					
Battistella, P. (2021)			X			
Dicuonzo, G., Donofrio, F., Ranaldo, S. (2022)				X		

Table 1.2. Shows an overview of the identified themes in the articles and which articles discuss which theme. The themes in the table are colour-coordinated and if there are several of the same colour, the theme on the left is the main category, and the theme on the right after that is a subcategory.

1.2.1 Developments in Legislation Regarding Corporate Sustainability Reporting

Corporate sustainability reporting became an aspect selected companies had to deal with through the *Non-Financial Reporting Directive (Directive 2014/95/EU - NFRD)* introduced in 2014 ([The European Parliament and The Council Of The European Union, 2014](#)). Under the NFRD, large companies have, since 2018 based on the previous financial year, had to publish NFI related to five topics:

- Environmental matters
- Social matters and treatment of employees
- Respect for human rights
- Anti-corruption and bribery
- Diversity on company boards (in terms of age, gender, educational and professional background)

([The European Parliament and The Council Of The European Union, 2014](#))

The objective of the NFRD was to improve the quality and quantity of the reporting of corporate NFI ([The European Parliament and The Council Of The European Union, 2014](#); [European Commission and FISMA, 2020](#)). According to, [Camoletto et al. \(2022\)](#) and [Czaja-Cieszyńska et al. \(2021\)](#) the directive has increased the quality and quantity of reporting. However, [Camoletto et al. \(2022\)](#) points out that this increase is most evident in companies that, before the mandatory legal requirement for reporting, were characterised as "low" performing companies.

Comparatively, [Fiandrino et al. \(2022\)](#) and [Janicka and Sajnog \(2022\)](#) direct attention to that the NFRD has increased the quality and quantity of the reporting of corporate NFI. However, the NFRD has not increased the quality and quantity enough, and there is still ample opportunity to increase the NFI more ([Fiandrino et al., 2022](#); [Janicka and Sajnog, 2022](#)).

This point stems from the fact that [Janicka and Sajnog \(2022\)](#) argues that the companies face far more challenges in relation to sustainability than the NFRD includes, and thereby the NFRD only uncovers part of the companies' real non-financial or sustainability information. Both ([Fiandrino et al., 2022](#)) and [Yosifova and Petrova-Kirova \(2022\)](#), additionally, point out that there has been observed cherry-picking of NFI, which has contributed to the quality of NFI not having achieved the potential improvement under the NFRD, as relevant and important information has been sorted out.

Furthermore, [Bergman and Rogers \(2021\)](#) and [Paolone et al. \(2023\)](#) identify companies are being pressured to report on more aspects of sustainability than have been included in the NFRD. This pressure comes from stakeholders, investors and/or civil society, as these use corporate sustainability reporting as an indicator of the company's general sustainability, due to an understanding of a correlation between the company's general sustainability and their reporting ([Paolone et al., 2023](#)). This is also supported by [Baid and Jayaraman \(2022\)](#) who points out that the public in Europe sees companies as a unit that both creates economic growth and societal progress. Therefore, corporate sustainability is also of particular interest to the public.

Subsequently, it is pointed out by, among others, [Primec and Belak \(2022\)](#), [Ottenstein et al. \(2022\)](#), [Reedtz \(2021\)](#) and [Bergman and Rogers \(2021\)](#) that there are generally three challenges, that can and must be improved from the NFRD, which are:

- Comparability of non-financial information
- Transparency on data sources and methodologies
- Reliable and accessible non-financial information

This improvement is what the EU is seeking to amend in the new CSRD.

Amendment to the NFRD

As part of the European Green Deal, it was determined that the European Commission should assess the NFRD, based on their view on the importance of improvement of disclosure of NFI from companies and financial institutions ([European Commission, 2019](#); [The European Parliament and The Council Of The European Union, 2022a](#)). The European Commission began a *Public consultation on the review of the non-financial reporting directive* in 2020 and publish a *Proposal for a Corporate Sustainability Reporting Directive (CSRD) to amend the reporting requirements of the NFRD (Directive (EU) 2022/2464)* (CSRD) which was approved and entered into force the 5th of January 2023 ([The European Parliament and The Council Of The European Union, 2022a](#); [Commission, 2020](#)).

[Primec and Belak \(2022\)](#) and [Yosifova and Petrova-Kirova \(2022\)](#) both call the CSRD an upgrade of mandatory corporate sustainability reporting and expect the CSRD to improve what previously fell short in the NFRD. This expectation for an improvement in information published on sustainability issues and an improvement in reporting requirements is also supported by [Sklias \(2022\)](#). [Czaja-Cieszyńska et al. \(2021\)](#) brings up that they expect the CSRD to bring the same increase in quality of NFI that was seen when the NFRD came into force.

Furthermore, [Ottenstein et al. \(2022\)](#) have found a positive effect on the quantity of companies reporting in addition to the quantity of reported information as well as the overall quality. Similarly, [Ottenstein et al. \(2022\)](#) also divides the consequences associated with the regulation of sustainability reporting, through requirements for mandatory reporting, into first-order and second-order consequences. The first-order consequences are found interesting to focus on within this study as they are defined as the direct effects caused by the change in reporting regulation ([Ottenstein et al., 2022](#)).

The landscape regarding mandatory corporate sustainability reporting for companies operating in Europe is undergoing major changes in recent years, [Sklias \(2022\)](#) even call it a radical transformation. This is due to the development that has taken place in the area, both by the inclusion of more and new aspects. In addition, the large combination of traditional financial reporting and non-financial reporting. This development can be illustrated in figure 1.1.

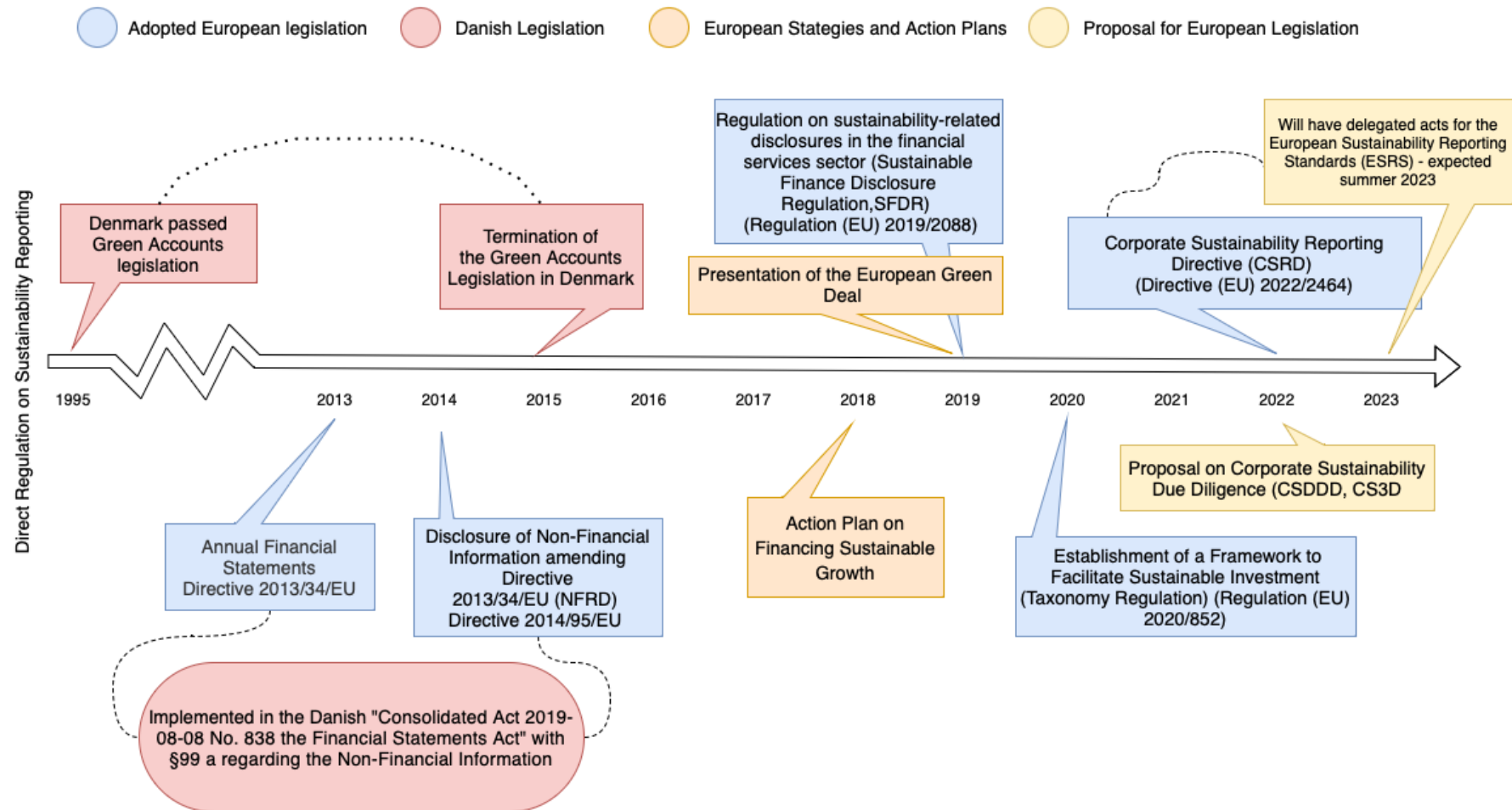


Figure 1.1. Shows a timeline of direct regulation of sustainability reporting from 1995 to 2023, in a Danish context. In the figure, the dashed links show a direct connection between one or more pieces of legislation.

(Miljøministeriet, 1995, 2015; The European Parliament and The Council Of The European Union, 2014; European Commission, 2019; The European Parliament and The Council Of The European Union, 2020, 2022a; European Commission, 2022)

As can be seen from figure 1.1, a lot has happened regarding corporate reporting in the recent decade. Several specific directives and regulations have been added with the aim of increasing the availability of information from companies about their impact and effect on sustainability issues.

Aside from the CSRD, *The Establishment of a Framework to Facilitate Sustainable Investment (Regulation (EU) 2020/852)* (the Taxonomy), is another significant initiative regarding the regulation of the disclosure of companies' economic activity qualified as environmentally sustainable ([The European Parliament and The Council Of The European Union, 2020](#)). The Taxonomy is a classification system, which aims to guide and upscale sustainable investments in the EU. In connection with comprehensive sustainability reporting and the CSRD, the Taxonomy is relevant to include because it is developed and implemented in conjunction with the reporting requirements according to the CSRD.

[Antoine et al. \(2022\)](#) points out that the Taxonomy and the *Regulation on sustainability-related disclosures in the financial services sector (Regulation (EU) 2019/2088)* (SFDR) ([The European Parliament and The Council Of The European Union, 2019](#)), together will help to remedy the data accessibility issues around NFI.

However, [Battistella \(2021\)](#) points out that the European Commission has started backwards with the Taxonomy regulation and the SFDR before the CSRD. This is given that the data used for the Taxonomy regulation and the SFDR is often based on, and thereby limited by, the available data from companies NFI ([Battistella, 2021](#)). Furthermore, the European Commission has published *a proposal for a Directive on Corporate Sustainability Due Diligence - COM/2022/71* (CSDDD), stating that it will support a sustainable and responsible corporate behaviour ([European Commission, 2022](#)). Together, this composition of legislation, the Taxonomy regulation, SFDR, CSRD and CSDDD will support the development of corporate sustainability ([The European Parliament and The Council Of The European Union, 2020, 2019, 2022a; European Commission, 2022, 2018](#)).

Additionally, together with the reporting requirements from the CSRD, a challenge may arise for companies associated with collecting sufficient and reliable data. [Balp and Strampelli \(2022\)](#) indicates that a burden may arise for the companies associated with collecting this data, as there will be an increased demand for data leading to more working hours collecting data and thereby an increased price on data.

Based on the aforementioned, it can be understood that the CSRD, as a regulatory tool, is part of a larger European goal to achieve ambitious sustainability goals in connection to the green deal and sustainable finance ([European Commission, 2019, 2018; The European Parliament and The Council Of The European Union, 2022a](#)). The previous regulation of companies' sustainable reporting, through the NFRD, has had a positive effect on both the quality and quantity of reported data from companies ([Ottenstein et al., 2022; Afolabi et al., 2022; European Commission and FISMA, 2020](#)). However, this increase must be seen in relation to the fact that the regulation was only applicable to Public Interest Entities (large listed companies, banks and insurance companies - PIE's) ([The European Parliament and The Council Of The European Union, 2014](#)). This, as well as; the free guidelines for how to report and what is deemed significant enough to include in reporting has resulted in problematic situations or deficiencies associated with reporting under the

NFRD, which is attempted to be resolved through the CSRD.

Table 1.3 shows the previously described challenges that have been identified earlier in relation to the NFRD and how the CSRD has sought to implement initiatives to deal with these challenges.

Challenges associated with the NFRD	How CSRD addresses the challenges from the NFRD
Comparability of NFI	Develop mandatory common sustainability reporting standards - the ESRS by EFRAG
Transparency on data sources and methodologies	Develop mandatory common sustainability reporting standards - the ESRS by EFRAG
Reliable and accessible NFI	Assurance of the sustainability report (in time both limited assurance and reasonable assurance)

Table 1.3. Shows a table of the identified challenges associated with the NFRD and how the CSRD seeks to address these challenges.

([The European Parliament and The Council Of The European Union, 2014](#); [European Commission and FISMA, 2020](#); [The European Parliament and The Council Of The European Union, 2022a](#))

1.2.2 Requirement and Standards

The challenges regarding how and what to report based on the NFRD led to a lack of comparability across companies' sustainability reports as well as a lack of transparency regarding data. This is argued to be due to the free guidelines and lack of standards from the EU.

Following the adoption of the NFRD in 2014, the European Commission published two guidelines on non-financial reporting; in 2017 the *Guidelines on non-financial reporting (methodology for reporting non-financial information)* (2017/C 215/01) and in 2019 the *Guidelines on non-financial reporting: Supplement on reporting climate-related information* (2019/C 209/01) ([The European Commission, 2017, 2019](#)).

[Primec and Belak \(2022\)](#) stipulate that, by the NFRD not specifying which standard companies should follow in their sustainability report, led to the companies using different standards making the sustainability disclosure non-transparent and non-comparable. The way the CSRD addresses this challenge is by developing mandatory common sustainability reporting standards - the European Sustainability Reporting Standards (ESRS) by EFRAG ([EFRAG and EFRAG SRB, 2022](#); [The European Parliament and The Council Of The European Union, 2022a](#)). [Primec and Belak \(2022\)](#) argues that, due to the free framework for the methodology for reporting NFI, more companies use reporting standards, such as the GRI standards on sustainability reporting. By not setting a unified framework for reporting but simply setting requirements for reporting, a non-transparent and inconsistent practice arises in terms of sustainability reporting. It is this non-transparent and inconsistent practice that the CSRD aims to solve by setting more requirements and firmer frameworks for European sustainability reporting ([Primec and Belak, 2022](#)).

A significant point is connected with the various professions that prepare the standards used for sustainability reporting, which also concerns which professions prepare the sustainability reporting in the companies. Different professional areas amplify different focus areas, e.g. a financial background has been found to amplify governance aspects

and an environmental technical background to amplify environmental aspects ([Afolabi et al., 2022](#)). By setting requirements for content and framework through the CSRD and more precisely through the ESRS, the hope is to ensure a board and equal weighting of sustainability across ESG aspects ([The European Parliament and The Council Of The European Union, 2022a](#)). This is supported by [Pulino et al. \(2022\)](#), who points out the importance of sustainability including a balance of all three ESG pillars of sustainability and is being extended to all industries ([IFLR, 2022](#)).

[Ottenstein et al. \(2022\)](#) is sure that the more advanced requirements in the CSRD will become a challenge for companies with a certain level of maturity, for reporting on sustainability. The broadened requirements in the CSRD challenge the companies regarding their qualitative data which they so far have not used in their corporate sustainability reporting as they still do their corporate sustainability disclosure as a "tick-the-box", and [Primec and Belak \(2022\)](#) thereby find the ESRS standards even more necessary. A part of the new ESRS standards is the double materiality which [Cristofaro and Gulluscio \(2023\)](#) expect to be of great variety in the reports in the coming years and argues that this aspect of the standards needs great attention.

1.2.3 Assurance and Audit

One of the challenges of the NFRD was the ability to create reliable and accessible NFI from companies ([The European Parliament and The Council Of The European Union, 2022a; European Commission and FISMA, 2020](#)). To ensure this, the CSRD sets requirements for mandatory assurance of the sustainability report, beginning with limited assurance in 2026 and gradually incorporating reasonable assurance from 2028 ([The European Parliament and The Council Of The European Union, 2022a](#)). The limited assurance means that based on the report there are no identified reasons to conclude that the data are incorrect ([The European Parliament and The Council Of The European Union, 2022a](#)). The reasonable assurance requires several more comprehensive tests and procedures of the company and their reported data to conclude that the results meet the defined criteria and thereby conclude that the data reported is correct ([The European Parliament and The Council Of The European Union, 2022a](#)).

Investigations by [Bauwhede and Cauwenberge \(2022\)](#), of the effect of voluntary assurance of sustainability report, contain mixed results showing both positive and no effect of the assurance. A positive effect of assurance of sustainability reports is increased credibility for the companies and trust among stakeholders, found by [Bauwhede and Cauwenberge \(2022\)](#) and [Fiandrino et al. \(2022\)](#). [Maechler \(2022\)](#) also points out that assurance has long had a central role within the auditor and the financial field, and the current development of, assurance regarding sustainability reports is almost equated with annual financial statements.

Both [Fiandrino et al. \(2022\)](#), [Lenz and Hoos \(2023\)](#), [Myers and Czarnecki \(2021\)](#) and [Willekes et al. \(2022\)](#) point out how the professions that previously worked with the assurance of annual financial statements now have to assess and ensure sustainability, which is a field they not necessarily are trained in and a field that currently not have clear guidelines, in the same way as annual financial statements. [Lenz and Hoos \(2023\)](#) does not see auditors and accountants as ready for this role with engaging and providing assurance

of sustainability. Furthermore, [Willekes et al. \(2022\)](#), in continuation of this, points out that the biggest challenge is the mindset of accounting and control professionals, who currently mainly focus on financial data, which needs to be expanded if the full picture of sustainability is to be considered.

1.2.4 The Board of Directors and/or Managements Role in Relation to Corporate Sustainability Reporting

A significant number of articles were found to discuss the role of the board and management in the development of sustainability in companies and especially how they should be adjusted in relation to CSRD and other legislation relating to sustainability such as the Taxonomy and CSDDD ([Primec and Belak, 2022](#); [Arvidsson and Dumay, 2022](#); [Zetzsche and Anker-Sørensen, 2022](#); [Paolone et al., 2023](#); [Myers and Czarnezki, 2021](#)). In this aspect, [Zetzsche and Anker-Sørensen \(2022\)](#) points out that the assessment of key executives at the current point is based on two criteria, their fitness and properness. This relates to their experience (fitness) and their credibility and integrity associated with their work (properness). Furthermore, [Zetzsche and Anker-Sørensen \(2022\)](#) indicate that it is a question of time before sustainability becomes a part of the assessment. Additionally [Paolone et al. \(2023\)](#), states that it is necessary for a company's environmental performance that the board of directors has knowledge of and familiarity with sustainability as well as the opportunity and interest in implementing sustainable development in the company.

However, as argued by both [Zetzsche and Anker-Sørensen \(2022\)](#), [Paolone et al. \(2023\)](#) and [Primec and Belak \(2022\)](#) the current change in corporate sustainability, with the Taxonomy regulation, the implementation of the CSRD and the proposal for CSDDD, requires a change in the view of executives and the board of directors on the prioritisation of sustainability in the company. Sustainability will become a license to operate for companies and needs to be implemented by the top management, executives and board of directors.

1.2.5 The Knowledge Gap from the Literature

Based on the state of the art it is clear that the NFRD did have a positive impact on corporate sustainability reporting, and has led to an increase in both the quality and quantity of NFI disclosed by companies. However, through the literature, information has been found that supports the need to revise and expand the NFRD and thereby the regulation of corporate sustainability reporting. The CSRD is going to amend the identified aspects where the NFRD fall short and thus increase the quantity and quality of reliable NFI, through new European reporting standards. Additionally, the CSRD also broaden the scope of which companies are going to report according to the CSRD. All with the purpose of securing sustainable investments in Europe through increased comparability and transparency of companies' sustainability reporting.

1.3 Current Debate in Denmark Regarding the CSRD

In addition to the literature review, the current debate regarding the CSRD and challenges in Danish companies have been examined through webinars, podcasts and interviews from table 3.3 in section 3.2.2 and table 3.4 in section 3.2.3. Based on these, four main topics are identified;

- The CSRD and ESRS
- Danish Companies
- Europe VS global perspective
- ESG reporting

The described topics of the current debate, are illustrated in table 1.4, with an indication of which actor discuss which themes.

1.3.1 CSRD and the European Sustainability Reporting Standards

First and foremost there is an agreement that the CSRD is an important directive and tool from the EU towards more sustainable companies, which in turn will provide the necessary assistance for the green transition and creating a greener EU by mitigating e.g. the climate crisis (Johansen, 2023; Jacobsen, 2023; Reuters Event, 2022). With that being said the CSRD and the 12 ESRS, are going to be a huge task (IDA, 2022) for the companies as an administrative burden (Johansen, 2023). The task is referred to as a tsunami or freight train that hits the companies as the CSRD comes along with other legislations e.g. the Taxonomy and CSDDD (Bøge et al., 2022; Høgh, 2022a; European Commission, 2022; The European Parliament and The Council Of The European Union, 2020). The Taxonomy affects all large companies, in the scope of the CSRD, starting from 2024 (Ecobio Manager, 2023). The CSRD is described as being as large as the industrialisation because it forces companies to run their companies and exist in a different way than before (Høgh, 2022b).

As mentioned before the CSRD comes into force at the same time as the ongoing implementation of the Taxonomy (IDA, 2022; Høgh, 2022a). Currently, there are published two out of six areas in the Taxonomy (The European Parliament and The Council Of The European Union, 2020; IDA, 2022). The Taxonomy is important to mention since the companies that have to be compliant with Taxonomy will be the same who also have to be compliant with the CSRD, and the Taxonomy will therefore work as a *license to operate* just as the CSRD (IDA, 2022; Høgh, 2022a; Johansen, 2023). The *Environmental ESRS E1* of the CSRD are aligned with the first two areas in the Taxonomy. And when both the Taxonomy and the ESRS standards are done the intention is that they should cover the same areas in a way where it is not a duplication of work to report on both (Stormer, 2022b; Ecobio Manager, 2023).

1.3.2 Danish Companies

All the data requirements in the standards for the CSRD set new requirements for Danish companies, even though several of the companies in the scope of the CSRD have done sustainability reporting for some years cf. the NFRD. Due to the amount of legislation in general, and in particular the disclosure requirements and data points in the ESRS, sustainability reporting according to the CSRD will to some companies for the first years

of reporting be a compliance task, due to the resources it will require to live up to the standards (Boe, 2023; Jacobsen, 2023; Høgh, 2022b). However, the intent of the CSRD is not to be a compliance task (Høgh, 2022a). The approach of viewing the CSRD as a compliance task, can be adopted for the first report by the CSRD, to give the companies time to organise their work and collect data (Johansen, 2023; Høgh, 2022a).

In general, the complexity of the CSRD means that some companies need to rethink and re-organise their work regarding sustainability, ESG data and reporting (Høgh, 2022a). This is given the 1144 data requirements in the CSRD which will involve different departments and the supply chain (IDA, 2022). In some cases, the companies maybe even have to reskill employees to give them the right competences to make them cable of maintaining the task of CSRD (Johansen, 2023; Drif and Hedemark, 2023; Kacanski, 2023).

Across the webinars and podcasts, several essential points have been found regarding how the companies are going to prepare for the overall implementation of the CSRD.

- Get started, even if you will meet challenges, you will experience a profit (Stormer, 2022b)
- Get organised with the departments such as communication, finance and sustainability - nobody can do this on their own (Stormer, 2022b)
- Governance is a good place to start, with the right governance and management it is easier to get a hold of both E, S and G data (Høgh, 2022a)

Regarding governance and changes in the organisation, it is stated that sustainability must reside in the top management and live in the rest of the company (Høgh, 2022a). For some leaders, this has to start with the acknowledgement of these changes and work with the CSRD being a necessity and get started with the task of change management and running their company differently (Høgh, 2022a). The hope is that the CSRD, in some years, will lead to the point that when you look at a companies stock index, there will be a column where it is described how companies perform on E, S and G, and the company's value will be affected by their ESG, as the financial- and sustainability data is getting closer related (Høgh, 2022b,a).

Regarding the SMEs it will be the listed ones who will be required to report by the CSRD and the non-listed can report on a voluntary basis (Ecobio Manager, 2023; Stormer, 2022b; Høgh, 2022b). However, it is expected that the CSRD will have a trickle-down effect, whereas the SMEs that supply companies that have to report, will have to provide the needed data in their report as a part of the scope 3 (IDA, 2022). If the SMEs want to continue in their supply chain, it is expected to be a deal-breaker for them if they are not capable of delivering the needed data to their customers. Otherwise, the companies will look for other suppliers which can deliver the needed data (Høgh, 2022b). Therefore, the advice for the SMEs is to get started collecting data, if the company want to continue its business (IDA, 2022). This trickle-down effect is also expected to be expressed in a way where companies look at what other companies are doing and therefore want to follow up, and in Høgh (2022b) it is mentioned that what is being reported on in the companies, in the long run, will lead to new requirements through a bottom-up approach.

1.3.3 Europe VS Global Perspective

With the CSRD, the EU is at the forefront in this field, but it is clear that it is spreading and is not only an EU thing (Høgh, 2022b; Reuters Event, 2022). As Jacobsen (2023) points out, it is important that the CSRD gets a ripple effect to all who want to trade with the EU, and further argues that it is a necessity due to the climate crises being global, and the EU only account for a minor amount of the total greenhouse gas emissions. The tendency with sustainability reporting is seen in other countries, and international standards as e.g. ISSB make drafts on climate-related standards (Høgh, 2022b; ISSB, n.a.a). But, there is no doubt that common global standards would make several aspects easier, and the new ESRS standards for the CSRD have looked at other voluntary standards to create coherence (Høgh, 2022b; Reuters Event, 2022).

1.3.4 ESG Reporting

The CSRD will incorporate ESG data into the annual reports, this type of report can be seen as just the final product of the company's sustainability efforts, showing how they have worked with sustainability, and what they are going to do in the future (Høgh, 2022b). The work behind the report is carried out by a cross-disciplinary team with employees from the board, management, risk management, production, strategy and IT (Høgh, 2022b).

ESG data is expected to become one of the biggest challenges for the companies as they have to collect data they maybe have not collected before and more data than earlier (Stormer, 2022b). Maybe in some cases, the data they need from e.g. their suppliers, the suppliers don't have it currently and would have to get it before they can deliver it (IDA, 2022). Therefore data is one of the biggest reasons for companies to get started as soon as possible to get a hold of what data they already have and what they need to find (IDA, 2022; Stormer, 2022b; Høgh, 2022b). Regarding data, it has until now often, been handled by an Excel data sheet (Johansen, 2023). But with the new requirements in the CSRD, the amount of needed data can be assumed to be difficult to handled only by an Excel sheet (Johansen, 2023). It is expressed by both Johansen (2023) and Jacobsen (2023) that there are several companies who try to develop software to handle the new amount of data for ESG reporting, and that this is a completely new market. One example is AMANA & Envoria (2023), which on their webinar presented their solution and how it can help companies to structure their data.

In connection with the CSRD follows a requirement of a limited assurance of the final report in 2026 (The European Parliament and The Council Of The European Union, 2022a). The assurance of the corporate sustainability report is expected to have an influence as a strategic tool and can therefore be considered as great importance (Johansen, 2023). The assurance requirement will be implemented for the limited and reasonable assurance respectively in 2026 and 2028 (The European Parliament and The Council Of The European Union, 2022a). The assurance aspect is important because it creates credibility for the companies and reliability for the ESG data (Boe, 2023; Reuters Event, 2022). However, the assurance can only be given by a statutory auditor and the question is if they have the right knowledge and competences to approve the sustainability reporting/the ESG data (Johansen, 2023; The European Parliament and The Council Of The European Union, 2022a).

	CSRD/ ESRS	Taxonomy	Danish Companies	Employees/ Competences	Board/ Directores	Europe/ Globale	Assurance	Data	ESG Reporting
WEBINARS:									
Reuters Event (2022)	X					X	X		
IDA (2022)	X	X							
CSR Europe (2023)									
Bøge et al. (2022)			X	X					
Ecobio Manager (2023)		X							
Kacanski (2023)	X			X			X		
Drif and Hedemark (2023)				X					
Stormer (2022a)	X					X			X
Stormer (2022b)	X		X						X
AMANA & Envoria (2023)								X	
PODCASTS:									
Høgh (2022a)		X	X		X			X	
Høgh (2022b)	X				X	X		X	
INTERVIEWS:									
Johansen (2023) from Dansk Erhverv	X			X			X	X	
Boe (2023) from PwC	X						X	X	
Jacobsen (2023) from Sustainable Business Solutions			X	X		X			

Table 1.4. Shows which webinar, podcast or interview talks about which subjects.

Research Question 2

Based on the state of the art of scientific articles in section 1.2, it became clear that there is room for improvements in the legislation regarding sustainability reporting. It is expected that the CSRD is going to create the opportunity for the fulfilment of the fund improvements. However, through the examination of the current status in Denmark regarding sustainability reporting based on three interviews, webinars and podcasts in section 1.3, it was found that the CSRD contains a great number of requirements for which the affected companies have a limited time to prepare for. The new requirements for sustainability reporting in Danish companies can in some cases mean that new processes, strategies, structures, systems, skills and/or staff are needed in the companies for them to become compliant with the CSRD. Therefore, these organisational changes are relevant to examine. Based on the described challenges the CSRD can bring companies, it was found relevant to examine the following research question;

How does the requirement in the CSRD and the new ESRS standards affect the way in which the case companies internally work with sustainability and sustainability reporting, and which organisational changes are necessary for them to become compliant with the CSRD?

This research question contributes to the current knowledge, given there currently is a limited amount of scientific literature about the CSRD and the fact that no company has been required to report by the CSRD yet. This thesis is expected to contribute to the current knowledge in the field of sustainability reporting, with an insight into how three Danish companies are going to be affected by the CSRD. It is found relevant to examine this research question to find out which challenges Danish companies face with the CSRD and which changes they will have to make concerning their work with sustainability reporting.

In order to answer the research question the following, sub-research questions have been formulated.

Sub-Research Questions

1. What are the requirements of the CSRD?
2. How have the companies organised their work with sustainability and sustainability reporting prior to the CSRD?
3. Which challenges do the companies face with the compliance of the CSRD?
4. Which organisational changes, defined by a conceptual framework, are the companies going to do to meet the CSRD requirements?

Research Design and Methodology 3

In this chapter the qualitative research design of the thesis will be illustrated through a research design. Furthermore, there will be a description of each method used as well as a description of how the methods is relevant for answering the research question and the corresponding sub-research questions.

3.1 Research Design

To aid the answering of the research question and the corresponding sub-research questions, a research design has been created. Figure 3.1 shows the logical structure illustration of the different approaches, methods and contexts of analyses used to answer the research question. In order to show the clearest picture of the individual structures in the report, it has been chosen to colour code the structures:

- Research question and sub-research questions
- Conceptual Framework
- Methods
- Analysis

This thesis is structured as a qualitative research design, given this allows for a complex picture of the field of study (Creswell, 2018). This complexity is based upon, that a qualitative research design consists of multiple different types of data collection, such as interviews, observation and documents. The thesis thereby incorporates multiple different factors and aspects of the field of study (Creswell, 2018, p. 180-182). The overarching design element of the qualitative research design in this thesis is the use of a case study.

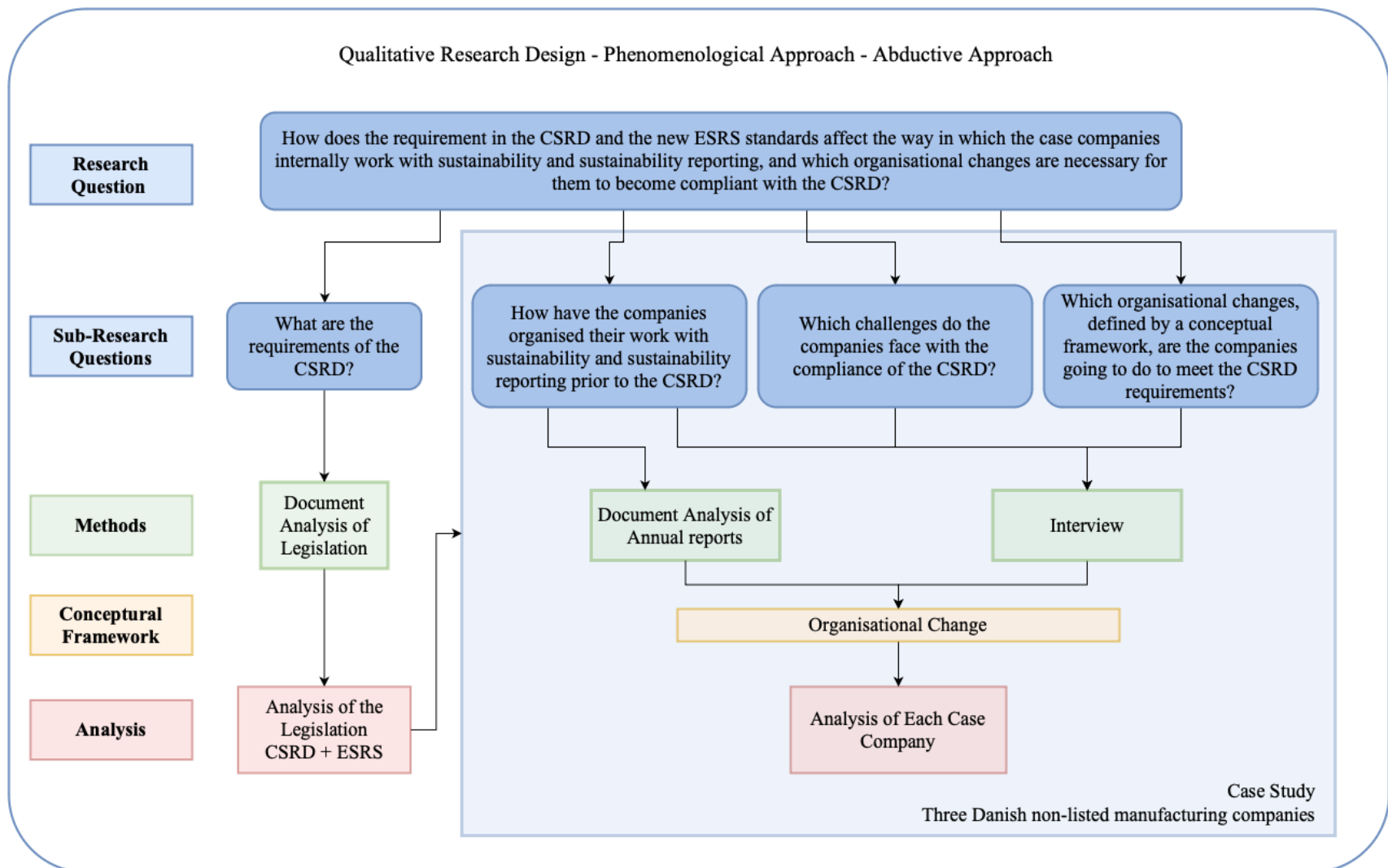


Figure 3.1. Shows the research design of this thesis, where the different structures are colour coded to distinguish them from each other.

3.1.1 Theories of Science

In the thesis, a phenomenological approach is used to guide the analysis and conclusion of the organisational change needed to achieve compliance with the CSRD. The phenomenological approach will thereby be the theoretical basis which is used to develop the thesis, and thus describes the prerequisites for the conclusion. The understanding of the phenomenological approach is based on [Egholm \(2014\)](#), which summarises it to be:

"Phenomenology's subject field is human consciousness and knowledge. The phenomenological perspective assumes that phenomena are always phenomena for someone, and can therefore never be studied independently of how they appear to a particular consciousness. [...] Since phenomena manifest themselves differently to different people in different contexts, the phenomena must be understood and interpreted ideographically, in relation to how different phenomena manifest themselves to different individuals." ([Egholm, 2014](#), p. 103).

The quote highlights that the phenomenon always is closely connected with the people who experience the phenomenon. In this thesis, the phenomenon is; the organisational changes needed to achieve compliance with the CSRD. Consequently, it is necessary to involve the perspective of the people required and affected by the phenomenon, hence it is the reality the affected people experience that will be investigated. Additionally, the quote also highlights the importance of understanding the subjectivity associated with the phenomenological approach. This also supports that it has been chosen to carry out a case study in this thesis, due to the theoretical framework used. Given that, through the case study, it is possible to include perspectives from people who are very close to the phenomenon under investigation.

In addition, the quote by [Egholm \(2014\)](#) also emphasises the importance of understanding the subjectivity associated with the phenomenological approach. According to ([Egholm, 2014](#), p. 104), phenomenology is based on the idea that science cannot be *value-free*. Empirical data collection through interviews would therefore be used in order to gain an understanding of the experiences of the people who deal with the phenomenon, the companies' basis of existence, as well as which perspectives the individuals and companies have regarding the phenomenon.

The use of interviews as methods for empirical data collection in the thesis is supported by the phenomenological definition of truth. The truth theory associated with the phenomenological approach is that a conclusion must be able to explain the phenomenon based on that world and the people who are this world ([Egholm, 2014](#), p. 111). The phenomenological approach thereby focuses on being able to explain a phenomenon based on the context and understanding that it appears in, rather than verifying it, by comparing it with a specific understanding of reality ([Egholm, 2014](#), p. 112). This approach can be encapsulated in the fact that there is not only one truth but that there is a truth associated with being able to explain the investigated phenomenon, in the worldview (ontology) the phenomenon is investigated in ([Egholm, 2014](#), p. 105).

The phenomenological approach is most often characterised as an inductive approach to knowledge creation, as it is primarily used to form theories on the basis of collected empirical evidence, in contrast to the deduction approach, which deals with testing theories empirically (Egholm, 2014). Regardless, this thesis applies an abductive approach, considering that this approach contributes with a framework of understanding, which can be used to describe the organisational changes associated with achieving compliance with the CSRD. Therefore the abductive approach neither develops nor tests theories, but rather examines the connection between observations and existing knowledge (Egholm, 2014, p. 31).

3.1.2 Case Study as Research Design

As a research design for this thesis, the case study was found most applicable given its ability to *"investigate a contemporary phenomenon (the "case") in depth and within its real-world context [...]"* (Yin, 2009, p. 16).

When working with case studies, a distinction is most often made between four types of case studies; based on whether they have used a multiple-case design or a single-case design or multiple and embedded or holistic (Yin, 2009, p. 50). The type of case design used in this thesis is illustrated in figure 3.2.

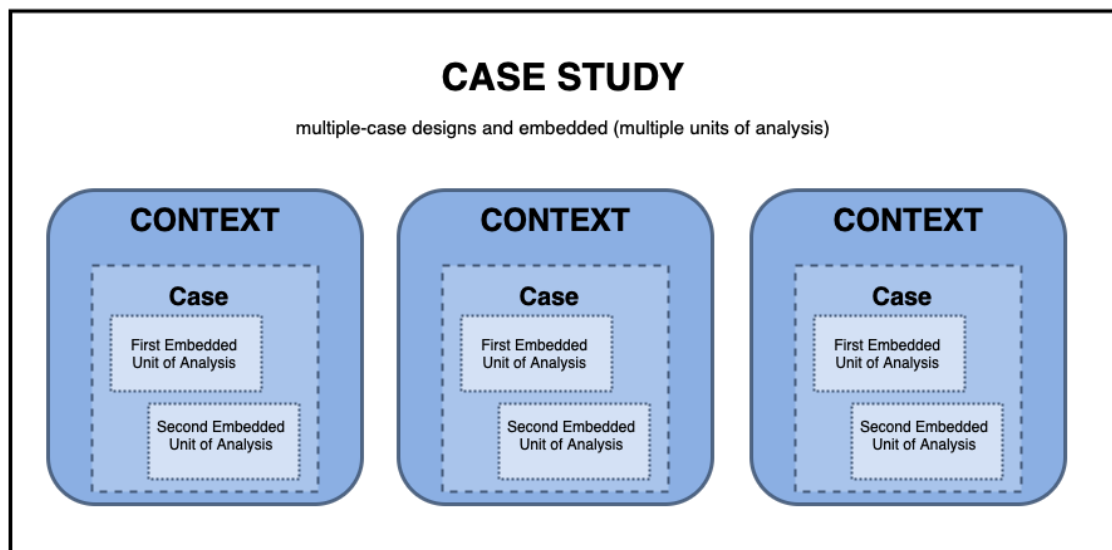


Figure 3.2. Shows the case study design for this thesis *comparative multiple-embedded-case design* based on (Yin, 2009, p. 50).

The case study design for this thesis is a *comparative multiple-embedded-case design*. This case design was chosen because of the multiple case designs ability to compare findings across cases while simultaneously producing more robust and convincing results compared with a single case design (Yin, 2009, p. 57).

More precisely, a comparative case study will be used according to the multiple case designs, due to the ability to develop new assumptions across cases based on a select smaller number of cases (Ramian, 2012, p. 85). Furthermore, this case study design is chosen to clarify the contextual difference between the three cases. This must be understood as the societal context the companies operate in, is different from one another. There will be an overlap

between the context of the three companies as e.g. all are Danish companies. However, the context is seen as being unique for each of the companies in order to be able to analyse them individually and identify their unique challenges.

The choice of an embedded case design means that the focus will be on more than one unit of analysis or phenomena within each case (Ramian, 2012, p. 86) (Yin, 2009, p. 62). For this thesis, the two units of analysis are respectively, the case companies' internal sustainability work as well as their work with sustainability reporting. Both of these two units of analysis are relevant in connection with the overarching focus of the case study, which concerns organisational change within a sustainability department, which must take place in order to ensure compliance with the requirement from CSRD.

3.1.3 Case Selection

In order to answer the second, third and fourth sub-research questions, are there in chapter 5, section 5.2 conducted three case studies. The case studies of three large non-listed Danish manufacturing companies are conducted to determine which challenges they face in relation to compliance with the CSRD and how they handle these challenges. In this section, the selection of the cases will be presented and argued for.

The case selection was information-oriented as opposed to randomly selected (Neergaard, 2007, p. 39). Additionally, the selection strategy utilised is a critical case selection (Neergaard, 2007, p. 28), given that the cases selected are situation-based for reporting and possible organisational change as a result of the CSRD. The critical case selection is based in the assumption of *"If it happens here, it can happen everywhere"* (Neergaard, 2007, p. 29), e.g. that the cases selected are seen as a critical example of how the rest of Danish companies with the same characteristics can be expected to be affected by possible organisational changes in connection with the CSRD. This selection strategy contributes to a positive impact in relation to generalisability (external validity) due to the results allowing for a logical deduction (Flyvbjerg, 2015, p. 510).

The cases selected are also based on a maximal variation sampling strategy, meaning that the selected cases vary by characteristic or trait (Neergaard, 2007, p. 30). The most central variations observed in the case selection are; the industry the companies operate in. The basis for using a maximal variation sampling strategy is that the results arising from this case study will be results across this variation, highlighting central experiences and common aspects. Thereby ensuring a richer description of the organisational changes that may need to be made in order to achieve compliance with the CSRD. Two types of results are expected to arise from this case study based on maximum variation sampling:

- Detailed descriptions of the individual cases and their unique challenges.
- Common patterns of challenges that occur across the cases arising from heterogeneity. (Neergaard, 2007, p. 31)

The logical deduction that can be made is based on the fact that the selected companies can be assumed to be 'best-in-class'. This assumption is based on the fact that they are some of the largest Danish companies, which thereby have the resources to handle the workload with sustainability reporting, and that these companies already have to report according to §99a in accordance with the Danish Financial Statements Act (Erhvervsstyrelsen, 2022).

The companies are thereby expected to have both the resources and experience to achieve compliance with the CSRD. Based on the logical deduction, the results of these case studies can be generalised to other large Danish companies, as well as to a certain extent to SMEs, with the same characteristics as the selected case companies.

The case selection was based on a requirement to report on sustainability under the CSRD. The choice of cases was based on the companies having a certain size, thus falling under the CSRD in the category of *Large Undertakings*, excluding micro, small and medium-sized enterprises (SMEs) (Erhvervsministeriet, 2022; The European Parliament and The Council Of The European Union, 2022a).

The non-listed aspect excludes the Public Interest Entities (PIEs). In a Danish context, large undertakings will fall under the accounting class C, which is defined as the companies exceeding the limits of at least two of the three following criteria:

- A balance sheet total of 156 million. DKK
- A net turnover of 313 million DKK
- An average number of full-time employees during the financial year of 250 (Erhvervsstyrelsen, 2022)

Thus, they will currently report according to Danish Financial Statements Act §99a, which is the transpose of NFRD in Danish legislation (Erhvervsstyrelsen, 2022). The large non-listed Danish companies are going to report by the CSRD from the financial year 2025 (The European Parliament and The Council Of The European Union, 2022a, Artical 5), which ensures that the companies have time and opportunity to create a change in the company before they have to be compliant with the CSRD. This is found relevant as the organisational changes are the subject of examination. Boe (2023) argues that frontrunners of sustainability reporting will know of the field and thereby also of the challenges the CSRD can bring.

In order to narrow the scope of large non-listed Danish corporations further, Johansen (2023) pointed out that it was less relevant to choose a specific sector as the sector-specific standards are not developed yet and that all corporations at this time are subject to the same requirements. Next up, manufacturing companies were selected to ensure that the companies themselves had access to their ESG data, and did not necessarily have to go through a supply chain, even though Jacobsen (2023) point out that manufacturing companies can be specifically challenged as they can have complicated supply chains.

Thus, the criteria for selecting case companies are as follows:

- The case companies must be affected by the CSRD
- They must be a Danish company
- They must be a Non-listed company
- They must be viewed as a frontrunner in sustainability reporting
- The case companies are not required to be sector-specific due to no sector-specific requirements
- They must be a manufacturing company due to access to ESG data, but the production does not need to be located in Denmark.

The selected case companies were selected based on a collection of 49 non-listed companies by FSR (2022), which they include in the assessment pool for 2021 and/or 2022 for their annual CSR award. This collection of companies was assumed to be frontrunners and 'best-in-class', given their incursion in the annual CSR award assessment. The criteria for the collection of the 49 companies are:

"The 49 unlisted companies in the assessment pool are all companies that have their headquarters in Denmark, more than 250 employees, and that publish an independent group report that includes a statement of social responsibility cf. Danish Financial Statements Act §99a or equivalent. The pool consists of companies that, based on the above, are at the top of Børsen's top 1000 list measured based on turnover [...], as well as companies that are wholly or partially owned by the state [...], and companies within banking, insurance and pensions (listed in the Financial Supervisory Authority (Finanstilsynet)'s company register)". (FSR, 2022)

This list of companies was subsequently sorted by type of sector, in order to identify manufacturing companies. This sorting led to a selection of eight companies, all of which meet the established criteria. The 49 non-listed companies in the assessment pool, sorted by sector are listed in Appendix A.1.

3.2 Methods

3.2.1 State of the Art Method

The State Of The Art is based on three search strings in the Aalborg University Library database, Primo, which is an all-in-one database that searches all material with physical or online access in other databases (Aalborg Universitetsbibliotek, n.a.). Additionally, it was chosen to search on the Scopus database to make sure to cover the field of examination in the best way. In table 3.1 an overview of the search string, databases and results are shown.

No.	Database	Search sting	Setting	Result
1	AAU Primo	CSR And challenge* AND change AND review AND ESG AND CSRD	All lines English 2020	48
2	AAU Primo	ESG AND review AND Reporting AND CSRD AND consult*	All lines English 2020 No newspaper	55
3	AAU Primo	ESG AND review AND reporting AND CSRD AND consult* AND CSR AND change	All lines English 2020	21
4	Scopus	(csr) AND (challenge* OR change) AND (csrd) AND (esg) AND (review)	All search fields English 2020	44
5	Scopus	(csrd) AND (esg) AND (challenge* OR change) AND (csr) AND (review) AND (report*) AND (eu OR "European Union" OR Denmark)	All search fields English 2020	26

Table 3.1. Shows an overview of the used search strings, databases, settings and results for the state of the art.

The setting of the beginning year 2020 in both databases was chosen based on the CSRD being the object for examination and that it in 2020 where known that the NFRD where going to be revised in 2020 (European Commission and FISMA, n.a.). To start the search from 2020 was assumed to incorporate the latest perspectives regarding the NFRD which the CSRD exceed, as well as the current knowledge and perspectives on the CSRD. However, this limitation could also lead to a cut-off from a historical understanding of why and how the development associated with NFRD has occurred. This limitation has been a trade-off with a limited amount of literature deemed valuable in this thesis.

To be able to sort and select the relevant articles and exclude the not-relevant articles some criteria were set up and specified during the process. Additionally, before reading the non-excluded articles, two focus areas were set up as a guideline for perspectives to incorporate in the State of the art. The first focus was *The change to CSRD, why and perspective of this change* and the second focus area was *Challenges for companies regarding the CSRD*. In table 3.2 below the criteria for inclusions and exclusion are shown.

Excluded based on title	Focus on countries outside of the EU Focus on banking and investment fund Focus on SME's Written in a language other than English
Excluded based on abstract and keywords	Does not contain the keywords; "CSRD, NFRD and/or reporting" Does not contain perspectives on the two focus areas
Included in the SOTA	Contain perspectives on the two focus areas contains perspectives on European legislation for corporate sustainability

Table 3.2. Shows the criteria for whether an article is included or excluded in the State of the Art.

The criteria for exclusion take a point of departure in the CSRD, and since this is European legislation that aims to regulate companies' sustainability operations on the European market, articles that discuss markets other than the European market are not selected, as these are not based on the CSRD legislation. This choice of only focusing on literature concerning Europe, lead to an exclusion of knowledge regarding CSR and sustainability reporting from other countries. Additionally, the exclusion of a focus on SMEs was based on their later implementation in legislation, and therefore it has been implicitly chosen to focus on the large affected companies under the CSRD. Furthermore, articles that were not relevant to the subject of sustainability reporting were excluded, through the exclusion criteria; *Does not contain perspectives on the two focus areas*.

Result of the State of the Art

All articles found in the search strings were set up in a table. If an article appeared in more than one search string, only one entry was kept and the rest were removed from the table. In total, the search strings on both databases gave 127 results whereas 53 are excluded based on the title and 47 articles are excluded based on the abstract and keywords. This gave 26 articles, which were used in the State of the art in section 1.2. Figure 3.3 shows the total list of used articles, where both author and title can be seen. The complete list of found articles can be seen in Appendix A.1.

Additionally, during the reading four main themes appeared, and each article was allocated based on these themes, however, more than one theme could appear in one article, which can be seen in table 1.2 in section 1.2.

No.	Author and year	Title
1	Primec, A. & Belak, J. (2022)	Sustainable CSR: Legal and Managerial Demands of the New EU Legislation (CSRD) for the Future Corporate Governance Practices
8	Pulino, S. C. et al. (2022)	Does ESG Disclosure Influence Firm Performance?
9	Arvidsson, S. & Dumay, J. (2022)	Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?
10	Janicka, M. & Sajnog, A. (2022)	The ESG Reporting of EU Public Companies. Does the Company's Capitalisation Matter?
14	Baid, V. & Jayaraman, V. (2022)	Amplifying and promoting the "S" in ESG investing: the case for social responsibility in supply chain financing
24	Antoine, P. et al. (2022)	Challenges and practical solutions to sustainable investing in the EU
27	Vander Bauwhede, H. & Van Cauwenberge, P. (2022)	Determinants and Value Relevance of Voluntary Assurance of Sustainability Reports in a Mandatory Reporting Context: Evidence from Europe
28	Ottenstein, P. et al. (2022)	From voluntarism to regulation: effects of Directive 2014/95/EU on sustainability reporting in the EU
32	Camoletto, S. et al. (2022)	Corporate Social Responsibility due diligence among European companies: The results of an interventionist research project with accountability and political implications
34	Fiandrino, S. et al. (2022)	The multi-faceted dimensions for the disclosure quality of non-financial information in revising directive 2014/95/EU
39	Myers, C. & Czarnecki, J. J. (2021)	Sustainable Business Law? The Key Role of Corporate Governance and Finance
45	Czaja-Cieszyńska, H. et al. (2021)	How to make corporate social disclosures comparable?
49	Lenz, R. & Hoos, F. (2023)	THE FUTURE ROLE OF THE INTERNAL AUDIT FUNCTION: ASSURE. BUILD. CONSULT
51	Balp, G. & Strampelli, G. (2022)	Institutional Investor ESG Engagement: The European Experience
54	International Financial Law Review (2022)	Development of ESG in capital markets: global trends to watch
57	Paolone, F. et al. (2023)	Longer board tenure and audit committee tenure. How do they impact environmental performance? A European study
64	Yosifova, D. & Petrova-Kirova, M. (2022)	The New EU Corporate Sustainability Reporting Framework In The Context Of GRI Standards
69	Willekes, E. et al. (2022)	The Role of the Accounting and Control Professional in Monitoring and Controlling Sustainable Value
70	Afolabi, H. et al. (2022)	Harmonization of Sustainability Reporting Regulation: Analysis of a Contested Arena
73	De Cristofaro, T. & Gulluscio, C. (2023)	In Search of Double Materiality in Non-Financial Reports: First Empirical Evidence
78	Reedtz, P. M. (2021)	Financing the Environmental Transition in Europe
80	Zetzsche, D. A. & Anker-Sørensen, L. (2022)	Regulating Sustainable Finance in the Dark
81	Bergman, M. & Rogers, J. (2021)	Financing Sustainable Growth in the European Union: Global Lessons
82	Maechler, S. (2022)	Accounting for whom? The financialisation of the environmental economic transition
84	Battistella, P. (2021)	SFDR's delay does little to tackle existing issue - expert
111	Dicuonzo, G., Donofrio, F., Ranaldo, S. (2022)	The Jungle of Sustainability Frameworks and Standards: Evidence from European Listed Companies

Figure 3.3. Shows an illustration of the included articles by showing a fraction of the full Excel file which was used to organise the literature review.

3.2.2 Data Collection through Webinars and Podcast

Since the CSRD is not yet entered into force and no companies have stated their reporting by this directive, it is limited what is known and written about the CSRD other than thoughts and expectations. Therefore there were a limited amount of scientific articles to obtain knowledge about CSRD. Therefore it was found relevant to see and participate in webinars and listen to podcasts discussing the CSRD to obtain the latest knowledge and perspectives regarding the CSRD in Europe and Denmark. The methods used for the data collection were done by using *observations*. Like the other qualitative data collection types, observations are about collecting knowledge presented in a specific format, which in this thesis through webinars and podcasts. By observations through webinars and podcasts, it was possible to analyse what was presented visually or aurally, through webinars and podcasts (Creswell, 2018, p. 188). Some webinars and podcasts were found by coincidence on the internet in search of knowledge about the CSRD and others were found on LinkedIn and signed up for. The webinars and podcasts all had a description of what they concerned, and based on this they were assessed as either relevant or not for this thesis. The webinars and podcasts have all been assessed to have a high degree of credibility as they all work in the field of e.g. reporting, sustainability or as advisors and have done that for several years and can be viewed as experts.

What and Who	Date	Title	Contribution
Webinar Reuters Event Reuters Event (2022)	26/1 2022	Best Practices for a Successful ESG Program for CSRD	With an overview of what is needed in order to report after the CSRD and future challenges
Webinar IDA IDA (2022)	23/11 2022	EU Taxonomien, den grønne omstilling og rapportering af bæredygtighed (Eng. The EU Taxonomy, the green transition and sustainability reporting)	Overview and explanation of how the Green Deal, Taxonomy and the CSRD are connected and how Danish companies are being affected and have to report.
Webinar CSR Europe CSR Europe (2023)	21/2 2023	European Business Toolbox for Just Transition Launch Event	Did not contribute anything relevant to this report, as the focus was on the Just Transition and not the CSRD.
Podcast CSR.dk Bøge et al. (2022)	25/2 2022	CSR Agendaen #10 om bæredygtighedsarbejdet i 2022 (eng. The CSR agenda #10 on sustainability work in 2022)	A better understanding of how the CSRD is going to affect the Danish Companies and which challenges it can bring. Talks about the CSRD bring an increased need for employees with the right competences.
Webinar ECOBIO MANAGER Ecobio Manager (2023)	28/2 2023	The smarter way to do EU Taxonomy Reporting	With a short introduction of the EU Taxonomy and CSRD and an overall comparison of the differences and similarities between the Taxonomy and the CSRD.
Webinar CSR Froum Kacanski (2023)	3/6 2023	Online Masterclass - An introduction to the CSRD Directive	A review of the CSRD, what it improves from the NFRD, and an overview of how different directives and regulations are connected and affect each other, and which competences are needed to report cf. the CSRD.
Webinar CSR Forum Drif and Hedemark (2023)	9/3 2023	Virtuel CSRD-klargøringsforløb (Eng. Virtual CSRD preparation course)	A brief introduction to what you learn in their course regarding CSRD and reporting, an understanding of the demand for education to work with the CSRD, and who the participants are.
Webinar PwC Stormer (2022a)	1/3 2022	Rapportering om bæredygtighed - nye standarder tager form (eng. Sustainability reporting - New standards taking shape)	An introduction to the global scene of standards, the CSRD, and ESRS. Example of how Mærsk has approached materiality. Recommendations for how companies should structure their reports and how to improve them in the future.
Webinar PwC Stormer (2022b)	28/10 2022	CSRD - Kom godt fra start (eng. Get off to a good start)	An introduction to how different directives and regulations are connected. Timeline - where are we now in the legislation, main changes with the CSRD. Example with Danfoss and how they do Integrated Reporting.
Podcast Bæredygtig Business Høgh (2022a)	17/11 2022	EU's nye bæredygtigheds direktiv med Carina Ohm fra EY (eng. EU's new sustainability directive with Carina Ohm from EY)	A description of the EU Taxonomy and the development of legislation currently in the EU regarding sustainability. Perspectives on the importance of ESG data now and in the future
Podcast Bæredygtig Business Høgh (2022b)	1/12 2022	Hvad kommer EU's CSRD-direktiv til at betyde? (eng. What will the EU's CSRD directive mean?)	An introduction to the CSRD and what it will improve from the NFRD, what the double materiality is and means, and how the SME's are going to be affected by the CSRD.
Webinar AMANA & Envoria AMANA & Envoria (2023)	23/3 2023	CSRD reporting and publication challenges in practice – with AMANA & Envoria	An overall introduction to how their software program can support companies to handle their ESG data.

Table 3.3. Overview of watched webinars and listened to podcasts.

The webinars and podcasts watched and listened to can be seen in table 3.3, as well as the date, who made it, the title and what each contributed. Overall the webinars and podcasts have contributed with good explanations of what the CSRD is, how it is related to other legislations in the EU, how the CSRD is going to affect the companies and how to handle the CSRD. Some of the webinars were from early 2022 or earlier and were provided as an "on-demand" service from the host organisation. They were still considered relevant for this thesis, as they contain perspectives on how the CSRD is going to affect Danish Companies. By using these webinars, it has been important to acknowledge the time of publication, hence what at that time has been known, published and written down regarding the CSRD and the ESRS.

3.2.3 Interview

In this thesis, expert interviews are used as the qualitative interview method. This method was utilised based on its ability to explore a specific field of knowledge, which in this thesis was the field of corporate sustainability reporting and organisational change (Doeringer, 2021; Brinkmann and Tanggaard, 2015, p. 30).

Table 3.4 and 3.5, shows an overview of the interviews that have been conducted. The tables also show the respondents with name, title and organisation, as well as the purpose, date and length. The interviews all had a clearly defined purpose, which was set in advance of the interviews. This purpose description had been communicated to the interviewees before the planned interviews. In addition, an interview guide was prepared before the interviews, however, this was not sent to the respondents beforehand. This decision was made based on a desire to obtain spontaneous answers that were not previously formulated by the respondents (Kvale and Brinkmann, 2015, p. 186).

All interviews for this thesis was conducted as semi-structured interview. This interview structure was preferable because it gives the opportunity to discuss the predetermined topics, at the same time as the interview can be guided by the prepared interview guide (Kvale and Brinkmann, 2015, p. 185). An example of an interview guide for the interview in table 3.5 can be seen in the Appendix A.3. The remaining interview guides are designed in the same way but adapted to the individual companies and respondents.

The interviews were all attempted to be conducted virtually on Microsoft Teams (Teams), based on an assessment that online interviews as opposed to physical, could lead to a greater likelihood that the interviews would be able to take place because the respondents have different places of residence across Denmark. In addition, virtual interviews have become a common practice, after the Covid-19 pandemic, and are less time-consuming and easier to coordinate (Mirick and Wladkowski, 2019).

It was not possible to conduct all interviews virtually, a single interview has been conducted in physics, when this opportunity arose and was viewed as a better option for this interview. Additionally, one interview was conducted by telephone, because it was assessed as a necessity to ensure the collection of the data. For the interviews conducted virtually on Teams, the function of Teams to record and transcribe the interviews was utilised. Otherwise, other forms of recording and transcription tools have been used, such as Good Tape (Zetland, n.a.). At the start of the recording, verbal approval was given by the respondents, additionally, it was explained that the recording and the

subsequent transcription only would be used in connection with the thesis. Furthermore, all respondents were given the opportunity to elaborate on and correct statements used in the thesis.

After the interviews were conducted the transcripts were reviewed in order to make structural and linguistic corrections. The interviews were primarily conducted in Danish, and this was chosen to create the best language comprehension conditions for both the respondents and the interviewer. However, one interview was conducted in English based on the wish of the respondent.

Participants	Focus	Date	Length
Ellen Marie Friss Johansen Head of CSR, Danish Chamber of Commerce, Dansk Erhverv	How the CSRD affects Danish companies. How are the challenges described, by the business and employer organisation?	2/3 2023	28 min
Ida Kirstine Andersen Boe Senior Associate, PwC	How the CSRD affects Danish companies. How are the challenges described, by an auditing and consulting company?	9/3 2023	47 min
Simon Hillbrandt Jacobsen Sustainability Advisor, Sustainable Business Solutions	How the CSRD affects Danish companies. How are the challenges described by a consultancy?	15/3 2023	30 min

Table 3.4. Shows an overview of the conducted expert interviews.

Participants	Focus	Date	Length
Victor Sejling Kubel Sustainability Manager in Group Sustainability, Danfoss	The focus of the first part of the interview is to know more about Danfoss, how you currently have worked with sustainability reporting and which challenges you to face with the CSRD.	19/4 2023	46 min
	The purpose of the second interview is to investigate what kind of organisational change Danfoss has to do or has started	27/4 2023	57 min
Liselotte Gjerdrum Carlsen Director for Sustainable Innovation & Reporting, Danish Crown	The focus of the first part of the interview is to know more about Danish Crown, how you currently have worked with sustainability reporting and which challenges you to face with the CSRD.	25/4 2023	57 min
	The purpose of the second interview is to investigate what kind of organisational change Danish Crown has to do or has started	16/5 2023	47 min
Vasileia Stavrakaki ESG Strategy Manager, Hempel	The focus of the first part of the interview is to know more about Hempel, how you currently have worked with sustainability reporting and which challenges you to face with the CSRD. The purpose of the second part of the interview is to investigate what kind of organisational change Hempel has to do or has started	11/5 2023	1h 38 min

Table 3.5. Shows an overview of conducted interviews with case companies.

Danfoss - Victor Sejling Kubel

Victor Kubel is a Sustainability Manager and works in Group Sustainability at Danfoss where [Kubel \(2023\)](#) has worked since April 2022. The educational background of [Kubel \(2023\)](#), is as an accountant with a MSc in *Business Economics and Auditing* and has in previous positions worked with ESG data and general strategy implementation.

Danish Crown - Liselotte Gjerdrum Carlsen

Liselotte Gjerdrum Carlsen is the Director of Sustainable Innovation & Reporting at Danish Crown and has worked at Danish Crown since December 2021 ([Carlsen, 2023](#)). The educational background for [Carlsen \(2023\)](#) is as a MA in *Contemporary history* however, has worked with sustainability for almost 20 years, with a particular focus on sustainability reporting.

Hempel - Vasileia Stavrakaki

Vasileia Stavrakaki is an ESG Strategy Manager in the Sustainability Department at Hempel. [Stavrakaki \(2023\)](#) has worked for Hempel since February 2023. The educational background of [Stavrakaki \(2023\)](#) is in Economics and Business Administration with a MSc in *Finance and Investments*. However, [Stavrakaki \(2023\)](#) has worked with sustainability through ESG investment.

Validity and Reliability of the Interviews

Throughout this thesis, interviews have been conducted with selected people, in order to obtain knowledge that has been assessed as only possible to obtain through these interviews. Since interviews have been conducted, it is also relevant to investigate the validity and reliability of these interviews and the knowledge gained through the use of this data collection method.

According to ([Kvale and Brinkmann, 2015](#), p. 318), the term validity "*[...] in common parlance refers to the truth, correctness and strength of a statement.*". Based on this interpretation and in connection with the use of the phenomenological approach used in this thesis, it was assessed that the validity was relatively high. This assessment was based on the phenomenological understanding of truth, which comes from individuals' relation and attachment to the investigated phenomenon. Thereby, since the selected respondents were part of the phenomenon itself, their views and observations are also considered to be true and valid in connection with the research carried out in this thesis. In contrast, according to ([Kvale and Brinkmann, 2015](#), p. 318), reliability as a concept deals "*[...] with whether a result can be reproduced at other times and by others [...]*." Due to the time-sensitivity that was recorded in this thesis, reliability was assessed to be relatively low. This was based on an assessment that the answers obtained through interviews are dependent on the time they are observed, in connection with the process concerning the CSRD. Thereby, if the same studies are repeated at a later time, it is expected that there would have been a development of the CSRD and it would therefore be assessed that the knowledge of possible challenges in relation to the CSRD will have changed.

3.2.4 Document Analysis

This thesis utilises document analysis as a qualitative method of data collection given this method allows for the analysis of published information and the data that has been given significant attention as well as deemed relevant and important by the publisher ([Creswell, 2018](#), p. 188).

Document Analysis of Legal Documents - The CSRD and ESRS

To answer the first sub-research question, a document analysis was conducted of the relevant legal documents, which in this thesis were the CSRD and related documents, such as the proposals for the ESRS as well as assessments and studies prepared with reference to the implementation of the CSRD.

The basis of the document analysis was the CSRD as the main document and the ESRS was seen as supplementary information ([Creswell, 2018](#)). In order to be able to carry out

the analysis of the ESRS, the assumption was that these do not change significantly before their implementation in June 2023, when they are expected to be adopted ([The European Parliament and The Council Of The European Union, 2022a](#); [EFRAG and EFRAG SRB, 2022](#)). To analyse the documents, hand-coding was used in order to organise and aid the analysis of the data ([Creswell, 2018](#), p. 193-195). The coding was based on pre-established themes:

1. The purpose and context
2. Challenges and solutions to these
 - a) The development of reporting standards
 - b) The inclusion of assurance
3. How the legislation should be incorporated by corporations in practice

Additionally, the ESRS were analysed based on two themes:

1. A generic structure that repeats itself across standards
2. A unique subject-specific structure that only applies to individual standards

Document Analysis of Sustainability- and Annual Reports from the Case Companies

The document analysis of the sustainability- and annual reports has been used both in preparation for the interviews conducted with the case companies and as a method to obtain knowledge of the case companies. As some of the case companies have integrated the knowledge from a sustainability report into their annual financial report. The main focus was on the integrated report. However it was necessary to include the separated sustainability- and annual financial reports in the document analysis if no integrated report was found. The focus of the document analysis of the sustainability- and annual reports from the case companies was primarily on the aspects concerning sustainability in the companies. These were aspects such as strategies, objectives, certifications and overall structure. Furthermore, the focus of the document analysis was not on the specific ESG data but rather on an overall impression of the amount of ESG data and how the case companies have reported this data.

For this document analyses, the following step for *qualitative data analysis process* by ([Creswell, 2018](#), p. 193) was used:

- Step 1: Organise and prepare the data for analysis
- Step 2: Read or look at all the data
- Step 3: Start coding all of the data
- Step 4: Representing the result from the coding.

The two first steps were done by visiting the selected case companies' websites to find their latest annual report and reading through it. The coding of the annual reports was done with the pre-established themes:

1. The context and purpose of the company
2. Sustainability strategies and ambition
 - a) Their ESG Data availability, transparency and choice of data
3. Their mention of CSRD and/or ESRS

Organisational Change as a Conceptual Framework 4

This chapter will describe the developed Conceptual Framework. This framework will be applied throughout the analysis of the case study, in order to provide a structure and aid with an understanding of elements that are deemed necessary to examine in connection with possible organisational changes, for the investigated case companies. The framework is conducted on knowledge and figures from [Palmer et al. \(2017\)](#), [Anderson and Anderson \(2010\)](#) and [Caldwell \(2003\)](#).

4.1 Organisational Change

Change is a part of life as nothing will ever stay the same, and changes can lead to either what we wanted to obtain or what we did not want to obtain ([Anderson and Anderson, 2010](#), p. 18). However, changes in organisations can be viewed differently by leaders and employees. Leaders often want changes to be done with the minimum of disruptions and resistance from the employees ([Anderson and Anderson, 2010](#), p. 18). Employees often view changes as uncomfortable and that change disturbs their work ([Anderson and Anderson, 2010](#), p. 18). However, changes are not always bad or lead to negative results, but can lead to improvements, growth and evolution ([Anderson and Anderson, 2010](#), p. 18).

Thereby organisational change can be uplifting, frustrating, satisfying, creative and rational. All of this affects those involved in managing the organisational change ([Palmer et al., 2017](#), p. 4). This thesis examines how the new and extended requirements in the CSRD and the ESRS affect how companies internally work with sustainability and their reporting of ESG data and which changes will be necessary for them to become compliant with the CSRD. Therefore, it was found relevant to examine the following aspects, which will be a help for the structure of this chapter;

- The reason for the change?
- What is going to change?
- Which type of change?
- Who drives the change?
- Are the company and employees ready for the change?

4.1.1 Pressure and drivers

The pressures and drivers should help answer the question *The reason for the change?* in each case company. It was assessed in this thesis that the CSRD would be an obvious

reason for organisational change in the case companies. Table 4.1 show some of the external pressures and internal drivers there can be for change in the case companies.

Today Organisations face several external pressures and internal drivers and have to navigate in an ever-changing society (Palmer et al., 2017, p. 63). Therefore organisations need to be able to adapt when the context, opportunities and challenges change (Palmer et al., 2017, p. 63). The external pressure from the surrounding environment is characterised by being varied and containing both opportunities and threats (Palmer et al., 2017, p. 64). The external pressures all stem from the environment, therefore the environment does not have its own box in table 4.1.

Often organisations face more than one of these external pressures at the time, and in a developed economy these pressures are all constantly active and should be considered as a high priority (Palmer et al., 2017, p. 64). Anderson and Anderson (2010) argues that the external pressures and internal drivers are connected and affect each other. Therefore, both must be present for a change to avoid its failure (Anderson and Anderson, 2010, p. 34). To simplify, the pressures and drivers and whether they were external or internal, they were separated.

External pressures	Internal drivers
Fashion Trends in management, appearing progressive	Growth Increase of size and complexity or creativity
Demography Different generations and elderly employees	Integration and coordination Communication across divisions and need for sharing informations
Mandate Legislation regulation and corporates social responsibility	Power and politics When stakeholders interests affects decision making
Reputation Process, products, and service failures, as well as governance problems	Corporate identity Shared goal and purpose and a brand of the organisation
Hypercompetition Disruptive, innovation, competition	New chief executive New energy, new directions and a signal for change
Globalisation and Geopolitics Interdependent economies, global warming and climate change	Cultural imperatives Collective norms, way of being, working and relating in the organisation
Marketplace Aggregated set of requirements from customer, which determines the success of the organisation in its marketplace	Leader and employee behaviour Individual style, tone and character that permeates what people do
Business imperatives Concerns the organisation's strategy, business model, goals, products, service, price and branding	Leader and employee mindset Individual worldview, assumptions, beliefs or mental models
Organisational imperatives Structure, system, technology, processes, resources and skills	

Table 4.1. Shows the external pressure and internal drivers for organisational change (Palmer et al., 2017, p. 65-90), (Anderson and Anderson, 2010, p. 32-35).

4.1.2 7-S Framework as an Organisational Model

A diagnostic model is evident to use when a problem has to be found (Palmer et al., 2017, p. 102), and concerns the question *What is going to change*. However, for this thesis, one of the causes of change were assessed to be the CSRD. A diagnostic model was therefore used to examine the case companies to find out what they have to change in their organisation to meet the requirements of the CSRD. The model used for this was the *The 7-S Framework* as it considers the operation of an organisation as a whole (Palmer et al., 2017, p. 102). Although this thesis does not examine the organisations as a whole but focuses on the work with sustainability and ESG reporting, this framework was found to be the most appropriate. *The 7-S Framework* in figure 4.1 is conducted based on the assumption that the effectiveness of an organisation is influenced by several factors, as well as based on the assumption that a successful change also depends on the internal relations between these factors (Palmer et al., 2017, p. 104). In this framework, all seven aspects was assessed as being equally important (Palmer et al., 2017, p. 105).

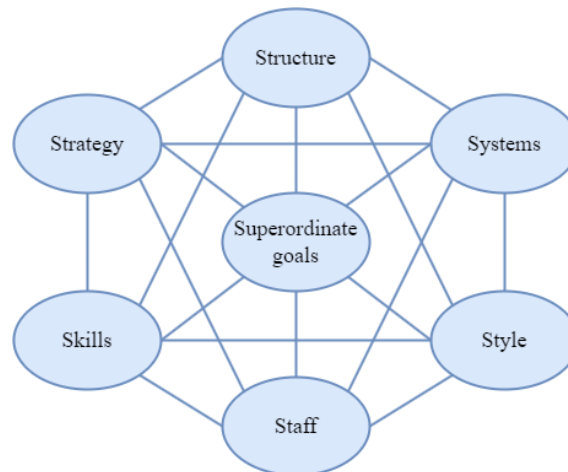


Figure 4.1. Shows the 7-S Framework. Figure based on (Palmer et al., 2017, p. 105)

The seven factors in the framework are;

- **Structure** concerns the formal design of the organisation
- **Strategy** is how the organisation expect to handle or respond to changes in the external environment with the purpose of strengthening their competitiveness
- **systems** refers to formal and informal procedures which determine how things are getting done
- **Style** concerns how managers act, spend their time, pay attention to, what they prioritise and their attitude to change
- **Staff** is first about how managers are developed, but can also concern appraisal, training, attitude, motivation and development processes
- **Skills** refers to what the organisation does best, and how this is described through attributes and capabilities which separate them from competitors
- **Superordinate goals** concerns the guiding concepts, values, aspirations and future direction of the organisation which can be described as an organisations vision or shared values

(Palmer et al., 2017, p. 104)

The seven aspects of the framework were answered through the conducted interviews with the case companies. The questions related to these seven aspects can be found in the interview guide in Appendix A.3. In the analysis of the case companies, the 7-S Framework were conducted twice in order to first map and answer the second sub-research question of *how the companies have organised their work with sustainability and sustainability reporting prior to the CSRD*. The second time, the 7-S Framework will be conducted following the same structure and make it clear what has to change in the companies.

4.1.3 The Three Types of Organisational Change

The types of change should help determine and answer the question *Which type of change?*. This was in order to understand how radical a change the companies are facing.

Anderson and Anderson (2010) uses three states within a change called the *old state*, *new state* and *transition state*, whereas the content of the old state is going to be dismantled and tuned into the new state over a time period which is the transition state. These states were used in the following description of the three types of change, and based on this description they were applied in the analyses of the case companies.

Developmental Change

The developmental change is the most simple type of change and is motivated by doing better or more of what is currently done (Anderson and Anderson, 2010, p. 52). The changes often concern improvements of skills, methods, performance and conditions which do not match current or future needs (Anderson and Anderson, 2010, p. 52). This type of change will typically occur based on minor shifts in the external pressures (Anderson and Anderson, 2010, p. 55). This type of change has the least impact on people, and threats to the organisation (Anderson and Anderson, 2010, p. 52-55).

The strategy used for this type of change is training (Anderson and Anderson, 2010, p. 55). This can be training for new skills, improved communication, and new techniques or processes leading to obtaining higher goals (Anderson and Anderson, 2010, p. 55).

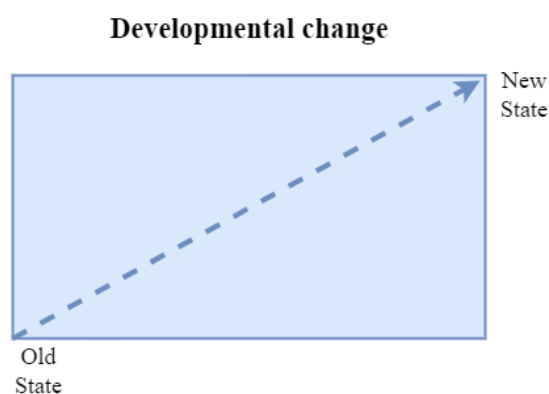


Figure 4.2. Shows the process of the developmental change, where the current state will be improved in the new. Figure based on (Anderson and Anderson, 2010, p. 53).

Transitional Change

Transitional change is more complex than developmental change, and instead of improving what is done, this change replaces this with something new (Anderson and Anderson, 2010, p. 56). These changes are driven by significant shifts in the external environment e.g. the marketplace. The process of this type of change typically has a start and end date, and the outcome is known, and can therefore be managed by a tight timeline and budget (Anderson and Anderson, 2010, p. 57). The dynamic of the people involved in this type of change is more complex than in the developmental changes, as they besides the training, typically also have to change their behaviours (Anderson and Anderson, 2010, p. 57).

The strategy used to lead a transitional change should contain the following aspects;

- A well-communicated case for change
- A clear change plan
- High employee involvement in the design and implementation of the plan
- A local control of implementation
- A effective workload and capacity management
- A training plan
- A adequate support and integration time, ensuring that employees will succeed (Anderson and Anderson, 2010, p. 59)

Before starting both a transitional and transformational change, it is important to conduct an analysis to determine the gaps between the current situation and the desired one (Anderson and Anderson, 2010, p. 59). It reveals which aspects that can continue as it is, what should not continue, and what needs to be created (Anderson and Anderson, 2010, p. 59). The analysis concerns both the organisational and human impact, and can thereby give essential information to a good plan for the change (Anderson and Anderson, 2010, p. 59).

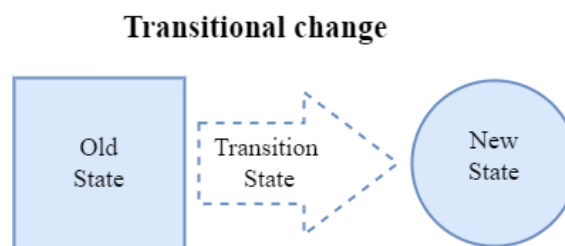


Figure 4.3. Shows the process of the transitional change, where a problem in the old state will be fixed through the transition state and obtain the desired in the new state. Figure based on (Anderson and Anderson, 2010, p. 53).

Transformational Change

Transformational change is the most complex of the three types of change, and the one with the greatest potential, but also the most challenging type of change (Anderson and Anderson, 2010, p. 59). Transformational change can mean radical shifts in strategy, structure, systems, processes or technology leading to changes in culture, behaviour and mindset to implement a successful and sustainable change (Anderson and Anderson, 2010, p. 60). The process of a transformation change is nonlinear and contains several changes of course and adjustments (Anderson and Anderson, 2010, p. 60). Furthermore, the result

of the change can be unknown when the change process starts and will emerge through the process (Anderson and Anderson, 2010, p. 60). Therefore the strategy to handle this type of change is to influence and facilitate the change, as this process has its own life (Anderson and Anderson, 2010, p. 61). The leader's mindset and awareness are the key catalysator for the process of transformational change making the necessary changes and not using the methods for a transitional or developmental change as these would not be sufficient to obtain the new state (Anderson and Anderson, 2010, p. 63).

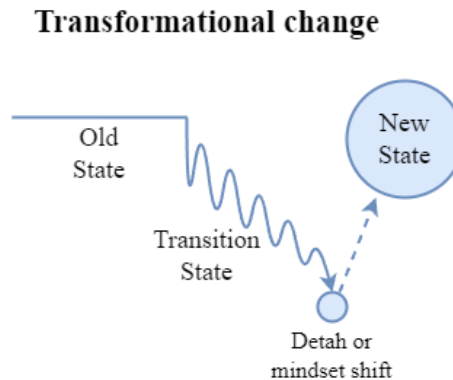


Figure 4.4. Shows the process of the transformational change, where the new state is unknown and will emerge during the process of fundamental changes in the organisation and employees in the transition state. Figure based on (Anderson and Anderson, 2010, p. 53).

Overall the relationship between the three types, enable that more than one type of change can occur. This meaning that within a transformational change both aspects of developmental and transitional change often is occurring. This relationship is illustrated in figure 4.5.

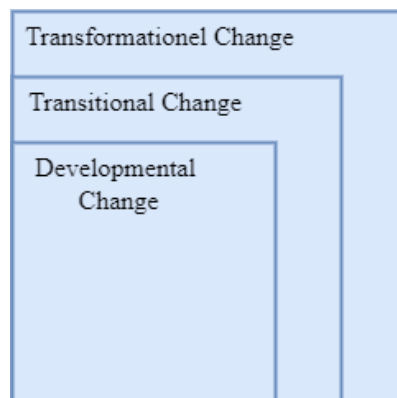


Figure 4.5. Shows the relationship between the three types of change and how different types of changes can be present in another. Figure based on (Anderson and Anderson, 2010, p. 73).

In order to determine which type of change the case companies faces, the respondents were in the interviews asked to explain and give examples of what was going to change both in the organisation and/or in the sustainability department (see Appendix A.3). Based on their answers it was possible to determine the type of changes the case companies faces and whether it was more than one type of change based on the description of each type above.

4.1.4 Change Agents, Managers or Leaders

In a change such as new requirements from e.g. legislation such as the CSRD, it was found necessary to involve change agents due to their necessity in terms of ensuring implementation and anchoring in sustainability in the companies.

There is always someone who drives and implements change, and how they are described and understood will affect how the role is fulfilled and whether or not it is successful (Palmer et al., 2017, p. 32). Therefore this part should aid in answering the question *Who drives the change* in the case companies. The term *change agent* is used more loosely and can be both an external consultant or member of the organisation, who plays a role in change implementation (Palmer et al., 2017, p. 32). Caldwell (2003) broadens the definition and adds that a change agent also can be a "(...) team responsible for initiating, sponsoring, directing, managing or implementing a specific change initiative, project or complete change programme" (Caldwell, 2003, p. 139).

The distinction between *Change managers* and *change leaders* can in theory be defined by their concepts and roles. However, it seems impossible to distinguish between them in practice (Palmer et al., 2017, p. 32). Palmer et al. (2017) do not find the distinction between managers and leaders essential, as they state that "(...) how would you like to be managed by someone who doesn't lead or led by someone who doesn't manage? We should be seeing managers as leaders and leaders as management practices well" (Palmer et al., 2017, p. 33). Anderson and Anderson (2010) uses *leaders* and states that this refers to leaders at all levels but specifically for those who have a responsibility and decision authority such as CEOs, senior executives, mid-managers, supervisors and employees with a vital role in a change project team.

The three texts thereby use different terms, but none of them argues why one or another is the right term to use in a specific situation. The broad definition of change agent from Palmer et al. (2017) and Caldwell (2003) was found as the best for the examination in this thesis. Furthermore, (Anderson and Anderson, 2010) use of *leaders* is closely related to the definition of change agent and since (Palmer et al., 2017) argues that a distinction between managers and leaders is not worth the work, it was not further described in this thesis as well.

When analysing who is driving the changes in the case companies, the term change agent was in this thesis applied instead of change leaders or change managers.

4.1.5 Organisational and Employees Readiness for Change

The question *Are the company and employees ready for the change* should be answered by the concepts presented below.

After the examination of what needs to be changed and thereby which type of changes the organisations are facing, it were appropriate to find out a) are the organisation ready to change? And b) are the affected employees of the change ready for these changes? (Palmer et al., 2017, p. 117). The organisational receptiveness were examined based on the following conditions:

1. Is there pressure for change?
 2. Is there a shared vision of the goals, benefits, and direction?
 3. Do we have effective liaison and trust between those concerned?
 4. Is there the will and power to act
 5. Do we have enough capable people with sufficient resources?
 6. Do we have suitable rewards and defined accountability for action?
 7. Have we identified actionable first steps?
 8. Does the organisation have the capacity to learn and to adapt?
- (Palmer et al., 2017, p. 117)

If the organisation can answer "yes" to these questions its receptiveness is high and the resistance to change will be limited (Palmer et al., 2017, p. 117). However, the receptiveness will be low, if there are no pressure, clear goal, trust, resources, and power to act and it will thereby be difficult to implement change (Palmer et al., 2017, p. 117).

Organisational change can meet resistance to change, from the employees, expressed by WIIFM - What's In It For Me? (Palmer et al., 2017, p. 250). Individual change readiness can be expressed through support, openness and commitment towards the change, and if these are high then the change is straightforward (Palmer et al., 2017, p. 117). However, if the readiness is low as well as with the organisational, some "groundwork" is needed to increase the level of readiness (Palmer et al., 2017, p. 122). Individual readiness can be increased by enhanced participation in decisions, change in communication, and perceptions of the organisations' history of change, all with little or no cost (Palmer et al., 2017, p. 122).

In the analysis of the cases in this thesis, it was found relevant to examine the organisational and individual readiness as the CSRD is described as legislation that has developed quickly in both the amount of requirements and in time.

Analysis 5

This chapter will enable an analysis of which requirements will be set for the companies through the CSRD as well as an analysis of the case companies where the prepared conceptual framework will be applied. The analysis of which requirements will be set through the CSRD will be based on a document analysis of both the CSRD and the associated ESRS. Document analysis will be used to analyse the case companies' sustainability- and annual reports. This will be the basis for the case study of which organisational changes the companies face in order to achieve compliance with the CSRD.

5.1 What are the requirements of the CSRD?

The purpose of this section was to elaborate on the reporting requirements set for companies that will operate in the European market in the future, and thereby answer the first sub-research question *What are the requirements of the CSRD?*

As described earlier, in section 1.2, the CSRD aims to create reliable, comparable and transparent sustainability information ([The European Parliament and The Council Of The European Union, 2022a](#); [European Commission and FISMA, 2020](#)). The CSRD is an amendment and expansion of the NFRD, which has been a useful and effective directive, within the framework set in the directive. As mentioned earlier in table 1.3 in section 1.2, shortcomings have been found in connection with the NFRD, which are now being resolved through the CSRD.

The CSRD can be seen as twofold; the directive, an amendment to the NFRD and the 12 ESRS prepared by EFRAG, which were reviewed in the following section.

5.1.1 The Amendments to the NFRD

The first part of the CSRD as legislation, was the amendments it makes to the NFRD. In addition, to the introduction of the ESRS through Article 1, §8, there were found four significant changes in the CSRD:

- A change of the term NFI to sustainability information
- Inclusion of sustainability information in the management report
- The expansion of reporting obligation company groups
- Implementation of auditor's declaration for sustainability information

[The European Parliament and The Council Of The European Union \(2022a\)](#)

In relation to the change of the term NFI, §8, states that *"Many stakeholders consider the term 'non-financial' to be inaccurate, in particular, because it implies that the information*

in question has no financial relevance" (The European Parliament and The Council Of The European Union, 2022a). This shows that the European Commission recognises the complexity of the concept of sustainability at the same time that they recognise the connection between sustainability and the financial aspects of running a business. It may seem like a minor detail to change a notation for the type of data companies must report on. However, this has an effect on the discourse that exists around the importance of sustainability for companies' basis of existence. By changing the term NFI to sustainability information, the European Commission, in a legal text, cements the role of sustainability as equal to financial information.

This point is further supported by the requirement to include sustainability information in the management report, through §57 stating *"Undertakings should therefore report sustainability information in a clearly identifiable dedicated section of the management report [...]"* (The European Parliament and The Council Of The European Union, 2022a). Through this amendment, companies are forced to consider sustainability at the same level as financial and operational information. This aims to anchor sustainability information as a central part of the decision-making basis for both internal and external assessments of, for example, investments and business opportunities.

Regarding the expansion of reporting obligation companies, §17 states that, the scope should be broadened to include *"all large undertakings and all undertakings, except micro undertakings"* (The European Parliament and The Council Of The European Union, 2022a). This is a significant expansion compared to the fact that under the NFRD only PIEs were subject to reporting. The expansion of requirements stems from recognising the necessity of the availability of sustainability information, for example in order to secure sustainable investments in companies in the EU market (The European Parliament and The Council Of The European Union, 2022a; European Commission and FISMA, 2020). As pointed out by several Johansen (2023); Boe (2023); Jacobsen (2023); Stormer (2022a) and Høgh (2022b), the requirement for the availability of sustainability information, even for companies that are not subject to reporting obligations, will be obliged to collect this information since they will most likely be part of a supply chain, where they are forced to provide information.

Furthermore, implemented through the CSRD, Article 1, §12-13, requires assurance of sustainability information (The European Parliament and The Council Of The European Union, 2022a). As described in section 1.2.3, this will initially be based on a limited assurance engagement, but in the long term a reasonable assurance engagement. The purpose of assurance of sustainability information is to create reliable and trustworthy data. Prior to the CSRD, it had been voluntary for companies whether they use assurance or not, but with the implementation of a requirement for assurance, through the CSRD, greater value is attributed to sustainability information, on the same level as financial information.

5.1.2 The 12 European Sustainability Reporting Standards

The second part of the CSRD was the proposed reporting standards, the ESRS (The European Parliament and The Council Of The European Union, 2022a). At the time of writing, EFRAG has published 12 drafts of the ESRS, which are expected to be adopted

by the European Commission, as delegated acts in June 2023 (EFRAG and EFRAG SRB, 2022). In regards to the ESRS, Johansen (2023) stated that the standards can be seen as being comprehensive, both in connection with the fact that a total of 84 disclosure requirements and 1144 data requirements are set through the ESRS (Stormer, 2022b,a). It can be argued that the level of ambition in the CSRD is particularly high given that there are mandatory requirements for compliance, where the same level of ambition is primarily seen in voluntary standards such as the GRI and SASB standards (GRI, n.a.; ISSB, n.a.b). The amount of data seems to be a parameter in connection with sustainability reporting, which can create challenges for companies (Høgh, 2022b; Jacobsen, 2023).

Figure 5.1 shows the 12 sector agnostic standards, divided into four categories; the cross-cutting standards and the standards related to ESG respectively Environment, Social and Governance.

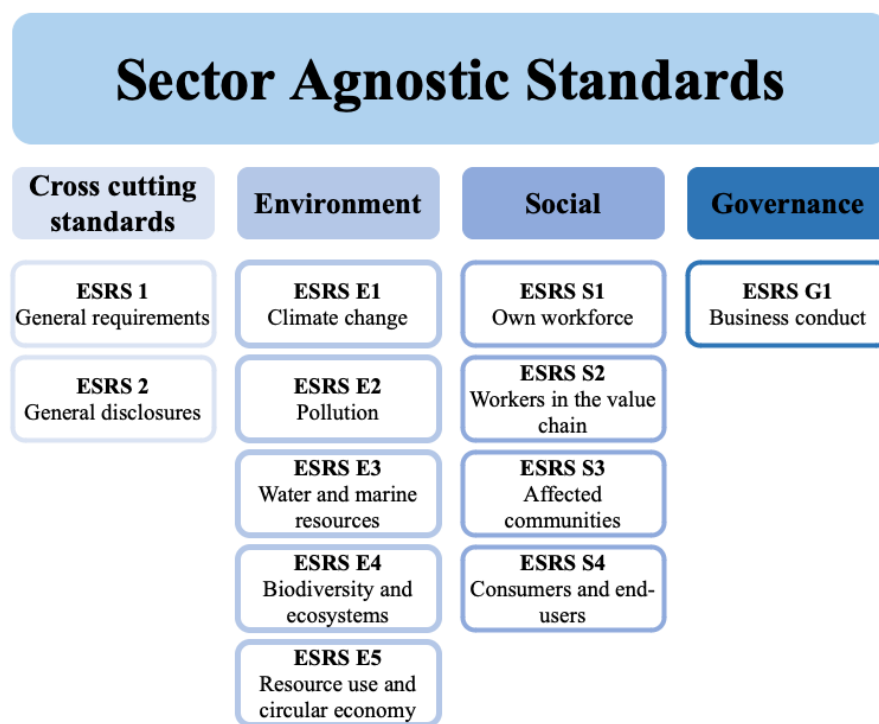


Figure 5.1. Shows the structure of the sector agnostic ESRS, in the four categories; Cross-cutting standard, Environment, Social and Governance (EFRAG and EFRAG SRB, 2022) (Own figure inspired by (Stormer, 2022b)).

Sector Specific Standards and SME Proportionate Standard

In addition to the 12 sector agnostic standards, sector-specific standards and SME proportionate standards will later be developed (The European Parliament and The Council Of The European Union, 2022a).

The latest publication of a working paper from EFRAG concerning the sector-specific standards is based on the NACE classification system and presents 40 sector and 14 sector group classifications (EFRAG, 2022a). However, the sector-specific standard will be delayed, due to a request from the European Commission that EFRAG "[...]focus attention on providing additional guidance for companies to apply the first set of horizontal standards." (McGuinness, 2023). This statement from McGuinness (2023) can be seen as

an example of the complexity associated with the ESRS and how extensive changes will be made to companies' mandatory sustainability reporting.

In Denmark, the implementation of the CSRD for Danish companies is aided by the Danish Financial Statements Act §99a, due to the fact that it establishes reporting requirements for more companies than just PIEs opposite to the NFRD ([The European Parliament and The Council Of The European Union, 2022a, 2014](#); [Erhvervsministeriet, 2022](#)). Because of this, several Danish companies have been subject to sustainability reporting since the NFRD. However, this earlier requirement for reporting does not necessarily mean that the preparation of sustainability reports for large Danish companies will not entail challenges for these companies, which must report from the financial year 2025.

This statement is based on the fact that the NFRD, have forced a selection of Danish companies to have processes and structures which are necessary for compliance with the CSRD. However, based on remarks from [Johansen \(2023\)](#), [Boe \(2023\)](#), [Jacobsen \(2023\)](#) and [Drif and Hedemark \(2023\)](#) the overall impression is that the CSRD still will demand significant changes and a substantial amount of work for danish companies to achieve compliance.

What Are the Requirements of The Individual European Sustainability Reporting Standards?

The overall framework for companies' sustainability reporting is set in the *ESRS 1 - General Requirements* ([EFRAG, 2022b](#)). Through this standard, the general requirements for companies regarding the preparation and reporting of sustainability information are set. In addition, the key terms and structure for sustainability reporting are defined. Two of the key additions from ESRS 1 are the definition and implementation of double materiality and data from the value chain ([EFRAG, 2022b](#)).

The concept of double materiality is described to include both impact materiality and financial materiality as well as the interrelationship and the interdependencies between these two dimensions ([EFRAG, 2022b](#)). Double materiality covers the impact and financial dimensions that are considered to be the *most significant* impact and financial dimensions for a given company and value chain ([EFRAG, 2022b](#)). The ESRS 1, makes it mandatory for companies to carry out an assessment, to determine the impacts, risks and opportunities that are material for the company and its value chain ([EFRAG, 2022b](#)).

It was pointed out by [Stormer \(2022a\)](#) and [Høgh \(2022b\)](#) that double materiality is a difficult concept, for many companies to work with. This is due to double materiality being an entity-specific disclosure requirement, meaning that the reporting company is required to independently make this assessment of materiality. The purpose of including an assessment of double materiality in relation to sustainability reporting is to ensure that the information companies report on what is relevant, essential and justified ([EFRAG, 2022b](#); [Datamaran, 2023](#)).

Along with the double materiality assessment, the ESRS 1 also introduces a focus on value chain information ([EFRAG, 2022b](#)). This is to enable an assessment of upstream and/or downstream materiality which is linked to the double materiality assessment. Together with the double materiality assessment, the value chain information requirement affects all the remaining ESRS and the data required in connection with them.

As seen in figure 5.1, the ESRS cover all three aspects of ESG, with a wide range of topics covered in the individual standards. As mentioned earlier, the ESRS introduces 1144 data points within 84 disclosure requirements, with a range of both qualitative and quantitative data points (EFRAG and EFRAG SRB, 2022). Table 5.1 shows two examples of disclosure requirements, E1-2 and S1-9 respectively, as well as data points under each disclosure requirement.

The two examples are selected due to their ability to show a qualitative and a quantitative data point. Both data points and disclosure requirements are chosen from the ESRS sector agnostic standards that are relatively well-known, respectively climate change and own workforce, and are thereby also based on more well-known and well-tested databases.

This assessment of familiarity with the subjects; climate change and own workforce, stems from the fact that these are topics that previously had a reporting obligation through the NFRD and that they are topics that are included and reported on in relation to other directives and standards, e.g. the Taxonomy, the GRI and the ISSB (The European Parliament and The Council Of The European Union, 2020; GRI, n.a.; ISSB, n.a.a). As pointed out by Carlsen (2023), there is a difference in the maturity of the various standards which affects the quality of data requirements and disclosure requirements.

Example of qualitative data points	Example of quantitative data points
<i>Disclosure Requirement E1-2</i> – <i>Policies related to climate change mitigation and adaptation</i>	<i>Disclosure Requirement S1-9</i> – <i>Diversity indicators</i>
§ 20 - The undertaking shall disclose the policies it has adopted to manage its material impacts, risks and opportunities related to climate change mitigation and adaptation.	§ 63 - The undertaking shall disclose the gender distribution at top management and the age distribution amongst its employees.

Table 5.1. Shows two examples of disclosure requirements, E1-2 and S1-9 respectively, as well as data points under each disclosure requirement (EFRAG, 2022c,i)

Carlsen (2023) points out that even with the many data requirements set through ESRS, the requirements are not necessarily all new data points. The companies may traditionally have collected a given data point, but through the ESRS they are required to present this data, which can be in a different way than before. In that case, the specific data will therefore appear as new in their report, without actually being so, as the company partially fulfilled the given requirement in advance.

Topical standards: Environment

Five standards have been published under this category: E1 Climate change, E2 Pollution, E3 Water and marine resources, E4 Biodiversity and ecosystems and E5 Resource use and circular economy (EFRAG, 2022c,d,e,f,g). The disclosure requirements for each of the standards are found to be structured in the same way, which in this thesis will be classified as topic specific requirements and general requirements that repeats themselves across the standards.

As shown in table 5.2, the environmental standards contain 32 disclosure requirements, of which 20 are found to be general and 12 are found to be topic specific. General disclosure requirements are assessed to be more generically structured and are repeated in several of the standards.

This means that the disclosure requirements which start with; *"Policies related to [Topical standards]"*, where [Topical standards] refer to the specific topical standard this disclosure requirement is linked to. It was found that the general disclosure requirements repeat themselves through all topical standards, and sets a more generic requirement for the reporting companies to have a policy for the given area. This was in contrast to the topic specific disclosure requirements, which set specific and adapted requirements for the individual topical standards. This can e.g. be seen in the disclosure requirements; *"Energy consumption and mix"* from E1 (EFRAG, 2022c). This disclosure requirement is adapted to this particular standard and is only relevant in this context.

Disclosure Requirements - Environment	General	Topic Specific
<i>ESRS E1 Climate change</i>		
E1-1 – Transition plan for climate change mitigation		x
E1-2 – Policies related to climate change mitigation and adaptation	x	
E1-3 – Actions and resources in relation to climate change policies	x	
E1-4 – Targets related to climate change mitigation and adaptation	x	
E1-5 – Energy consumption and mix		x
E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions		x
E1-7 – GHG removals and GHG mitigation projects financed through carbon credits		x
E1-8 – Internal carbon pricing		x
E1-9 – Potential financial effects from material physical and transition risks and potential climate-related opportunities	x	
<i>ESRS E2 Pollution</i>		
E2-1 – Policies related to pollution	x	
E2-2 – Actions and resources related to pollution	x	
E2-3 – Targets related to pollution	x	
E2-4 – Pollution of air, water and soil		x
E2-5 – Substances of concern and substances of very high concern		x
E2-6 – Potential financial effects from pollution-related impacts, risks and opportunities	x	
<i>ESRS E3 Water and marine resources</i>		
E3-1 – Policies related to water and marine resources	x	
E3-2 – Actions and resources related to water and marine resources	x	
E3-3 – Targets related to water and marine resources	x	
E3-4 – Water consumption		x
E3-5 – Potential financial effects from water and marine resources-related impacts, risks and opportunities	x	
<i>ESRS E4 Biodiversity and ecosystems</i>		
E4-1 – Transition plan on biodiversity and ecosystems		x
E4-2 – Policies related to biodiversity and ecosystems	x	
E4-3 – Actions and resources related to biodiversity and ecosystems	x	
E4-4 – Targets related to biodiversity and ecosystems	x	
E4-5 – Impact metrics related to biodiversity and ecosystems change		x
E4-6 – Potential financial effects from biodiversity and ecosystem-related impacts, risks and opportunities	x	
<i>ESRS E5 Resource use and circular economy</i>		
E5-1 – Policies related to resource use and circular economy	x	
E5-2 – Actions and resources related to resource use and circular economy	x	
E5-3 – Targets related to resource use and circular economy	x	
E5-4 – Resource inflows		x
E5-5 – Resource outflows		x
E5-6 – Potential financial effects from resource use and circular economy-related impacts, risks and opportunities	x	
A Total of Disclosure Requirement 32	20	12

Table 5.2. Shows an overview of the disclosure requirements for the topical standard of Environment with an indication of the requirements being a general or topic specific requirement (EFRAG, 2022c,d,e,f,g).

Based on this categorisation of the requirements, it was found that certain disclosure requirements were repeated in all five standards in relation to the Environment standards. This was because they are related to general principles about how a company has implemented these topics into their strategy, policy and metrics and targets, as well as how a company potentially is affected by the individual standards. Whereas the topic specific requirements are specific to the individual themes of the standards and introduce the largest and most comprehensive amount of disclosure requirements. This is due to the specification of the requirements as well as an expansion of the requirements both internally in the company and externally in the company's value chain.

In addition to the disclosure requirements, an appendix with definitions of selected terms as well as a detailed description of and guide to the application of the requirements are attached to each standard. In this description of guides to the application of the requirements, a reference is also provided to relevant further guidance and materials, e.g. refers E1 to guidance from the *GHG Protocol Corporate Standard* and E4 to guidance provided by *Taskforce on Nature-related Financial Disclosures* (TNFD) ([Ranganathan et al., 2004](#); [TNFD, 2022](#)).

Topical standards: Social

Four standards have been published under this category: S1 Own workforce, S2 Workers in the value chain, S3 Affected communities and S4 Consumers and end-users ([EFRAG, 2022i,j,k,l](#)). Just as the topical standards related to Environment, the disclosure requirements for each of the Social standards are structured in the same way, with subject-specific requirements and general requirements that repeat themselves across the standards.

In table 5.3, the categorisation of general and topic specific disclosure requirements can be seen in the same way as the environment-related standards. There are 32 disclosure requirements, 20 of which are general and 12 topic specific. However, the difference here can be seen as that three out of the four standards only contain general requirements. It is further found that there primarily are general requirements among the social standards and few topic specific requirements. The topic specific standards are all found in the S1 *Own Workforce* standard ([EFRAG, 2022i](#)). This can be assumed to be because standards for social aspects not yet have reached the same level of maturity such as aspects related to climate through e.g. the greenhouse gas (GHG) protocol.

Disclosure Requirements - Social	General	Topic specific
<i>ESRS S1 Own workforce</i>		
S1-1 – Policies related to own workforce	x	
S1-2 – Processes for engaging with own workers and workers' representatives about impacts	x	
S1-3 – Processes to remediate negative impacts and channels for own workers to raise concerns	x	
S1-4 – Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	x	
S1-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	x	
S1-6 – Characteristics of the undertaking's employees		x
S1-7 – Characteristics of non-employee workers in the undertaking's own workforce		x
S1-8 – Collective bargaining coverage and social dialogue		x
S1-9 – Diversity indicators		x
S1-10 – Adequate wages		x
S1-11 – Social protection		x
S1-12 – Persons with disabilities		x
S1-13 – Training and skills development indicators		x
S1-14 – Health and safety indicators		x
S1-15 – Work-life balance indicators		x
S1-16 – Compensation indicators (pay gap and total compensation)		x
S1-17 – Incidents, complaints and severe human rights impacts and incidents		x
<i>ESRS S2 Workers in the value chain</i>		
S2-1 – Policies related to value chain workers	x	
S2-2 – Processes for engaging with value chain workers about impacts	x	
S2-3 – Processes to remediate negative impacts and channels for value chain workers to raise concerns	x	
S2-4 – Taking action on material impacts on value chain workers, and approaches to mitigating material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions	x	
S2-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	x	
<i>ESRS S3 Affected communities</i>		
S3-1 – Policies related to affected communities	x	
S3-2 – Processes for engaging with affected communities about impacts	x	
S3-3 – Processes to remediate negative impacts and channels for affected communities to raise concerns	x	
S3-4 – Taking action on material impacts on affected communities, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions	x	
S3-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	x	
<i>ESRS S4 Consumers and end-users</i>		
S4-1 – Policies related to consumers and end-users	x	
S4-2 – Processes for engaging with consumers and end-users about impacts	x	
S4-3 – Processes to remediate negative impacts and channels for consumers and end-users to raise concerns	x	
S4-4 – Taking action on material impacts on consumers and end-users, and approaches to mitigating material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions	x	
S4-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	x	
A Total of Disclosure Requirement 32	20	12

Table 5.3. Shows an overview of the disclosure requirements for the topical standard of Social with an indication of the requirements being a general or topic specific requirement (EFRAG, 2022i,j,k,l).

Topical standards: Governance

In contrast to the other two topical standards Environment and Social, only one standard has been published regarding Governance; G1 *Business conduct* (EFRAG, 2022h). There are six disclosure requirements in connection with this standard which can be seen in table 5.4. However, it was difficult to assess whether these were general or topic specific

requirements as there were no other standards to compare with. However, there was not the same structure in these requirements of this standard as in the two aforementioned topical standards. This standard covers more broad and typical aspects within business conduct, such as *Payment practices* (EFRAG, 2022h).

Disclosure Requirements - Governance
ESRS G1 Business conduct
G1-1– Corporate culture and business conduct policies
G1-2 – Management of relationships with suppliers
G1-3 – Prevention and detection of corruption or bribery
G1-4 – Confirmed incidents of corruption or bribery
G1-5 – Political influence and lobbying activities
G1-6 – Payment practices
A Total of Disclosure Requirement 6

Table 5.4. Shows an overview of the disclosure requirements for the topical standard of Governance (EFRAG, 2022h).

5.2 Case Study of Case Companies

This section of the analysis should answer the second, third and fourth sub-research questions; "How have the companies organised their work with sustainability reporting prior to the CSRD?", "Which challenges do the companies face with the compliance of the CSRD?" and "Which organisational changes, defined by a conceptual framework, are the companies going to do to meet the CSRD requirements?" The answers to the sub-research questions are based on the knowledge obtained through first a document analysis of the companies' sustainability- and annual reports. Second, the analysis of the information collected through the interviews conducted with respondents from each case companies, presented in table 3.5 in section 3.2.3.

5.2.1 The Examined Case Companies

The three cases analysed in this thesis were the companies; Danfoss, Danish Crown and Hempel. The focus was on the three companies' general sustainability efforts and sustainability reporting and not the individual segments or parts of the companies. In the following, the three case companies were presented and described overall, before they were compared in a document analysis and examined individually regarding challenges and changes related to the CSRD.

Danfoss

Danfoss is a danish based international manufacturing company that specialises in research, production and development of mechanical and electronic components. Besides the overall group management, Danfoss consists of three business segments; *Danfoss Power Solutions*, *Danfoss Climate Solutions* and *Danfoss Power Electronics and Drives*. The customer base for Danfoss is both business-to-business (B2B) and businesses-and-consumers (B2C), which means that the company must deal with the different customer requirements that originate from these two segments (Danfoss, 2023). Across the organisation, Danfoss sees their role as being a *"Leading technology partner for our customers who want to decarbonise through energy efficiency, machine productivity, low emissions, and electrification"* (Danfoss, 2023).

As of the latest financial year, Danfoss had 97 factories in more than 20 countries and had sales in more than 100 countries worldwide as well as employed on average 41,928 full-time employees in the financial year 2022. The financial year for Danfoss is from January 1 to December 31 any given year and for the most recent financial year 2022, Danfoss published an integrated annual report. The integrated part refers to the incorporation of sustainability information into the annual financial report.

Danfoss has developed an ESG ambition focusing on; decarbonisation, circularity and diversity & inclusion (Danfoss, 2023).

In table 5.5, selected financial key figures for Danfoss can be seen. These key figures were included to show the current financial situation of the company and thereby the company's financial health.

Financial Key Figures	Unit: EUR million
Gross profit	416
Profit before tax	244
Net profit for the year	200
Total assets	6,953

Table 5.5. Shows selected financial key figures for Danfoss from the financial year 2022 (Danfoss, 2023).

Danish Crown

Danish Crown is a danish based international food company, which deals with slaughtering operations, processing and sales of primarily pork and beef. Danish Crown as a group consists of a number of subsidiaries in different European and international markets and currently, they have 57 abattoirs and processing facilities, 46 casing facilities, 12 warehouses and 49 offices (Danish Crown, 2022a,b).

Additionally, the Danish Crown is Europe's largest producer of pork, Europe's largest meat processing company and the world's largest exporter of pork (Danish Crown, n.a.). The customer base for Danish Crown is both B2B and B2C, which means that the company must deal with the different customer requirements that originate from these two segments (Danish Crown, 2022a).

The Danish Crown group is owned by 5,404 Danish farmers (Leverandørselskabet Danish Crown AmbA) and employs on average 26,641 full-time employees in the financial year 2021/2022. The financial year of Danish Crown is from 1 October to 30 September of any given year. For the most recent financial year, Danish Crown published a separate sustainability report and financial statement (Danish Crown, 2022a,b).

The sustainability strategy presented in the 2021/2022 sustainability report, is divided into four focus areas called *strategic lighthouses* concerning: together with customers and consumers, sustainable farming, good jobs for everyone and sustainable food production (Danish Crown, 2022b).

In table 5.6, selected financial key figures for Danish Crown can be seen. These key figures have been included to show the current financial situation of the company and thereby the company's financial health.

Financial Key Figures	Unit: DKK million
Gross profit	10,155
Profit before tax	2,659
Net profit for the year	2,180
Total assets	29,356

Table 5.6. Shows selected financial key figures for Danish Crown from the financial year 2021/2022 ([Danish Crown, 2022a](#)).

Hempel

Hempel is a danish based company which is a global supplier of; coatings and paints to industries such as the marine, decorative, energy and infrastructure industries ([Hempel, 2022](#)). On a global scale, Hempel as a group consists of; 28 factories, 17 Research and development (R&D) centres and warehouses ([Hempel, 2022](#)). The Hempel Foundation is the sole owner of the Hempel Group and has the purpose to safeguard the financial foundation for the group as well as create a foundation for the foundation's philanthropic work ([The Hempel Foundation, n.a.](#)). The corporate governance structure of Hempel is split into five segments; a *Technology & Operations* segments (meaning: integrated global supply chain and R&D) and four separate *Customer* segments; Decorative, Marine, Energy and Infrastructure. The customer base for Hempel is both B2B and B2C, which means that the company must deal with the different customer requirements that originate from these two segments ([Hempel, 2022](#)).

In the financial year 2022 Hempel employed an average 7,343 full-time employees. The financial year for Hempel is from January 1 to December 31 any given year, and for the latest financial year 2022, Hempel published an integrated annual report.

In table 5.7, selected financial key figures for Hempel can be seen. These key figures were included to show the current financial situation of the company and thereby the company's financial health.

Financial Key Figures	Unit: EUR million
Gross profit	784
Profit before tax	56
Net profit for the year	35
Total assets	2,655

Table 5.7. Shows selected financial key figures for Hempel from the financial year 2022 ([Hempel, 2022](#)).

5.2.2 Document Analysis of Sustainability- and Annual Reports from the Case Companies

The three cases examined in this thesis have been described in general in the sections above, in order to form a basis for understanding these companies. This section was focused on differentiating and comparing the three companies against each other based on a document analysis of the latest annual report and/or sustainability report from each company.

First, the similarities between the three companies' sustainability reporting were examined. All three companies have until now been, subject to reporting according to the guidelines

in the NFRD through section §99a of the Danish Financial Statements Act due to their classification as being in accounting class C ([Erhvervsstyrelsen, 2022](#)). This means that all three companies have published sustainability information since 2018. The companies have therefore had the opportunity to practice and adjust their reporting as well as build a system and structure for reporting internally in the company. This is in contrast to companies that have not previously been subject to reporting obligations and therefore have to start this process from scratch when requirements are set through CSRD for them to report.

Through all three reports, the companies all write that 2022 has been a difficult year. Generally, this is attributed to;

- Rising prices for raw materials and energy
- Raw material shortages and supply chain disruptions
- Rising inflation
- Pandemic lockdowns and/or consequences of the Coronavirus
- Ceased operations in Russia and/or the exit the Russian market as a result of the invasion of Ukraine.

([Danish Crown, 2022b](#); [Danfoss, 2023](#); [Hempel, 2022](#))

These challenges for companies cannot inevitably be said to have affected the sustainability reporting itself, but have clearly affected the companies' ability to conduct business. Therefore, it was assumed to also have affected the sustainability data the companies have reported on, but presumably not the way and the method used by the companies to report.

As mentioned earlier, the customer base for all three companies is both B2B and B2C, which means that the target audience for the three companies' sustainability information is customers, such as other companies (B2B segment) and private individuals (B2C segment). These two target groups presumably read a sustainability report through different lenses and it is assumed that this is for different reasons. This has an effect on the composition and readability of the reporting of sustainability information. The narrative and the telling of "a good story" are assumed to take up more space in the customer segment *private individuals*, as it is often the overall picture that is sold to them.

The report where the telling of "a good story" takes up the most space is in the report from Danish Crown, but this is also the only one of the three companies that have published a separate sustainability report in the last financial year ([Danish Crown, 2022b](#)). This narrative style can be seen in all three reports, but the one with the least explicit narrative style is the report from Hempel ([Hempel, 2022](#)). Therefore, the developments towards an integrated sustainability and financial report can also be seen as a step in the direction away from a narrative reporting style and towards a more data-oriented and objective presentation of sustainability information.

The integration of sustainability information in the annual report also reflects how sustainability has been given a higher priority in the case companies ([Danfoss, 2023](#); [Hempel, 2022](#)). This was based on the assumption that with an integrated report, sustainability has become a part of the company's business and is no longer seen as something separate and/or extra. As stated earlier there are some common requirements

for a report of ESG data through the NFRD and the coming CSRD and ESRS. However, there are still differences in what the three case companies report on in their annual reports and sustainability reports when compared. These differences and similarities are shown in table 5.8.

	Danfoss	Danish Crown	Hempel
Integrated report	✓	Have a separate report	✓
Used framework	GRI and ESRS	Inspired by GRI	TCFD, CDP, EcoVadis, NFRD
Assurance on ESG data	Not found	Not found	Limited assurance
Double materiality	Not found described	✓	Not found described
Sustainability strategy	Core & Clear 2025	Feeding the Future 2026	Futureproof 2025
Use of SDG's	Not found described	2, 4, 5, 6, 8, 12, 13, 15, 16, 17 (10 SDG's)	3, 5, 8, 12, 13, 17 (6 SDG's)
Use of ESG rating	CDP, EcoVadis*, Sustainalytics*, Moody's ESG Solutions*	EcoVadis	EcoVadis and CDP
ISO Certificated	87% of production IOS14001	All facilities certified according to ISO 45001 and all Polish facilities have been certified according ISO 14001	45001, 50001 9001* and 14001*
Science Based Target initiative (SBTi)	✓	✓	✓
Scope 3, GHG emissions	Target: Reduce by 15 % by 2030 accordance to 2019	Target: Lower towards 2030 reduction target	Target: 50% absolute reduction by the end of 2030
Mention of the CSRD and/or ESRS	✓	✓	✓

Table 5.8. Shows a comparison of the case companies' sustainability reporting, based on the companies' annual report from 2022 and interviews (Danish Crown, 2022a,b; Danfoss, 2023; Hempel, 2022). *Found on the companies web page.

In table 5.8 it can be seen that Danfoss and Hempel have made an integrated report and Danish Crown has not. In the CSRD the integrated report will be a requirement (The European Parliament and The Council Of The European Union, 2022a), hence through an interview it is stated by Carlsen (2023), that Danish Crown's 2023 annual report will be an integrated report.

One of the purposes of the CSRD is to create comparability of ESG data across companies by making it mandatory to use the same standards, hence the development of the ESRS (The European Parliament and The Council Of The European Union, 2022a; EFRAG and EFRAG SRB, 2022). In table 5.8, it can be seen that all three cases use different reporting frameworks and it was, therefore, difficult to compare their ESG data. All three companies will have to report by the ESRS standards from the financial year 2025, which is why e.g. Danfoss have started to report their ESG data in accordance with the ESRS general requirements (Danfoss, 2023). Danish Crown and Hempel also use the SDGs which are voluntary and not a framework for reporting, but companies can choose to use them actively in their reporting (WBCSD, n.a.), which is the case for these two companies (Danish Crown, 2022b; Hempel, 2022).

It was found that Hempel was the only company that had assurance on their ESG data (Hempel, 2022), which will also be a requirement in the CSRD by the earliest in 2028 (The European Parliament and The Council Of The European Union, 2022a). Furthermore, double materiality will be a requirement in the CSRD (The European Parliament and The Council Of The European Union, 2022a), and here Danish Crown was the only company

of the three cases which had a double materiality analysis in their report ([Danish Crown, 2022b](#)).

All three cases have a sustainability strategy. Danfoss launched their *Core & Clear* 2025 strategy in 2022 which will run until 2025 ([Danfoss, 2023](#)). In addition, Danish Crown launched their *Feeding the Future* strategy in 2021, which is a corporate strategy where the sustainability strategy is a part of, and this will set the direction for Danish Crown towards 2026 ([Danish Crown, 2022b](#)). Hempel also launched their *Futureproof* strategy in 2021 and will run until 2025 ([Hempel, 2021](#)). Based on this, it was found that the case companies all have deadlines for their objectives in 2025, which coincides with the fact that the companies must report according to CSRD from this year. This may indicate that the case companies have taken this into account and recognise that they must re-assess and develop new strategies in accordance with CSRD at that time anyway.

It was found that all three case companies use ESG ratings, which can be used by the companies to show customers how they perform on ESG. Danish Crown have in 2022 received a silver medal from their EcoVadis rating ([Danish Crown, 2022b](#)). Danfoss has also received a silver medal from EcoVadis, while they improved their rating in 2022 in CDP from D to A ([Danfoss, n.a.](#)).

All three cases use the Science Based Target Initiative (SBTi) which e.g. defines best practices in emissions reductions in line with climate science and they assess and validated companies' targets ([Science Based Targets, n.a.](#)). Danfoss had their climate goals validated by SBTi in 2022 ([Danfoss, 2023](#), p. 35). Danish Crown has submitted to SBTi that are in line with what is required to achieve the goals of the Paris Agreement ([Danish Crown, 2022a](#), p. 6) and have their goal of halving their carbon footprint by 2030 is approved by SBTi in 2022 ([Danish Crown, 2022b](#), p. 9 & 20). Hempel has also gotten their ambitions, regarding lowering their emission, approved by SBTi in 2022 ([Hempel, 2022](#), p. 7).

The fact that the companies have had their targets approved by SBTi is assessed to be a help for them in connection to the CSRD given that initiatives such as the SBTi or the CDP, provide a guide and starting point in carbon accounting and reporting ([Science Based Targets, n.a.](#); [CDP, n.a.](#)). Consequently, when it is introduced as a mandatory requirement through ESRS E1 ([EFRAG, 2022c](#)), the companies are prepared and have a system to handle this type of data. This is the same reasoning that applies in relation to the ISO certificates which also can be seen as an aid in relation to the preparation for the compliance of the CSRD.

Scope 3 related to GHG emissions is relevant to examine in the reports because this is one of the mandatory reporting requirements that will be implemented in the ESRS E1 ([EFRAG, 2022c](#)). Scope 3 GHG emissions are also an aspect that has been voluntary until now but is a central part of carbon accounting and neutrality, which is a target for the companies in the future. Danfoss aim to reduce their scope 3, GHG emissions by 15% by 2030 with 2019 as base year ([Danfoss, 2023](#), p. 35), but acknowledged that they have a huge work ahead especially regarding their value chain emissions ([Danfoss, 2023](#), p. 30). Danish crown aims to lower their scope 3 GHG emissions in order to reach their 2030 emission target ([Danish Crown, 2022b](#), p. 76). They have completed the first calculations of their scope 3 inventory, and have a focus on the GHG emissions from the farmers since these compose the majority of their scope 3 emissions ([Danish Crown, 2022b](#),

p. 20). Hempel has compared to 2021 achieved a 14% reduction of their scope 3 emissions (Hempel, 2022, p. 36), and they aim to reduce their absolute GHG emissions by 50% by 2030 (Hempel, 2022, p. 34). For Hempel, the scope 3 emissions are a huge challenge for them to track due to their complex supply chain, and they are in an early stage regarding scope 3 (Hempel, 2022, p. 30).

All three reports mention either the CSRD and/or the ESRS and thereby indicating that the case companies already have begun to incorporate and familiarise themselves with the coming regulation they will have to report in the financial year 2025.

In the coming sections, the three case companies will be analysed. Firstly the current organisation of both the work with sustainability and sustainability reporting in the three cases, will be examined. This will set the basis for which challenges the companies faces regarding the CSRD and which changes the companies will have to make for them to become compliant with the CSRD.

Lastly, the organisation of the companies, after the implementation of these changes has been implemented will be examined through their work with sustainability and sustainability reporting. The examination will vary in the focus of their work with sustainability in the organisation and the work with ESG data, however, these are closely related. The analysis will take a point of departure in the document analysis of their annual reports and the interviews conducted with each company.

5.2.3 Analysis of the Case Company - Danfoss

Based on the knowledge obtained through the interviews with Kubel (2023) and the document analysis of their latest annual report, it was found that Danfoss are in the process of preparing for the CSRD as they e.g. have made an integrated report. Besides the integrated report, Danfoss have also used ESRS 1, *General requirements*, even though they are a draft. Danfoss trust that this will enter into force and therefore they decided to start using the ESRS as that is what they will have to use in the future (Kubel, 2023). The fact that Danfoss is already in the process of preparing for the CSRD, was one point found in section 1.3 from Stormer (2022b) and Johansen (2023), that companies who are going to be affected by the CSRD should get started. Therefore, the description of the current status of Danfoss will take a point of departure from their work with sustainability and sustainability reporting prior to the CSRD and ESRS.

Current situation in Danfoss

The **Structure** of the work with sustainability and sustainability reporting in Danfoss is primarily taking place in the Group Sustainability and Group Finance. They among other things work with sustainability reporting, ESG ratings and treatments of data (Kubel, 2023). Furthermore, Group Sustainability works with the roll out of the ESG strategy e.g. decarbonise Danfoss's scope 1, 2 and 3, making circular business models, creating the right governance structure that secures the right targets being set at different levels (Kubel, 2023).

The three segments of Danfoss (Power Solutions, Climate Solutions and Electronics and Drives), have their own teams of sustainability employees which have been created in recent years (Kubel, 2023). These teams cooperate with Group Sustainability and secure that the initiatives from the new ESG ambitions regarding decarbonisation and circularity are happening in production (Kubel, 2023).

The Environmental department is responsible for environmental certificates primarily at the facility level. They monitor whether Danfoss complies with limited values e.g. water, air and soil and how Danfoss minimise their pollution (Kubel, 2023). Then there is Facility Management, which works with the decarbonisation of scope 1 and 2, by e.g. using Danfoss' own products (Kubel, 2023). Furthermore, Danfoss has a team who only works with LCA having a focus on scope 3, where their biggest category is their "use of sold products" which accounts for 98% of their scope 3 (Kubel, 2023). Finally, Danfoss has an ESG Leadership Team who runs quarterly meetings across the whole organisation which Kubel (2023) sees as a positive thing that all relevant departments are represented.

Regarding *strategy*, Danfoss launched in 2022 Danfoss an ESG ambition which builds on three initiatives; decarbonisation, circularity and diversity & inclusion (Danfoss, 2023). These three initiatives have to be supported by targets and data of good quality (Kubel, 2023). Besides their new ESG strategy, Danfoss launch a Circularity Framework with the purpose of increasing the amount of recycled content in their products, but also to design them in a way where they can be reused (Kubel, 2023). Danfoss wanted to increase the transparency in their reporting, and therefore they have worked with their sustainability reporting in the last years to prepare for the CSRD (Kubel, 2023).

The *system* regarding sustainability reporting is first and foremost that the responsibility is joint between Group Sustainability and Corporate Finance. The preparation of Danfoss' Annual report, consists of content from all departments in Danfoss, and Group Sustainability and Group Finance collect the data and is responsible for the consolidation of it in cooperation with each department. During the process, Danfoss consult their auditor to ensure that they can get assurance on the final report. Finally, there is a graphical agency for the setup of the report (Kubel, 2023). Currently, this system works well, but Kubel (2023) points out that there always is room for improvement.

Regarding the *style* there is a direct link from Group Sustainability to the Chief Financial Officer (CFO), which can be seen in figure 5.2. This, Kubel (2023) sees as very important, because it can enable quicker decisions, and the CFO is e.g. a part of the changes regarding the CSRD. Furthermore, the three segments take responsibility by cooperating and sharing knowledge of how they work in order to improve their sustainability (Kubel, 2023). All this shows that there are managers present and that they have a focus on how to improve and thereby also the changes they have to do in order for Danfoss to comply with the CSRD and for Danfoss to reach the target they have set up.

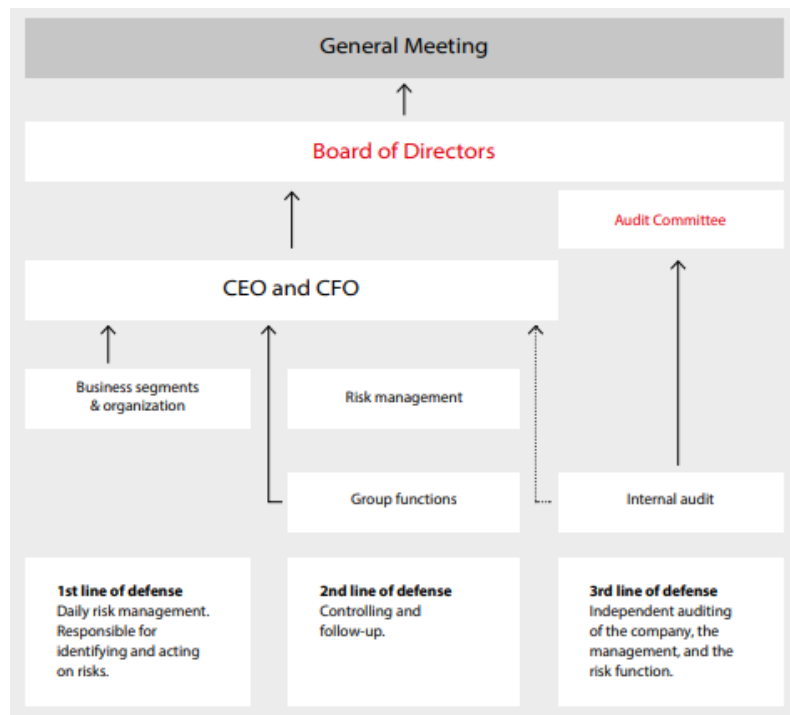


Figure 5.2. Shows the diagram over Danfoss organisation, where Group Sustainability are placed in "Group Functions" with the direct link to the CFO (Kubel, 2023).

Currently, the Group Sustainability has the *staff* that they need for the current and near-future workload associated with sustainability in Danfoss, because they cooperate with the three segments (Kubel, 2023). The employees have the right and needed competences, but there will always be a need to develop and improve their skills in different areas (Kubel, 2023). In Group Sustainability the focus is on being a diverse group of employees with different backgrounds who therefore can take care of different tasks (Kubel, 2023).

The *skills* of Danfoss, is related to the implementation of the ESG strategy which they are proud of given it has become such an integrated part of the strategy (Kubel, 2023). This is given that the employees, where it is relevant, have gotten a deep understanding of the strategy and the value it creates (Kubel, 2023). Furthermore, the implementation of sustainability is going well, due to the different segments being good at communication with each other regarding e.g. how to decarbonise the production processes and/or how to increase the amount of recycled content in the products (Kubel, 2023). What was noticed in this regard was that their skills currently not are focused on reporting, however, it can be assessed that the work with their strategy will affect what is reported.

The *Superordinate goals* for Danfoss is to equate the ESG data alongside the financial information. This is to make the same foundation for ESG data as the financial data has built up through several years (Kubel, 2023). It was pointed out that it is important to establish ownership of sustainability and ESG strategies and objectives in the whole organisation (Kubel, 2023). Furthermore to establish working procedures that allow Group Sustainability and Corporate Finance to be the ones receiving and verifying the data as well as creating the opportunity for this to happen through a consolidated IT set-up to control the processes (Kubel, 2023).

Pressures and Drivers

The CSRD was in this thesis assessed to compose the overall external *pressure*, which also applies to Danfoss, and is categorised as the *mandate*, in table 4.1 in section 4.1.1. Besides the CSRD, the external pressure on Danfoss is from their customers who demand more and more data, just as Danfoss does from their own suppliers. However, Kubel (2023) expresses that it is more as a pull and demand for data, than a pressure. The demand for data from their customers falls in the category of the *marketplace* as it is here the customers set up requirements for e.g. quality, innovation and service, and the company must meet these and go through changes to obtain success (Anderson and Anderson, 2010, p. 34).

Internally in Danfoss, the *drive* for more data stems from the top management and their ambition and targets which should be documented by data (Kubel, 2023). This internal drive falls under the category of *business imperatives* where the marketplace e.g. the customer's demand for data (Anderson and Anderson, 2010, p. 34), is the drive for change for Danfoss's strategy. Furthermore, the external pressure and demand for data are easily turned into an intern demand for more data when other departments request data. However, it is expressed by Kubel (2023), that to get specific data currently in Danfoss, there is room for improvements as well as a better structure for the data is needed to improve the intern processes for data demands. It can be assessed that the improvements of the intern data demand are a necessity for Danfoss in order for them to become compliant with the CSRD. This internal data demand is the *organisational imperatives*, where the employees must make changes in their processes, systems, technology and maybe in their skill base (Anderson and Anderson, 2010, p. 35).

Challenges and Changes in Danfoss

Kubel (2023) expresses that Danfoss have several different challenges regarding the CSRD, and highlights the challenge concerning collecting the needed data that the CSRD demand e.g. data that the organisation does not have. The next challenge concerns using the data actively, to make sure that data makes a difference and to articulate data in the whole organisation. The third challenge is the amount of required data.

One of the biggest challenges regarding data in Danfoss is when they need data from an external business partner to e.g. know the amount of recycled content in their products. In that case, Danfoss relies on its suppliers to deliver data on every single component (Kubel, 2023). In this regard Kubel (2023) expresses that the coming *Digital Product Passport* in the EU will be a good tool in order to get data from the supply chain (The European Parliament and The Council Of The European Union, 2022b). To be able to secure the quality of the data from their suppliers, Kubel (2023) expresses that a pragmatic approach will be necessary in the first place before the primary data are accessible.

Based on the current status of Danfoss and the mentioned challenges, the following changes are found relevant for Danfoss to make, or what they already are in the process of changing.

First of all, Danfoss has made an integrated report where they have ranked the ESG data alongside the financial, and that is not going to change (Kubel, 2023). But the content will be more satisfactory and comprehensive with underlying tables of data with associated accounting policy for each parameter (Kubel, 2023). From this statement, it can be understood that Danfoss has already assessed their latest report and assessed what

needs to change in order to achieve compliance with the CSRD. Furthermore, the report should contain a more active analysis of where they are in the process of achieving their 2030 targets which are net zero on scope 1 and 2 (Kubel, 2023). Finally, the report will also contain the the Taxonomy (Kubel, 2023).

In the organisation, there are some changes that are going to happen if Danfoss will have to become compliant with the CSRD and the above description of their coming annual reports. The following changes are identified for the annual report and the organisation;

- Annual report: Improve the content of ESG data with underlying tables
- Annual report: Analysis of the process towards 2030 targets
- Organisation: Improved governance structure
- Organisation: New consolidated IT system for data handling
- Organisation: Increase the number of data owners and requirements for their data
- Organisation: New data from suppliers, they do not already have
- Organisation: Expand the knowledge and importance of the CSRD in the whole organisation

It is clearly stated by Kubel (2023) that the CSRD is a huge change for Danfoss and calls the CSRD a revolution which sets new requirements regarding data and its audit. According to Kubel (2023), the ESRS builds on the requirements Danfoss has already been subject to until now through, among other things the Danish Financial Statements Act. According to the CSRD and ESRS, Kubel (2023) state that the responsibility of Group Sustainability is to prepare the organisation for these requirements. It is assessed that Kubel (2023) means, that the CSRD is a licence to operate for companies, and if they do not live up to the requirements in the CSRD Danfoss, it can have consequences e.g. loss of customers and sanction, which is so far unknown as the CSRD is not yet implemented into Danish law. Kubel (2023) especially point at the double materiality as ambitious. In addition, Kubel (2023) thinks that in the future there will be a global standard for sustainability reporting. Kubel (2023) further states that the big task is now, to comply with the ESRS, and in the future, the hope is that it will be minor changes to comply with an international standard for ESG data.

Based on the changes Danfoss will have to do in order to become compliant with the CSRD, their type of change is viewed as a *transitional change* because, it concerns the integration of new technology (the consolidated IT system), and the creation of new systems, processes and procedures. But some of the changes Danfoss will have to make will be *developmental changes* e.g. improvements of skills, as Kubel (2023) states that there is always room for improvements. Even, with the expression from Kubel (2023) of the CSRD being a revolution, the changes Danfoss have to make do not seem to be as complex and radical in a way where their changes can be deemed as transformational changes. The transitional change is driven by shifts in the environment, which in this case will be the CSRD as a mandate of legislation, and marketplace which for Danfoss is clarified to be from data requirements from their customers.

It has earlier been expressed that Danfoss already has started a process towards becoming compliant with the CSRD. This means that they are in the *transition state*, and have left the *old state* which can be viewed as when they made the annual report and a sustainability

report separately, and the ESG data thereby not were viewed as important as the financial. The *New state*, which they are aiming to reach, can for Danfoss, be stated as being when they are compliant with the CSRD or when they have reached their 2030 target.

The strategy for a transitional change mentioned in section 4.1.3 seems to comply with, what is already happening in Danfoss, and their strategy for how to reach their ambitions. First of all, Kubel (2023) states that the work with circularity has already been well integrated for those working with it, and can be viewed as a case for change. Furthermore, it does not seem as if they have a clear change plan unless their Core & Clear strategy can be used internally as a change plan with minor targets, as Kubel (2023) expressed that the CSRD, should be split into smaller projects. Next, Danfoss have focus on the importance of all employees knowing why these changes and the CSRD are important, which also covers the high involvement of the employee aspect in the implementation of the plan. The local control of the implementation can be assumed to take place in each segment in Danfoss, as Kubel (2023) explain that they currently are hiring controllers for each segment. The workload and capacity management also seems to be covered as it is expressed that the huge CSRD tasks could be broken down into smaller projects and thereby reach minor targets through the process or the employees are able to express if they have too many tasks in a period (Kubel, 2023). Concerning the training plan, Danfoss have internal training of colleagues, as well as attending webinars, conferences and industry forums to gain more knowledge. Further, it seems as if Danfoss currently have the necessary knowledge and competences for the CSRD tasks or otherwise they are aware of it being an important aspect and will take action later in the process.

The impression through the two interviews was, that if Danfoss receives assurance on their annual report the first year they have to report by the CSRD, it will be a success for them. However, this will not be viewed as an end date for their transitional change, as the CSRD is too dynamic for an end date (Kubel, 2023). In that regard, Danfoss will continue to improve and change what is needed for them to reach the target they have set for 2030.

The Future of Sustainability in Danfoss Associated with Compliant of the CSRD

Based on the challenges described, it will be necessary for Danfoss to make changes in the company. The following sections will describe the future state of Danfoss and the Group Sustainability and where they desire to be when they are compliant with the CSRD.

Regarding the *structure*, governance is stated to be important (Kubel, 2023). In Danfoss, the governance structure is in a maturing process. Kubel (2023) expresses that *"(...) in bigger organisations there is a need for a clear mandate from the top of the organisation to keep an eye on the organisation reaching its targets e.g. with data"*. In regards to data, the CFO in Danfoss are active and sets ambitious targets. This also entails a need to ensure that this governance structure is strengthened in the future. This is to ensure the best results and help the process to achieve the desired objectives.

Regarding *strategies* Kubel (2023) highlights that Danfoss need strategies for the procedures associated, with data, improvement of data handling and data verification to achieve assurance. In order to implement these strategies they are currently hiring

controllers in each segment to handle data, but there is also a need for a new IT system to handle and verify data (Kubel, 2023). It is assumed that this system can be both a new system or an upgrade of their existing system to increase the level of detail and ability to handle this new and more extensive data.

The future state of *system* concerns that all data gathered in Danfoss should be based on a solid process in order to get assurance on the final report, which in the future is a requirement (The European Parliament and The Council Of The European Union, 2022a), but also because some of their stakeholders demand it (Kubel, 2023). Therefore, it is a priority for Danfoss to develop a system that can support the data handling in the future. This means that it is important to build a foundation and systems for how to handle data, and to have systems and procedures in place that can aid the gathering of data from other data systems used in the organisation (Kubel, 2023). Furthermore, Kubel (2023) expresses that data which has been handled through this process will be a *single source of truth* and thereby the place to get the necessary data for the whole organisation. If the system should be a single source of truth and aid the auditing process for assurance on the final report, it must be possible to approve the process that the data have been through. The hope is that the system also should contain data regarding the CO₂ footprint from each product down to each component (Kubel, 2023).

Regarding the reporting of ESG data, Danfoss will in the coming years increase the involvement of their auditor in their process in order to get assurance of their upcoming report. With the increased amount of data requirements from the CSRD, Kubel (2023) expresses that there will become more data owners in their organisation followed by increased requirements for them. As the CSRD requires data regarding the environment, social and governance, it affects the whole organisation. However, Kubel (2023) expresses that the whole organisation can not pause until they know how to handle the new requirements from the CSRD, and further expresses that it is a prioritising just as with anything else, but that the ESG area receives great focus currently, particularly on data. Regarding data, Kubel (2023) points at the size of the project, and argues that working with several minor projects and reaching their targets of them could be a way to go for Danfoss. Kubel (2023) gives an example of what this minor project could be, where the IT department was handed a prioritised list of what needs to be done concerning a project e.g. which data points are needed and monitoring of data quality.

In relation to the management *style* of Danfoss, Group Sustainability has a central role concerning sustainability. Given the work with the CSRD starts and ends with them, and thereby there is a need for them to have the overview and responsibility for the entire process. This further connects with the fact that the CSRD leads to a centralisation of data handling, to ensure that this is handled optimally. To improve the quality of data, Danfoss has started implementing reporting on a quarterly basis in the areas they find relevant, to have more frequent reports and thereby be able to look at data at a monthly level (Kubel, 2023). Furthermore, Danfoss has already started looking into the ESRS even though they are still being drafted and the CSRD first will be a requirement for them to report by, in 2025. Kubel (2023) states that this is because if they did not start now, Danfoss would not have enough time to change in order to become compliant with the CSRD and to reach their own targets set for 2030.

For the future *staff* situation, Kubel (2023) express that it will be an agile process to figure out if they need more employees and secure that nothing is worked on two places in the organisation and thereby do double work.

What highlights the *skills* of Danfoss is that the process of integrating the three ambitions from the ESG strategy into the daily work of the company, and Kubel (2023) expresses that it works well and is something they are proud of. Kubel (2023) further express that the work now is to prepare the organisation for the CSRD and make it more tangible for everyone.

The fact that Danfoss had started implementing the ESRS in their reporting should also be seen as an ambition regarding competitors who are listed companies and will therefore report by the CSRD, in 2024, a year earlier than Danfoss (Kubel, 2023).

The *superordinate goals*, regarding the handling and verification of data, is expressed by Kubel (2023) to be reached when the data have been through three verification flows and thereby are able to trace data back to its source within the system. Additionally, the goal is reached when it is possible to get the needed data from this system for different purposes (Kubel, 2023).

The ambition regarding the CSRD is to become compliant with it. But Danfoss have higher ambitions, as they have targets where other data is needed they will disclose them even if they are not a part of the ESRS standards (Kubel, 2023).

The findings of the current situation in Danfoss and how the organisation looks in the future when the changes have been implemented are summarised in table 5.9.

7-S Framework for Danfoss	Current situation		Changes needed to become compliant with CSRD
Structure	In Danfoss Group Sustainability has the overall responsibility in the company for the strategic work with sustainability. The three segments have individual sustainability teams that handle the individual segments' sustainability work. There is a close cooperation with other departments and key people to support the overall work with sustainability in the company. These departments and key people are; Finance, HR, Facility management, environmental department in the segments, LCA specialists and teams as well as the ESG Leadership Team.	⇒	Create a clear and distinct governance structure, especially in connection with sustainability, to ensure that there is a clear mandate to achieve and further develop their ESG strategies and targets.
Strategy	Have implemented their ESG Strategy; Core & Clear. This strategy focuses on three separate subjects which are; Decarbonization, Circularity, Diversity & Inclusion. In addition, Danfoss has a separate; Circularity Framework, which supports the objective and strategy to increase the amount of recycled content in their product.	⇒	Data must be included in all stages of their strategies - this is both in the form of collection, handling and verification of this data. This should ensure that it is both the right data that is collected and the way in which this data is collected is the right and most optimal one.
System	There is a clear division of responsibilities in connection with sustainability reporting, where this is shared between Group Sustainability and Corporate Finance. This distribution is particularly clear because the report is made as an integrated report.	⇒	An IT system must be developed to support both data collection, handling and verification. This is highlighted as a challenge.
Style	Group sustainability has a direct link to the CFO which enables quick decisions. The segment cooperates with each other and share knowledge	⇒	Group sustainability is central in the work with the CSRD. Danfoss has implemented quarterly reporting to secure data. Have started using the ESRS to have time to change and secure compliance and to research their own targets
Staff	Danfoss currently assess that they have enough employees to solve the task of achieving compliance with the CSRD. In addition, the employees working with sustainability have the right and necessary competences, which is based on the assessment that there is a diverse composition of employees.	⇒	It must be continuously assessed whether there is a need for more employees with other competencies to solve the task of achieving compliance with the CSRD.
Skills	The skills of Danfoss are at a high level, given the previous strategic implementation of their ESG strategy. In addition, there is a high level of communication across the three segments that further strengthen in achieving strategic ESG initiatives such as decarbonising and/or increasing the amount of recycled content	⇒	They will continue the great work of implementing their ESG ambition. Based on the fact that their latest report contains aspects required in the CSRD, this aspect is not affected by changes.
Superordinate goals	A solid foundation must be created for ESG data, which will make it possible to equate the ESG data with the financial information. This must be supported by a consolidated IT set-up.	⇒	A clear vision for compliance with the CSRD has been drawn up and a prioritisation of aspects to be improved first. As well as assessed success criteria for their reporting in connection with their first mandatory report.

Table 5.9. Shows the current situation with both the work of sustainability and sustainability reporting, and how this work will be when Danfoss has implemented the needed changes to become compliant with the CSRD.

The overall coordination regarding sustainability reporting is managed by the CFO and the finance department. However, Kubel (2023) expresses that Group Sustainability is some kind of unofficial project management office, and participates in several projects as they have expertise regarding sustainability.

The CFO can be viewed as the *change agent* in Danfoss, but with Caldwell (2003) broader definition, the Group Sustainability also play a *change agent* role as they are part of several projects. Both the CFO and the Group Sustainability are members of Danfoss and thereby the change agents that should handle the external pressure and internal drive in Danfoss.

Organisational and Employees Readiness

In section 4.1.5 eight conditions were listed in order to assess whether an organisation are ready for change. Based on the interview with Kubel (2023), and the analysis of Danfoss, the eight conditions are answered. First, there is pressure for change and it seems as if Danfoss have an ambition regarding sustainability reporting as they have already made an integrated report and started using the ESRS before they have to report by the CSRD.

Next, the changes for the CSRD are led by the CFO and there is a corporation between several departments and each segment and therefore a liaison between those being affected. Therefore it is further assessed that there both is a will and power to act.

In the analysis above, it is stated that Danfoss have enough capable employees and that they are in the process of defining the responsibility e.g. with the controllers in each segment. Next, Danfoss's first step can be assessed to be their ESG strategy, but also the improvement regarding the handling and verification of data expressed by Kubel (2023). Finally, based on all this, the impression is that Danfoss have the capacity to learn and adapt to the new requirements in the CSRD. The eight conditions seem to be able for Danfoss to answer "yes" to, and therefore they can be assessed as ready for the changes they face.

Concerning employee readiness, Kubel (2023) has not expressed any scepticism from employees, and it can therefore be assessed that the employees are ready for the changes. It is, however, worth mentioning that there is work regarding letting all employees know of the importance to comply with the CSRD and make them aware of their importance in this regard.

5.2.4 Analysis of the Case Company - Danish Crown

Based on the document analysis of both the annual report and the sustainability report of Danish Crown as well as the interviews with Carlsen (2023), it seems as if they have made several improvements and implemented several initiatives already towards becoming compliant with the CSRD. They have e.g. already started working on the double materiality which will be a requirement in the CSRD (The European Parliament and The Council Of The European Union, 2022a) and has assigned sustainability controllers in their business units.

Current Situation in Danish Crown

The *Structure* of the work with sustainability and sustainability reporting in Danish Crown is primarily taking place in the Group Sustainability. Group Sustainability primarily work internally in Danish Crown by gathering data from other departments such as e.g. finance, sales and IT but also communication regarding the communication of sustainability to incorporate in the annual report (Carlsen, 2023). Furthermore, Group Sustainability also has employees who work with the farmers and customers (Carlsen, 2023). Carlsen (2023) expresses that Group Sustainability is the backbone of data, but that the IT and finance departments are important collaborators in order to get the needed data. Danish Crown works with the farmers who own Danish Crown through a programme they call Climate Track, from which they e.g. collect data (Carlsen, 2023). Danish Crown also provides data back to the farmers, as Danish Crown want to use the data as a management tool and thereby make the organisation think more positively about the data collection and thereby also the CSRD (Carlsen, 2023).

Danish Crown have a sustainability *strategy* which consists of four areas; *sustainable farming, sustainable food production, good jobs for everyone and together with customers and consumers* (Carlsen, 2023; Danish Crown, 2022b). The Strategy aims to support the corporate strategy *Feeding the Future* (Carlsen, 2023; Danish Crown, 2022b). In Danish Crown's sustainability report, they use the SDGs which Carlsen (2023) express are because Danish Crown are part of the UN Global Compact and they are therefore expected to relate to the SDGs. Carlsen (2023) further states that some of the SDGs are obvious for Danish Crown to relate to and use in their communication of their work. In that regard, it is assessed that the SDGs are not used as a framework for reporting but rather to convey aspects of their sustainability.

In Danish Crown, they have several different *systems* which also include systems for the collection of data in different parts of the organisation, which is why data changes systems during its process of handling (Carlsen, 2023). Therefore Group Sustainability has a close dialogue with the IT department and has developed a process flow to make it clear what is happening with the data where and when (Carlsen, 2023).

The process of the data is tried described here; First, Danish Crown conduct a double materiality assessment, then they collect data, and then the data is validated and documented. Second, in the disclosure process, it is ensured that the data is accessible to the right people at the right time to minimise failures. Third, the data is used to update their strategies, policies and KIPs, as well as to evaluate how far Danish Crown is from achieving their targets (Carlsen, 2023). When Group Sustainability collects data they make a request for data to all Danish Crown's factories through their systems and will go through the validation process, where the first step is to secure that there e.g. are no empty fields and/or that the reason behind a deviation is explained (Carlsen, 2023). This process further includes information from what Danish Crown call *subject matter experts* in the organisation to secure verification of data. It is important that the data is; collected correctly, meets the audit requirements, is complete, accurate and finally validated and documented (Carlsen, 2023). All of this has not earlier been a part of ESG data handling in Danish Crown (Carlsen, 2023), but it can be assumed to be incorporated firstly due to the NFRD and now improved further because of the CSRD.

The *style* in Danish Crown, is that it is the CFO who has the responsibility for the project with handling the EU legislation (Carlsen, 2023). All of the sustainability work in Danish Crown is embedded at the top of the organisation as the Vice President of Group Sustainability has a direct link to the Chief Executive Officer (CEO) which can be seen in figure 5.3. This is according to Carlsen (2023) the right place for Group Sustainability to be in an organisation, because sustainability is of high importance. The choice of the CFO to run the EU legislation project is because of the ESG data being closely related to finance and the coming Taxonomy (Carlsen, 2023).

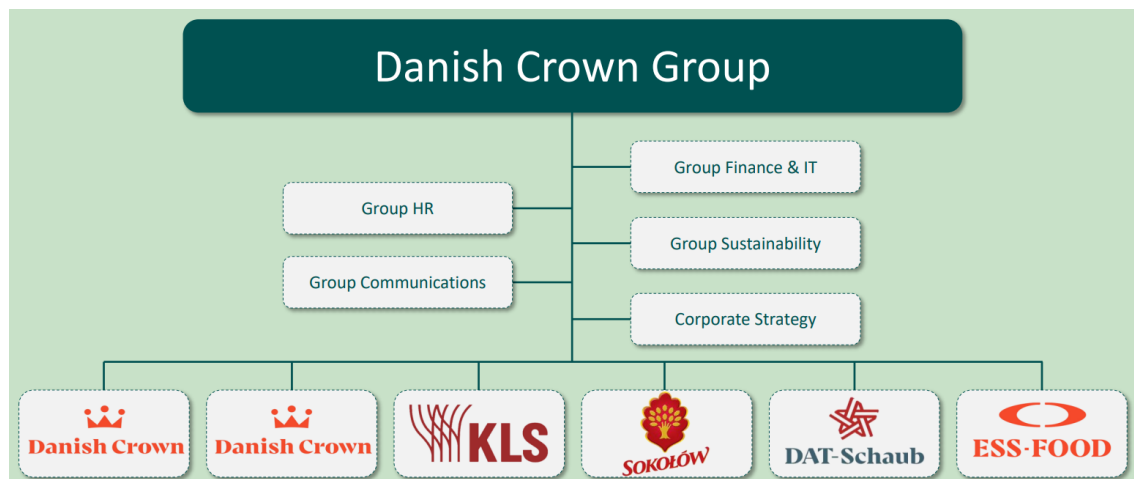


Figure 5.3. Shows the organisational structure of Danish Crown (Danish Crown, 2023).

For the *staff* in Group Sustainability they work with reporting non-financial data and its validation as well as compliance with EU legislation (Carlsen, 2023). Then they have some specialists who work with LCA and some who analyse the data requirements in the CSRD (Carlsen, 2023).

Regarding the *skills*, it was found based on the interviews with Carlsen (2023) that what Danish Crown currently does well is their described processes for data handling. Furthermore, their cooperation with the farmers will be expanded to the Swedish, German and Polish farmers, who also have started joining the Climate Track programme, which all the Danish farmers already are a part of (Carlsen, 2023).

The *superordinate goals* for Danish Crown regarding ESG data is to get a running reporting of data, otherwise, it is not possible to run a business (Carlsen, 2023).

Pressures and Drivers

For Danish Crown, the CSRD is not viewed as an external *pressure*, but there are some stakeholders in Danish Crown's network which view the CSRD as a more significant pressure than Carlsen (2023) think it is. Carlsen (2023) expresses that the requirement of the CSRD is what could be expected of a company the size of Danish Crown, and that they will have to take responsibility for the environment and society in general. So, there is an external pressure, but not more than could be expected. The pressure can be assessed to be categorised as a *mandate* by the CSRD being legislation (Palmer et al., 2017). Furthermore, there is a pressure from the *marketplace* as it is expected by Danish Crown

to take responsibility (Anderson and Anderson, 2010). Regarding the internal *drive*, it seems as if the employees, in general, are motivated to be a part of the coming changes, but there are also some who are less motivated and see it as more work (Carlsen, 2023). However, it is not expressed that these employees will work against the changes, as the CSRD is assumed to be a licence to operate. Therefore, it seems as if the internal drive is about a *corporate identity* that Danish Crown wants to manage the new requirements in the CSRD and is therefore motivated for the changes (Palmer et al., 2017, p. 87).

Challenges and Changes in Danish Crown

The first challenge for Danish Crown was found in the document analysis of their annual report and sustainability report and is that they do not report through an integrated report. It is however already stated by Carlsen (2023), that this will change for the 2023 report, as Danish Crown will make an integrated report.

It is in section 4.1 stated by Anderson and Anderson (2010), that change is constant and nothing will ever stay the same. This statement is supported by Carlsen (2023) which expresses that companies always change and will also do so now in relation to the CSRD. The challenge for Danish Crown in this regard is the amount and complexity of the requirements compared to the time there is to incorporate them as the final wording of the ESRS is still not finalised. The last challenge for Danish Crown is related to the lack of finalised framework from the EU and the short time horizon as this makes it difficult to start planning and therefore also leads to impatience among some employees who then just start doing something, which in the end can lead to the duplication of work (Carlsen, 2023). However, this is not a unique situation as it can be assumed to be applied to all companies that must report by the CSRD in 2025.

Carlsen (2023) expresses that there is a need for changes, as there are new requirements for the documentation and validation of processes, which will have to take place at several levels in the organisation. The changes expressed by Carlsen (2023) that Danish Crown will have to do regarding the CSRD are listed below with an indication of whether these are changes related to reporting or to the organisational aspects of the company:

- Annual report: Expand the annual report to contain ESG data, by making an integrated report
- Organisation: Distribution of responsibility to other employees in connection with the company's internal work with sustainability - particular focus on factory managers and sustainability controllers
- Organisation: Improve employee knowledge regarding sustainability and the work with data handling processes

These changes can be assessed to be *developmental changes* because they concern improvements of the current skills and methods, and the *new state* is an enhancement of the *old state* (Anderson and Anderson, 2010, p. 52). Carlsen (2023) express that the changes they will have to make, are not organisational changes but rather changes of processes.

The strategy to handle these developmental changes could be new processes related to the integrated report, improved communication for the divided responsibility and training of employees regarding their knowledge of sustainability and data handling (Anderson and

Anderson, 2010, p .55). Regarding the training of employees Carlsen (2023) expresses that further education is not necessary but rather concerns more internal training, which they already have started. This training concerns knowledge about e.g. how to gather data and how to document it because this is a new process for ESG data, but not new for the handling of financial data.

The *change agent* who drives and implements the CSRD in Danish Crown is the CFO as stated under *style*. However, it seems as if there will be several other change agents in Danish Crown who will have responsibility for the changes, e.g. factory managers and sustainability controllers.

The Future of Sustainability in Danish Crown Associated with Compliant of the CSRD

The future *structure* in Danish Crown is expected to be affected by the sector-specific standards for Manufacturing, Food & Beverages (EFRAG, 2022a), which can affect the type and amount of data Danish Crown will have to get from the farmers.

Regarding the *strategy* Carlsen (2023) agrees with the statement that the CSRD is a *license to operate*. Carlsen (2023) hopes that the CSRD can be used to commercialise the company further if the data is strong enough. Furthermore, Carlsen (2023) express that the CSRD and the ESRS can be significance regarding customers and competition, e.g. to be able to show that they have a hold on their supply chain.

For the *system* in Danish Crown, they are going to set up new processes for data gathering, as they have not earlier validated or documented at the same level as they are required to do now with the CSRD. However, Carlsen (2023) underlines that data gathering is not new to Danish Crown, but that they have to improve the systematic associated with the data collection. Carlsen (2023) explain that Danish Crown uses a lot of different systems to handle different kinds of data and that Excel is a good system and tool to gather data from the different systems. Therefore, it does not sound on Carlsen (2023) as if they are going to stop using Excel as it is highly useful and user-friendly for the employees. Additionally, Danish Crown is working on a new system to supplement Excel. However, Carlsen (2023) express that Excel lacks control of data and that there is a limit of how much data it can handle.

Regarding the *style*, it is stated by Carlsen (2023) that there is support for the work with the CSRD from the top management as they know of its importance. This is further stressed by the audit committee asking for an integrated report for the 2023 report. However, it is stressed by Carlsen (2023), that it is not the top management or the CFO who runs e.g. online training of employees, that is the employees in Group Sustainability who does that, but they know of and support initiatives such as the training.

Regarding the *staff* Carlsen (2023) states that depending on how the work with data is organised, they have enough employees. If the work with data is either centralised or de-centralised and how the collaboration with e.g. finance is established. In that regard, the sustainability controllers in each of the business units are highlighted by Carlsen (2023) as an important resource. What is important regarding the employees is whether they have the needed knowledge, which is questioned by Carlsen (2023). However, it is expressed

that the employees in general are interested in improving their knowledge and being a part of the work with the CSRD (Carlsen, 2023).

In the future, Carlsen (2023) hopes that Danish Crown obtain the *skills* of having consistency across their units for data gathering, as well as improved processes for data handling regarding control and documentation.

First of all the *superordinate goal* for Danish Crown is to have a limited assurance without remarks (Carlsen, 2023). Next, Carlsen (2023) desire that data will drive changes and lead to informed decisions, which is also expressed in the podcast Høgh (2022b), is the purpose of the CSRD. To be able to make informed decisions, it is, stated by Carlsen (2023), important to be aware of the trade-offs associated with individual choices, and that a way to assess this is to ask the questions of "Where do we want to go", and "What are the positive and negative impacts of this decision?"

In order to gain an understanding of both the current organisational situation in Danish Crown as well as which organisational changes are necessary for them to make due to the challenges which have been found facing the CSRD, this is visualised in table 5.10.

7-S Framework for Danish Crown	Current situation		Changes needed to become compliant with CSRD
Structure	In Danish Crown, Group Sustainability has the overall responsibility for the strategic work with sustainability. There is a close cooperation with other departments, farmers and other key people to support the overall work with sustainability in the company. These departments cover finance, sales, IT and communication as well as their business units and farmers in their supply chain.	⇒	It is primarily the sector-specific standards that are expected to be able to influence the organisational structure of the company. This is due to an expectation that it is through these standards the greatest demands of the company are set.
Strategy	Have implemented their sustainability strategy, which is part of the overall corporate strategy: Feeding the Future. Their sustainability strategy concerns four areas; Sustainable farming, Sustainable food production, Good jobs for everyone and Together with customers and consumers.	⇒	Based on the assumption that the CSRD will be a license to operate in the future, it is necessary for the CSRD to be conceived strategically in the company. This is with a particular focus on being able to commercialise the company further based on solid data through reporting by the CSRD.
System	There is a clear division of responsibilities in connection with the sustainability reporting, which is shared between Group Sustainability and Corporate Finance. In Danish Crown, they have several different IT-systems for the collection of data in different parts of the organisation. There is a clear procedure for data handling which is drawn up to ensure that all levels of the company know how to handle data correctly.	⇒	To ensure the needed quality and verification of the data, in order to achieve compliance with the CSRD, Danish Crown needs new processes for data gathering, as the company has not validated or documented with the same thoroughness and system approach which is required in the future with the CSRD.
Style	All of the sustainability work in Danish Crown is embedded at the top of the organisation as there is a direct link between the Group Sustainability and the CEO.	⇒	It is not deemed necessary to carry out changes regarding the management of the sustainability department in the future. Given there is great support from the top management and they understand the importance of the CSRD.
Staff	There are employees who have a special focus on the CSRD, to support the incorporation of principles and data points from this in the company as well as their farmers they have a close collaboration with.	⇒	The assessment of staff necessary to accomplish the task of implementing measures necessary for compliance with the CSRD, depends on how the work with data is organised. If the work with data is e.g. centralised or de-centralised and how the collaboration with other departments are considered.
Skills	Danish Crown have well-described processes for data handling. At the same time, the collaboration with Danish farmers is working well in Denmark and is expanding to more farmers from several countries, based on the success of Danish farmers.	⇒	Going forward, it is the work with data and especially obtaining a consistency across their units for data gathering, which is assessed as the most important parameter to ensure well-implemented measures associated with the work with the CSRD.
Superordinate goals	There is a clear ambition associated with the work with ESG, given a clear position that this is a necessity in order to have a functioning business in the current society.	⇒	A clear ambition for compliance with the CSRD has been drawn up for Danish Crown, concerning having a limited assurance without remarks. Furthermore, it is desired that the data collected and reported will drive real changes and lead to informed decisions throughout the company.

Table 5.10. Shows the current situation with both the work of sustainability and sustainability reporting, and how this work will be when Danish Crown has implemented the needed changes to become compliant with the CSRD.

Organisational and Employees Readiness

The organisational readiness is assessed based on the eight questions set up in section 4.1.5. First of all, there should be pressure for change, however, the external pressure in this regard being the CSRD does not seem to be of high significance in itself, but is rather the time pressure due to the amount of requirements. This point, therefore, seems more vague than it could have been but is still assessed to be present. Next, the shared target can be assessed to contain the four directions of their sustainability strategy and the corporate strategy, *Feeding the Future*. But the goal regarding the CSRD seems to be the limited assurance of their ESG data as there is a focus on validation, documentation and getting the right processes integrated. Regarding the liaison between the affected employees, it seems as if Danish Crown through their Climate Track programme for their farmers, have a good liaison between themselves and the farmers. Carlsen (2023) further express that some of the farmers themselves might have to report by the CSRD and Danish Crown will have to figure out how they can collaborate with them in this situation. In Danish Crown it seems as if there is a will and power to act, both because the changes are assessed to be of developmental character and also based on what Carlsen (2023) is telling about a manufacturing site asking her to participate in a meeting for the management group. Regarding the suitable defined accountability, it is assessed that there could be room for improvement based on Carlsen (2023) expressing that the short time horizon can lead to the fact that some employees just start doing something which then can create duplicate work later on when the ESRS is finalised and approved. Lastly, it is assessed that Danish Crown has the capacity to adapt to the CSRD. However, it further seems as if there are minor adjustments and/or improvements before they can answer "yes" to all the questions for organisational readiness, and thereby state that Danish Crown is ready for the changes.

Overall it is expressed by Carlsen (2023) that the employees at Danish Crown are proud of their work and enjoy working at Danish Crown. However, it is further stated that there always will be some employees who just go to work to earn their salary and then go home. It is therefore assessed that these kinds of employees could have some resistance to the changes Danish Crown will do in order to become compliant with the CSRD, and thereby could express "What's In It For Me?". In that regard, the improvements of communication mentioned as a change in Danish Crown, should be internal in order to improve employee readiness.

5.2.5 Analysis of the Case company - Hempel

Based on the knowledge obtained through the interview with Stavrakaki (2023) and the document analysis of Hempel's annual report, it was assessed that Hempel has a solid foundation to build upon, in order to become compliant with the CSRD as they e.g. have a limited assurance on their ESG data and an integrated report which both are a requirement in the CSRD (Hempel, 2022). It was stated by Stavrakaki (2023) that Hempel over the last 1-2 years has done a huge transformation in Hempel in respect of sustainability regarding the definition of their sustainability strategy called *FUTUREPROOF*. This emphasises the fact that Hempel already is in a process of change, which therefore was assumed to affect the amount and complexity of the changes Hempel is yet to conduct in accordance with the CSRD.

Current Situation in Hempel

The *structure* of the sustainability work at Hempel is that the Sustainability Department work with the reporting of sustainability and the sharing of this knowledge in collaboration with communication in order to communicate Hempel's sustainability effort externally but also internally. Regarding the reporting of sustainability, it is the Sustainability Department in collaboration with Finance and Accounting that defines what kind of data should be public, and how the data should be calculated. This publication is based on standards and guides for sustainability reporting, through which the CSRD in the near future will play a major role in this process. The Sustainability Department also produces LCAs and works closely with the R&D department where they e.g. see if it is possible to eliminate or substitute unwanted materials or substitute them. The collaboration among the departments in Hempel is expressed by Stavrakaki (2023) to be very important, as the work in the Sustainability Department should not be characterised by silo thinking, as they need data and input from stakeholders and people in the work with sustainability.

It is already stated that the Sustainability Department is working together with R&D regarding product innovation, as well as R&D also experimenting with new ideas in their innovation hub with a focus on sustainability (Stavrakaki, 2023). The Sustainability Department furthermore works with procurement and finance as Stavrakaki (2023) states that "*financial and sustainability reporting should go hand in hand*". Lastly, the Sustainability Department collaborates with sales in order to intercept the customer's demands (Stavrakaki, 2023). Subsequently Stavrakaki (2023) states that the people in the Sustainability Department have different backgrounds and that they all collaborate under the *sustainability umbrella*. Where they all know of the importance of prioritising the data for the Sustainability Department. The term sustainability umbrella is used based on the Sustainability Department's collaboration with all these departments, but also given the fact that Hempel has introduced the concept of *sustainability champions* all over the organisation which helps the Sustainability Department to understand what they can do in the areas where they do not have much direct contact (Stavrakaki, 2023).

In Hempel, there is a clear allocation of responsibility related to the reporting of sustainability and Stavrakaki (2023) gives an example, of her being the one who manages the stakeholders and defines data, and then there are others being the data providers. Internally in Hempel, they report on a quarterly basis, and Stavrakaki (2023) therefore states that they are prepared for the new requirements from the CSRD, given the monitoring of data collection.

Hempel has a general *strategy* called *FUTUREPROOF* (Hempel, 2021), which is also a sustainability framework. It consists of four pillars; *performance, products, partners, and people* (Hempel, 2021), which each have KPIs that Hempel monitors and reports on internally on a quarterly basis (Stavrakaki, 2023). Stavrakaki (2023) express that there may be additions or changes to these KIPs going forward based on the CSRD. The four pillars as well as associated KPIs are made based on a material assessment (Stavrakaki, 2023). The upcoming double materiality assessment Hempel is going to make, will to a great extent build on their current materiality assessment, and Stavrakaki (2023) express that the results not will differ significantly.

Hempel is currently working on a data gap analysis to see what data they have and where

they lack data for the ESRS as well as, whether it is data they are able to obtain or if it will be difficult to obtain (Stavarakaki, 2023). Hempel produces coatings and paints and thereby works with chemicals which is why they are aware of their obvious impact on the environment. It is expressed by Stavarakaki (2023) that the CSRD should drive Hempel's strategy, and thereby the CSRD is not only viewed as a reporting task but as something which should create change.

For the *system* around procedures that support the work with sustainability, there is a great focus on the work regarding the handling of ESG data. Currently, the Sustainability Department does a lot of manual work with their data as well as they use Excel. Additionally, in accordance with the limited assurance of their current ESG data, the auditor asked a lot of questions for Hempel regarding their data and validation (Stavarakaki, 2023). Furthermore, Stavarakaki (2023) states that it was a comprehensive work for the limited assurance, and can thereby imagine how reasonable assurance is going to be an even more comprehensive task. It can be assumed that the assurance tasks are more comprehensive the first time and until the rights systems are in place. The qualitative data requirement is expressed to be a challenge for Hempel to measure, but Stavarakaki (2023) is sure that Hempel will solve that challenge, and become compliant with the CSRD.

The Sustainability Department belongs to the Technology & Operations segment which can be seen in figure 5.4 and is thereby led by the Chief Operating Officer (COO). The COO is by Stavarakaki (2023) described as being very engaged with sustainability and always bringing sustainability to the table at meetings. Furthermore, the director of the Sustainability Department is also described as being very passionate and having a technical education and wants to understand the requirements of the CSRD, but also turn it into action and not just "report in accordance" with it (Stavarakaki, 2023). Furthermore, the director is both challenging and supportive of the employee's work as the department is highly self-organising with a bottom-up approach where it is not always the director giving the mandate of what to do (Stavarakaki, 2023). The Sustainability Department is placed in the Technology & Operations department, and Stavarakaki (2023) expresses that they are placed relatively high in the Hempel organisation, and further states that sustainability most of the time is a subject when the executive management or board of directors have a meeting.

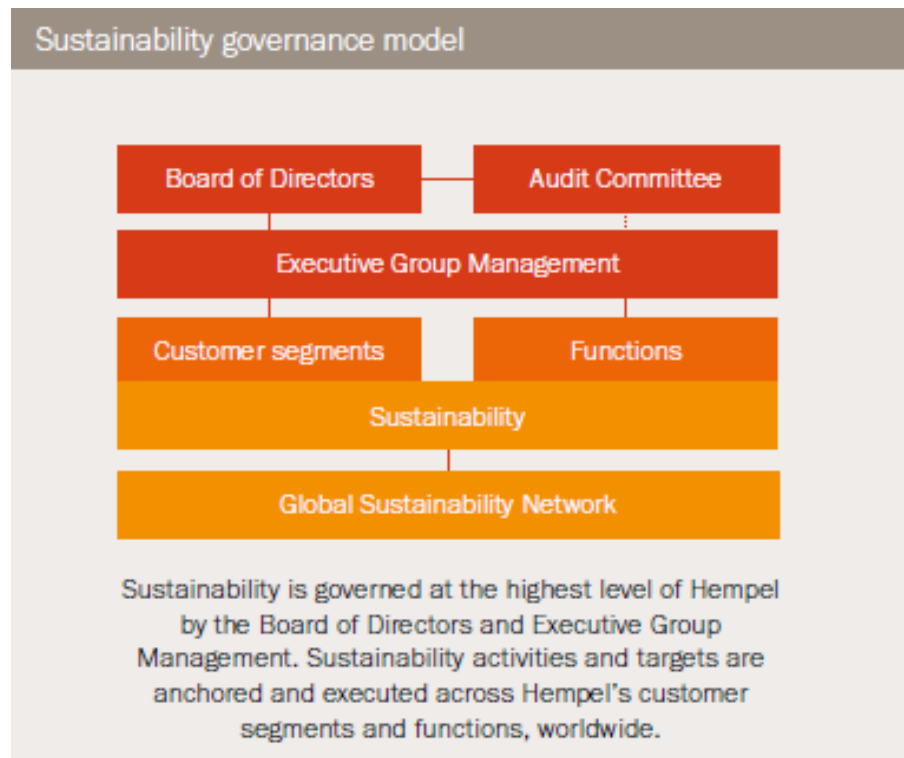


Figure 5.4. Shows Hempel's sustainability governance model (Hempel, 2022, p. 30).

Related to the *staff* of the Sustainability Department, it is expressed by Stavrakaki (2023) that there are a lot of people in Hempel who already have an understanding of sustainability and also works with it daily. The employees in the Sustainability Department are very diverse based on their backgrounds as they consist of people with business, finance, sustainability, data analytics, engineers and chemists backgrounds (Stavrakaki, 2023). However, Hempel will have to continue working with sustainability, as every employee in Hempel has an impact on sustainability with the work they do (Stavrakaki, 2023). This is further expressed through the intern communication channel where employees in other departments, post new achievements or initiatives from their departments (Stavrakaki, 2023). Regarding further education of employees, Stavrakaki (2023) express that fortunately there are certifications and courses to attend and learn from. But the most important seems to be the network where Hempel is a part of e.g. UN Global Compact and Dansk Industri, where Stavrakaki (2023) states that it is important to connect to these networks and to learn from them. In addition to the mentioned courses, Stavrakaki (2023) explain that they are launching a mandatory e-learning course in June this year for all employees.

Currently, based on the above-mentioned, it seems as the *skills* of the Sustainability Department is, that they collaborate with several other departments and have these sustainability champions in the other departments who communicates with the Sustainability Department. Furthermore, it is stated by Stavrakaki (2023) that they work well with their data even if it is a lot of manual work.

The *superordinate goal* for Hempel the first year they are going to report by the CSRD, is that they are compliant, but Stavrakaki (2023) is realistic and states that it is not going

to be Hempel's best year of reporting, but that they will improve the more they report. Furthermore, [Stavrakaki \(2023\)](#) expect that Hempel has aligned their strategy with the requirements of the CSRD.

Pressures and Drivers

It has earlier been stated that the CSRD in this thesis was assessed to compose an obvious external *pressure* for the companies. However, [Stavrakaki \(2023\)](#) express that the CSRD is a "*very nice guideline*" for companies on what they have to look into and thereby makes the CSRD a guide rather than a pressure. Furthermore, Hempel will be affected by the sector-specific standards presumably the Manufacturing, Chemicals & Biofuels ([EFRA, 2022a](#)), by which [Stavrakaki \(2023\)](#) is also looking forward. These sector-specific standards are also not seen as a threat or external pressure, but rather a guide for Hempel to move forward.

As Hempel is owned by the Hempel Foundation, it means that there are no other parties or investors that are pushing Hempel to get sustainability data for the company. However, Hempel's customers are asking for sustainability data, and external pressure is present in the category of *marketplace* ([Anderson and Anderson, 2010](#), p. 34). Regarding Hempel's customers, [Stavrakaki \(2023\)](#) express that their customers are becoming more mature when it comes to what they want, and they demand information about what the paint contains and better packaging e.g. recycled packaging. That the customers are becoming more mature is not elaborated further, but it can be assumed that they had become aware of the importance of more sustainability or that they also have to disclose more data. This constitutes an external pressure or as [Stavrakaki \(2023\)](#) says, "*a collaboration with their customers*". Furthermore, Hempel's customers in the *energy and infrastructure* and the *marine* segments, which are also subject to the CSRD, are setting demands regarding data and also for Hempel to improve their products, as Hempel's paint are an important tool for these segments to improve their own sustainability. An example of this is that big ships can save energy by using specific paints. [Stavrakaki \(2023\)](#) express that these industries have to collaborate, and Hempel has to collaborate with their suppliers, in order to improve sustainability and environmental impact.

The internal *drive* is e.g. expressed through an internal attempt by the chemist belonging to the Sustainability Department wanted to examine hazardous substances in their products and how to eliminate or substitute them, which led to that they communicating to the C-level of Hempel that they wanted to improve on this ([Stavrakaki, 2023](#)).

Based on this example and the fact that Hempel's products are a tool for sustainability for other industries, the internal drive is assessed to be a combination of *corporate identity* and *leader and employees mindset* ([Palmer et al., 2017](#); [Anderson and Anderson, 2010](#)). It is further expressed by [Stavrakaki \(2023\)](#) that the ISO certificates and SBTi approval of their targets are a great motivation for the employees.

Challenges and Changes in Hempel

Hempel has made a material assessment where they found that the most material issues for them are; climate change, resource depletion, biodiversity and health and safety in

general (Stavarakaki, 2023). Besides these issues, Hempel has several challenges they face regarding the CSRD (Stavarakaki, 2023), which will be described in the following.

The first challenge is the double materiality assessment, where Hempel needs to incorporate more financial goals and risk (Stavarakaki, 2023). Next, it is explained that Hempel should become better to navigate areas that have been assessed as important in terms of e.g. a materiality assessment, but where information about this area is not readily available or an area of work they have previous experience with (Stavarakaki, 2023). The third challenge is, the external and internal communication of their sustainability effort, as it is described by Stavarakaki (2023) as a challenge, but also as being very important, and they want to improve this communication going forward. Furthermore, the data is a challenge as Hempel currently is doing a lot of the work with ESG data manually and they desire more integrated data management which is more automated (Stavarakaki, 2023). In relation to these challenges, a need arises for a robust data management procedure, where the infrastructure of gathering, consolidations and reporting of ESG data is no longer a burden for the Sustainability Department (Stavarakaki, 2023). This also accounts for the handling of the qualitative data points. The found changes which Hempel will have to make are listed below, as well as an indication of whether the changes are related to the annual report or the organisation.

- Annual report: Double materiality, incorporate more financial measures and risks
- Organisation: How to navigate in unknown, but important areas
- Organisation: More automated and integrated data management
- Organisation: Extern and intern communication of sustainability efforts
- Organisation: Robust data management procedure for gathering, consolidation and reporting of ESG data

Based on these changes Hempel will have to do, the type of change was assessed to be a *transitional Change* because the changes e.g. concern the existing data handling, from being highly manual to becoming more automated, which seems to replace the existing process with something different (Anderson and Anderson, 2010, p. 56). The manual data handling will then constitute the *old state* whereas an automated data handling system will constitute the *new state*. Hempel can currently be assessed to be in the *transition state* as they are both doing manual work with data but also use IT systems. In addition, most of their changes are categorised as *developmental changes*, as they concern mostly improvements of what Hempel is already doing e.g. related to their reporting and the expansion of the CSRD and sustainability knowledge internally in Hempel (Anderson and Anderson, 2010, p. 52).

The strategy to handle the transitional change should contain the described aspects in section 4.1.3. First of all, Stavarakaki (2023) states that there is a plan for change, but adds that it is not set in stone and that this kind of change does not happen overnight. This plan should also be well-communicated, and it is earlier stated that the Sustainability Department is making steps in collaborating with the Digital Department, and it can therefore be assumed that they are communicating about the change from manual data handling to an automated system. In addition to that, there also seems to be a high involvement of the employees in the design and implementation of the new processes. Regarding the workload and capacity, it can be assumed based on the description of the

staff situation that they are currently enough employees. However, that could depend on the amount of ESG data which are to be handled and the knowledge that the employees possess. The knowledge of the employees can thereby also dictate if, and the amount of training is needed. If Hempel has adequate time to ensure that the employees will succeed with the new way of handling ESG data, is it possible to assume that they will obtain reasonable assurance before it is required. The question is therefore whether Hempel will have the necessary transparency and documentation for their data if they do not manage to change the handling of ESG to be more automated.

The strategy to handle the developmental changes described in section 4.1.3 is largely in accordance with what Hempel will have to do. First, they wanted to expand their material assessment to become double materiality, which could be assumed to happen through new skills or collaboration with other departments. Second, they want to improve their knowledge of CSRD and sustainability which also can be done through training and internal communication. Third, Hempel wants to improve the social and governance part of the annual report. The social part can be assumed to be improved through better communication with their employees and the Health and Safety Department, in order for them to be aware of what the CSRD require them to disclose. Regarding the governance, [Stavrakaki \(2023\)](#) expresses that they have started working on, obtaining a formal governance structure for sustainability matters, both for the internal work and also for the reporting. The aspect about these changes is as [Stavrakaki \(2023\)](#) expresses, that nothing comes without a cost. So, regarding all good intentions to change and improve, there will always be a trade-off e.g. less CO₂ emissions in the production phase can instead require more water. Therefore it is important for Hempel that they are aware of which trade-offs there are and why they are present.

Besides these changes related to how Hempel will become compliant with the CSRD, [Stavrakaki \(2023\)](#) further talks about a more complex change, which is to make their customers use less paint and avoid leftovers, and states that this will require a business change which is way more complicated. This means that, even though Hempel works towards more sustainable products, they ultimately depend on their customers using their products in a sustainable way.

The CSRD consist of a lot of requirements, but there are other EU regulations Hempel will have to comply with, and Hempel has e.g. started working towards the CSDDD and the Taxonomy which [Stavrakaki \(2023\)](#) states that they will need finance to help. To begin with, it is the cross-cutting ESRS Hempel has to follow, and later on the sector-specific standards. Related to this [Stavrakaki \(2023\)](#) states that these sector-specific standards will set the scene for what Hempel should focus on, as well as state what is the sector-specific issues.

In Hempel, the Sustainability Department is led by the COO and of course the Vice President of Sustainability and the Head of the Sustainability Strategy Department. It is therefore obvious to name them as *change agents* for the changes to happen in accordance with the CSRD. However, [Stavrakaki \(2023\)](#) does not think that it is any given person who drives the changes in Hempel, as there are a lot of passionate employees in the Sustainability Department. Since [Stavrakaki \(2023\)](#) expresses that all employees in the Sustainability Department are very self-organising and that the department has a bottom-

up approach, the whole Sustainability Department can be assessed to be *change agents* and thereby being responsible for the changes to happen, and to handle the external pressure.

The Future of Sustainability in Hempel Associated with Compliant of the CSRD

There will not be changes to the *structure* of the Sustainability Department, but [Stavarakaki \(2023\)](#) is not discouraging that it can happen in the future. It is also conceivable that the department could become bigger with new employees or that some employees from other departments could be moved to the Sustainability Department. In that regard, it can be assumed that employees from other departments could possess valuable knowledge to use in the Sustainability Department.

Regarding Hempel's annual report the environmental part of the ESG data [Stavarakaki \(2023\)](#) states that Hempel is quite advanced regarding the calculation of Scope 1, 2 and 3, while the social and governance will have to have added more. Some of the new things Hempel will incorporate in the annual report in the future are e.g. biodiversity-related issues as it is material and something they are currently working on ([Stavarakaki, 2023](#)).

Hempels FUTUREPROOF *strategy* is going to end in 2025, the year they are going to report by the CSRD, and [Stavarakaki \(2023\)](#) states that the strategy might be redefined based on the CSRD as a guideline for this. Regarding Hempel's annual report, they will have to continue the work on their materiality assessment and incorporate more financial risks to achieve the double materiality ([Stavarakaki, 2023](#)). Furthermore, Hempel will continue their engagement with the SBTi and adjust their goals to be more ambitious if they are close to reaching their goals ([Stavarakaki, 2023](#)). Lastly, Hempel will continue their use of EcoVadis as well as a higher engagement with their tier 2 and 3 suppliers, to improve their work on human rights in a broader perspective than only their own workers to enhance their due diligence process to include the whole value chain ([Stavarakaki, 2023](#)).

In the mentioned challenges, it is described that the *system* workflow in the Sustainability Department is based on manual work regarding the handling of data, in that regard [Stavarakaki \(2023\)](#) express that a new IT system will make the employees satisfied. This is linked to the fact that [Stavarakaki \(2023\)](#) expect Hempel to receive a reasonable assurance before it is required, where a new IT system can be expected to be a benefit for the auditor's control of data.

For the *style* management and working procedures of Hempel, it is not expressed by [Stavarakaki \(2023\)](#) that there will be changes regarding the management of the Sustainability Department in the future. However, based on the expectation of an expansion of the department it could mean that small changes could occur in that regard.

It is expressed by [Stavarakaki \(2023\)](#) that, for the *staff* at Hempel, it is important to keep learning and be acquainted with relevant knowledge. Therefore Hempel is working on conducting more internal workshops or making use of external ones to broaden the knowledge about the CSRD. It is expected by [Stavarakaki \(2023\)](#) that Hempel will be more employees in the Sustainability Department in the future, and in this regard, it is expressed that it will be important to have people with sustainability and technical interests and skills.

Internally in Hempel, the *skills* is reflected in that, they are good at talking about sustainability, being curious, working towards more sustainability and incorporating sustainability into their strategy (Stavrakaki, 2023). Furthermore, the product innovation is working towards finding climate or biodiversity-friendly solutions (Stavrakaki, 2023). However, regardless of how well Hempel is doing, Stavrakaki (2023) express there is always room for improvement.

The *superordinate goals* for Hempel is to be more than compliant with the CSRD (Stavrakaki, 2023). They want to understand all their issues, both the ones they are handling well and the ones where they will have to improve (Stavrakaki, 2023). Additionally, they want to have a more holistic view of sustainability in their annual report (Stavrakaki, 2023). An example of an issue they want to address is the microplastic in paint, as it is not 100% possible to quantify its effect other than it is a risk, and here Stavrakaki (2023) are very keen on collaborating with the scientific community about mapping this risk. In addition, collaborating and being part of networks seems to be of great importance to Stavrakaki (2023). Regarding the disclosure of ESG data, a success criterion would be, that the work with data and validation is no longer as manual as it is currently (Stavrakaki, 2023). The current organisational situation in Hempel and their desired future situation when the found changes are implemented are illustrated in table 5.11.

Organisational and Employees Readiness

For *organisational readiness* the eight questions in section 4.1.5 will be reviewed in the following section. First of all, even though the CSRD is not stated as a threat in terms of being an external pressure, demands for data are still made from Hempel's customers. However, that being said, there seems to be a clear and shared direction internally in Hempel e.g. the ambition of being more than compliant with the CSRD. Thereby also a will and power to become compliant with the CSRD which, based on Stavrakaki (2023) answers seems to come from the employees as well. Next, currently, Hempel has the needed employees, but they are not averse to needing more in the future and also do some internal work to broaden the knowledge and work about the CSRD and sustainability. Regarding the suitable rewards and accountability for actions, these are found to be present based on e.g. the work in the innovation hub in R&D. Finally, the first steps for Hempel seem to be the improvement of their materiality analyses and for less manual work of handling data. Based on all this it was assessed that Hempel has the capacity both to learn and adapt to the requirements in the CSRD, and they are therefore found to have an organisational readiness.

Based on the description of the staff in Hempel it seems to be a few employees questioning Hempel's work with sustainability with "What's in it for me?". This is e.g. based on Stavrakaki (2023) descriptions of her collaboration with other departments and employees being interested, curious and asking questions. However, Stavrakaki (2023), expresses that there are employees questioning this, and they are the once Hempel will have to convince about the importance of sustainability and the CSRD. The employee's readiness is therefore assessed to be high, but with room for improvement, which makes the changes straightforward in this regard.

7-S Framework for Hempel	Current situation		Changes needed to become compliant with CSRD
Structure	In Hempel, it is the Sustainability Department which has the overall responsibility for the strategic work with sustainability. There is close cooperation with other departments and key people to support the overall work with sustainability in the company. These departments cover finance, sales, Digital and R&D.	⇒	There are currently no designated areas where it is considered necessary to make changes. However, it is not excluded that this may be necessary in the future.
Strategy	Have implemented their sustainability strategy, called FUTUREPROOF. It consists of four pillars; Performance, Products, Partners, and People.	⇒	The current sustainability strategy has an end date of 2025, this is in coinciding with the company having to report according to the CSRD. It is intended that the CSRD can guide the process of preparing a new strategy for the company.
System	A clear system has been built up with a clear division of responsibility for the work with sustainability. However, it is pointed out that much of the work is still done manually.	⇒	In order to help the distribution of work that has already been established in the company and to remedy the current very manual data collection, there are plans to establish a new IT system.
Style	With the Sustainability Department placed in the Technology & Operations department, the department is thereby assessed to be placed fairly high in the Hempel organisations. The department is also assessed to be highly self-organising with a bottom-up approach	⇒	It is not deemed necessary to carry out changes regarding the management of the Sustainability Department in the future. However, based on the expectation of an expansion of the department it could mean that small changes could occur in that regard.
Staff	There is an assessment that the composition and number of employees are sufficient to be able to accomplish the task with the CSRD. The employees in the Sustainability Department are very diverse based on their backgrounds as they consist of people with business, finance, sustainability, data analytics, engineers and chemists backgrounds	⇒	It has been identified that there is a need to acquire new knowledge now and in the future. This is considered particularly relevant associated with it the CSRD. This knowledge must both come externally from but is also seen as an internal process to convey new knowledge to the company's employees in departments outside of the Sustainability Department.
Skills	Currently, it is assessed that the Sustainability Department does well in collaborating with several other departments and has these sustainability champions in the other departments who communicate with and aides the Sustainability Department.	⇒	It is communication across departments in the company there is considered to be a true asset for the company. This collaboration and communication is seen as an important part of the future work with sustainability and is something that must be cultivated in the future.
Superordinate goals	Hempel has a clear and realistic goal to achieve compliance with the CSRD the first year it is mandatory for them, as well as have their strategy aligned with the requirements in the CSRD	⇒	A clear vision for compliance with the CSRD has been drawn up where the focus is on the fact that in the future Hempel will be more than compliant with the CSRD. In connection with this, there is an emphasis on the fact that this must happen with a holistic view of sustainability.

Table 5.11. Shows the current situation with both the work of sustainability and sustainability reporting, and how this work will be when Hempel has implemented the needed changes to become compliant with the CSRD.

5.3 Summary of Findings from the Analysis

The purpose of this section was to summarise the results found through the analysis. This covers the results found through the document analysis of the CSRD and ESRS as well as the results from the analysis of the companies' annual reporting of ESG data. In addition, a summary of the results from the analysis of the individual companies' organisational changes.

In section 5.1 a document analysis of the CSRD was conducted to map out the requirements of this legislation. This was done through a review of the ESRS. It was found that, through the ESRS, greater and broader requirements are set for companies' ESG reporting. This is particularly visible through the review of which disclosure requirements are made. In that regard, two types of categories of requirements were found: general and topic specific. This shows that the reporting process is streamlined by setting uniform general requirements across the topical standards. As well as incorporating topic-specific requirements, thereby expanding the field of areas companies must report on.

Afterwards, a document analysis of the case companies' latest reporting of ESG information was carried out in section 5.2.2. Through this, it was found that variation in the structure of the companies' reporting as well as a significant variation in which aspects were chosen to be included in each company's report. This can be seen in figure 5.8 in section 5.2.2.

Through the analysis of the case companies in section 5.2.3, 5.2.4 and 5.2.5, the unique challenges for the individual case companies have been identified. However, based on the choice to carry out a case study that uses a maximum variation sampling strategy, it was also possible to map out the common challenges that were found for the case companies in connection with organisational changes in regard to achieving compliance with the CSRD for the financial year 2025.

The following challenges have been found that occur across the cases:

- General data handling - This challenge relates both to the fact that there are many new data points and requirements for collection, handling and verification through limited assurance, as well as the need to implement a system to handle all this data.
- Integration of information generated by reporting under the CSRD - This is an acknowledgement that the information generated must be integrated into the company and must be used in decision-making processes.

In addition, there was a general recognition that the CSRD will bring about changes categorised as *developmental* and *transitional changes*. Because it was found that the CSRD contains several requirements there is a lot of work associated with achieving compliance with the CSRD when this will be mandatory for the category of "Large undertakings" [Erhvervsministeriet \(2022\)](#); [The European Parliament and The Council Of The European Union \(2022a\)](#). This means that the companies primarily will do changes concerning improvements in skills, methods and performers ([Anderson and Anderson, 2010](#)). While Danfoss and Hempel which also faces transitional changes will replace something currently are doing with new processes, methods and systems ([Anderson and Anderson, 2010](#)).

Discussion 6

The purpose of this chapter was to provide an opportunity for a discussion of the results of the analysis carried out. Additionally, provide the opportunity for a reflection and discussion of the benefits and limitations of the methodological and theoretical decisions made.

6.1 The Results from the Analysis

Overall the results of the case study show that all three cases are working with sustainability and have been doing that for several years, which is aligned with the criteria for the case selection in section 3.1.3. All three cases already have existing sustainability departments which is found to aid them in working strategically with sustainability. Furthermore, these departments were in all three cases found to be placed relatively high in the organisation and thereby the board of directors and executives already have knowledge about and are familiar with the environmental performance and sustainable development of the company, as were stated important in the literature review, by [Paolone et al. \(2023\)](#) in section 1.2.4. In addition, all three cases confirm that they will improve the strategic work with sustainability through the use of the CSRD and ESRS as a guide ([Kubel, 2023](#); [Carlsen, 2023](#); [Stavarakaki, 2023](#)). This is supported by [Boe \(2023\)](#), which states that companies have started seeing the value in working strategically with sustainability. It can therefore be assessed that the three case companies do not see the CSRD as a "tick-the-box" task, but that the point from [Primec and Belak \(2022\)](#) in section 1.2.2, is that the ESRS is important and contributes to the use of data in reporting.

In connection with the results of the analysis of possible challenges, it is also relevant to remember that a critical case selection was used in the selection of the case companies. This does not affect the results found based on the selected cases, but this does affect the logical deduction and generalisation that can be made based on the results. The selected cases are chosen based on the criterion of being "best-in-class". Because of this, the observed challenges are also interesting given that it illustrates that even the "best" companies, experience challenges with the implementation of the CSRD. This also means that it can be assumed that companies that do not belong in the "best-in-class" category will experience challenges and these will presumably be bigger and more complex challenges.

The challenge associated with data handling is a two-folded challenge, where there is both a challenge with the amount of data and the system to handle this data. This is mentioned in all three cases as one of the biggest challenges they face ([Kubel, 2023](#); [Carlsen, 2023](#); [Stavarakaki, 2023](#)). At the same time, this is assumed to be one of the first challenges that need to be dealt with, given that there is a need for both the handling of the amount of data

and the system to handle this data to be ready for use at the start of the reporting period. This may also lead to a prioritisation of these changes, as it is relatively time-sensitive as an aspect that needs to be established before the reporting period even starts. Given that the purpose of the CSRD is to disclose ESG information, there is increased pressure on the collection and reporting of this information. In addition, the challenge *Transparency on data sources and methodologies* was mentioned in section 1.2.1, as a challenge which the CSRD must improve. And based on the findings in this thesis, it is confirmed by all three cases that this challenge is present and important to handle in the future.

The second challenge that repeats itself across the three cases is the challenge associated with conveying and utilising the information that is generated to create real change in the companies. All three companies recognise that in order for the CSRD to fulfil the task of creating a positive impact on companies' sustainability work, it is necessary for the companies to use the information generated internally within the companies as a basis for decision-making.

Due to this recognition, there is also a need to ensure that the entire company, both management and employees across the organisation are aware of this sustainability information and integrate it into their internal decision-making processes. For the case companies there is a general agreement that all employees in the companies should have more knowledge about sustainability and the CSRD, given that sustainability needs to be integrated into the companies. This is clear throughout the case study, given all three case companies point out that sustainability is not an 'add on'.

In section 1.2.1 the pressure on companies, is identified to come from stakeholders, investors and/or civil society. First, there is no pressure from investors as the three case companies due to their type of ownership. Next, the results of the analysis show that the primary external pressure comes from stakeholders in terms of customers and thereby not from civil society in these cases.

In the document analysis of the annual- and sustainability reports it was found that all three case companies use different frameworks for their ESG reporting and this supports the point of [Primec and Belak \(2022\)](#) in section 1.2.1, regarding the lack of uniformity of sustainability reporting. This was also supported by the fact that in this thesis it was found difficult to compare the reporting of the three case companies, as they were prepared based on different frameworks, structures and different choices regarding what and how to report on various data points.

Finally, there is in all three cases an agreement that a limited assurance on disclosed ESG data are very important, and that they all desire to get it before it is a requirement. This is in line with the point by [Maechler \(2022\)](#) in section 1.2.3, regarding the need for assurance for ESG data given that it equated ESG data with annual financial data.

Overall, it was found interesting that all respondents from the case companies have educational backgrounds, not concerning sustainability. Despite of this, they have all found their way to work with sustainability. This was supported by the fact that in the literature review (section 1.2.4) evidence was found that sustainability should be implemented in the top management of organisations and that this management needs a broad and interdisciplinary knowledge to be able to handle sustainability. Particularly

expressed through the auditing companies that support the financial and business aspects of management, see sustainability as a new business area for them.

In general, for all three cases, it is relevant to state that there can be other challenges and changes that the companies need to implement to become compliant with the CSRD, than the ones found in this thesis. The list of changes for each case is thereby not inexhaustible. This can be explained through the analysis of possible challenges, which is based on one respondent who has acted as a representative for the company in question. It was therefore not to be ruled out that by interviewing other or more people from the individual companies, other challenges would be found. Furthermore, the respondent's background could also have an impact on the challenges and changes they have mentioned.

Compliance Exercise

A concern that has been pointed out again and again in the course of this thesis was the concern about whether the CSRD will bring about real change in the reporting companies or whether this directive "just" will become another reporting task.

By real change, it is meant that the companies that are obliged to report on ESG information through the CSRD, at the same time as the reporting, consider how the company integrates this information in the company's decision-making processes. This must be understood as the company using the knowledge they have gained from the reporting obligation to develop the company in a sustainable direction.

Where the opposite will be that sustainability reporting continues to be seen as a separate task that can be solved outside the general operation of the company. A success criterion for this objective for real change rather than a reporting task is that sustainability reporting is conceived as creating value and part of the companies' decision-making and/or strategy.

Through this thesis, signs can be seen that the CSRD brings about change in the companies. First of all [Kubel \(2023\)](#) expresses that Danfoss will disclose more data than required through the ESRS and [Stavarakaki \(2023\)](#) states that Hempel will be more than compliant, meaning that they will understand their issues and not just report them. [Carlsen \(2023\)](#) follows along and states that the CSRD in Danish Crown should lead to informed decision-making, taking trade-offs into account. On the other hand [Johansen \(2023\)](#) and [Jacobsen \(2023\)](#) state that the CSRD is a huge administrative task lying ahead of the companies which in the first place will have to be compliant. In that regard [Boe \(2023\)](#) states, that it will be regrettable if the CSRD will become a pure compliance task where the affected companies do as little as possible to become compliant, but that this probably will be the case for many companies due to the complexity and scope of the standards.

A point worth including in the discussion of real change and the CSRD is the timing of the implementation of this directive. In the years from 2018 until now, at the time of writing, there has been a major development in legislation and regulation regarding sustainability. This can be seen through the development concerning; the NFRD, the CSRD, the CSDDD, the SFDR and the Taxonomy. This has been expressed by several respondents and through podcasts, as a tsunami or explosion of regulations and requirements imposed on the companies ([Johansen, 2023](#); [Jacobsen, 2023](#); [Høgh, 2022a](#); [Bøge et al., 2022](#)).

This can mean that it is difficult to separate where the pressure for change is coming from. If there is a change in business operations towards more integrated sustainability, does it then stem from the requirement for reporting according to the CSRD? Is it due to the Taxonomy regulation or CSDDD? The conjunction of all these regulations also has the potential to be the catalyst for change.

This thesis takes a point of departure in the CSRD and the extended requirements being the reason for organisational changes in the work with sustainability in companies. This is done to make it possible to investigate the connection between the CSRD and organisational changes. However, it is recognised that other legislations and societal developments may be the reason for this development. It is pointed out by [Reuters Event \(2022\)](#) and [Høgh \(2022b\)](#) that in the last few years, there has been a shift in society, through which sustainability is prioritised. This means that sustainability has become a license-to-operate that has not only arisen through EU legislation. However, the CSRD supports this societal development.

6.2 Used Methods and Conceptual Framework

Although the methods used as well as the developed conceptual framework were selected and handled based on careful considerations and the best assessment of being well-suited to this thesis's research objectives, there will be limitations that should be acknowledged. The purpose of this section was to discuss the assumptions and limitations that may have arisen in connection with the methods used and the applied conceptual framework.

6.2.1 Case Study and Case Selection

The case companies included in this thesis are selected on the basis of the six criteria in section 3.1.3. These selection criteria were established in order to be able to carry out a case selection that was information-oriented. However, these selection criteria have had a great influence on the case selection and thereby also on the results of these case studies.

The two criteria that are assessed to have had the greatest influence on the case selection are:

1. They must be a non-listed company
2. The case companies is not required to be sector-specific due to no sector-specific requirement

The first criterion regarding a need for the selected companies to be *a non-listed company* is based on a desire that the selected companies are required to report under the CSRD from the financial year 2025. By implementing this criterion, both the quantity and the types of companies that could be included were reduced. However, it is estimated that this restriction has had a positive effect on the result by limiting the case studies to only one ownership structure of the companies, which has ensured that the companies have the same motivation and incentive for their work with sustainability and thereby also to achieve compliance with the CSRD.

This means that the assumption for this type of company is; freedom associated with the expectations of the companies' sustainability work. Compared to listed companies and

PIEs, non-listed companies do not have shareholders and investors who, in the same way, demand e.g. turnover, profit and/or sustainability performance. However, this is not to point out that non-listed companies do not have a pressure to e.g. generate turnover and sustainability performance, however, this is just as often, assumed to be based on a desire to be sustainable.

Therefore, by taking a starting point in non-listed companies, it is assumed that the companies work with sustainability based on their own desire and interest. There are of course also other aspects that come into play in non-listed companies' sustainability work, e.g. that sustainability can be seen as a competitive advantage and/or that customers demand sustainability information.

In addition, a criterion was set that the case companies did not have to be *sector specific*. This is based on a desire to achieve maximum variation. This maximum variation of the selected case studies has contributed to a broad analysis and an opportunity to analyse general patterns which apply across the case companies.

However, on the contrary, this sampling strategy has also contributed to the fact that the results cannot be generalised to certain sectors. If there had been a focus on a single sector, this would have been assumed to be possible. However, no evidence has been found that problems for individual sectors should be something that required special attention. This is supported by, among others, [Boe \(2023\)](#) and [Stavarakaki \(2023\)](#), who point out that the sector-specific standards have not yet been published and that there are therefore the general and topical requirements for the broad grouping of companies which are relevant to investigate at the time of writing. Therefore the case companies are found to be optimal representatives for this examination, given they have an additional year compared to the listed companies. This means that they have greater opportunities and more time to implement organisational changes and prepare for the coming requirements with the CSRD. Although, it is expressed by [Carlsen \(2023\)](#) that even with this comparatively longer time horizon, it is still a relatively short time for non-listed companies to prepare the reporting according to the CSRD. However, if the case companies had been SMEs it could have been that they were facing more and greater challenges and thereby would have to make some more radical changes. Such a case study, however, would have been assumed to have several uncertainties due to the longer time horizon for when they are going to report in accordance with the CSRD.

6.2.2 Conceptual Framework

Based on the findings through the literature review and the webinars and podcasts in section 1.2 and 1.3, it was found relevant to develop a conceptual framework that focused on organisational changes. Given that a substantial amount of the requirements in the CSRD seemed to lead to changes in companies, in order for them to become compliant with the CSRD. Therefore, the conceptual framework consists of, what is assumed to be some of the most essential parts for an organisational change. However, it is acknowledged that the choices made in regards to using parts from both [Palmer et al. \(2017\)](#); [Caldwell \(2003\)](#) and [Anderson and Anderson \(2010\)](#) could be a disadvantage given e.g. that the 7-S Framework is removed from its original context and used in the one created for this thesis. On the other hand, it has been an advantage for this thesis to be able to develop a conceptual framework which specifically focuses on organisational change.

However, looking at the findings in the analysis of the cases it seems as if it is not immense organisational changes the companies are going to carry out. Additionally, the companies themselves categorise these changes more as "improvements" and/or "aspects we will work on" leading to the change being categorized as developmental changes. It furthermore, seems as if the case companies have worked with sustainability for a while, which is due to e.g. the NFRD. However, this was included in the case selection given the criterion of having reported earlier. This has also meant that it became more difficult to define a current situation and a future state, once again related to the companies not going to do comprehensive organisational changes.

Besides the analysis of organisational changes in the case companies, it was also examined which changes and/or improvements the companies were going to implement regarding their ESG reporting. In that regard, it was found that the conceptual framework did not concern changes in written reports, therefore the framework is more "adapted" to cover this topic in the analysis of this. However, as the analysed departments in the companies are those who primarily work with reporting, the organisational changes concerning their work and/or department are expected to be closely related to the reporting tasks.

It was assessed that the used conceptual framework has been well-suited to answer the research question in this thesis. However, it is acknowledged that there was a limitation associated with not examining e.g. SMEs. This is based on the assumption that SMEs will face greater and more complex organisational changes and therefore could have faced *transformational changes* which is not observed in this thesis.

Conclusion 7

The subject of corporate sustainability reporting has been through several iterations of European legislation in the last 10 years. This development started at the European level with NFRD, and the incorporation of ESG information in the management report. Where now, through the CSRD and the associated ESRS, the framework and requirements for reporting ESG information have been upgraded. Through a literature review of the scientific literature regarding ESG reporting and the challenges associated with this type of reporting, it was found that there was a large focus on the development which has taken place in the field with the NFRD and the CSRD. Through this literature review, there were found to be a great focus on the challenges, these legislations have brought about and what the basis was for the development in the area. Due to the fact that the research concerning the CSRD is a new research field, it was found difficult to collect scientific literature on this topic. Therefore, webinars, podcasts and interviews were used to supplement the scientific literature and map the current debate in Denmark around the CSRD. This review of the current debate supports the point regarding the CSRD being considered an upgrade of legislation. However, it was also found that there still are challenges when it comes to ESG reporting.

Based on these two reviews of, respectively, the scientific literature and current debate in Denmark regarding CSRD, it was found that the CSRD will entail challenges for Danish companies. In addition, these new requirements for sustainability reporting for Danish companies will in some cases lead to organisational changes in order to ensure compliance with the CSRD. Therefore, it was chosen to examine the following research question:

How does the requirement in the CSRD and the new ESRS standards affect the way in which the case companies internally work with sustainability and sustainability reporting, and which organisational changes are necessary for them to become compliant with the CSRD?

The thesis is conducted as a qualitative research design with the use of a case study of three Danish companies. The case study sampling strategy was a maximal variation strategy as well as critical case selection. This led to three different Danish manufacturing companies that can all be classified as "best-in-class".

A document analysis of the CSRD and the associated ESRS was conducted in order to obtain an understanding of the requirements set for the companies. Based on this analysis, it can be concluded that the CSRD sets new, broader and more specific requirements for the companies' ESG reporting. In addition, it was concluded that the framework and structure for reporting set through the ESRS, support the streamlining and comparability

of disclosed ESG information. It can further be concluded that several and a wider selection of requirements are being introduced for companies through the 12 ESRS. Additionally, it can be concluded that two types of disclosure requirements are introduced; *general disclosure requirements* and *topic specific disclosure requirements*. Which respectively sets generic requirements that repeat themselves through all topical standards and specific and adapted requirements for the individual topical standards.

In order to support the investigation of the case companies, a document analysis was carried out of the three case companies' latest reporting of the sustainability information. This was either through a separate sustainability report or an integrated ESG and financial report. The document analyses examined how the companies had organised their work with sustainability and sustainability reporting prior to the CSRD. From this analysis, it can be concluded that prior to the CSRD, there were aspects that repeated themselves through the three companies' reporting, but there was little to no uniformity as the structure of the case companies reporting are based on different frameworks.

A conceptual framework was developed to guide the structure of the analysis of the case study as well as provide a theoretical frame. This was done by identifying aspects that were deemed to be relevant to investigate related to organisational change that could be expected to arise due to the CSRD. These aspects were:

- Pressure and drivers
- 7-S Framework as an Organisational Model
- The Three Types of Organisational Change
- Change Agents, Managers or Leaders
- Organisational and Employees Readiness for Change

In order to extract information from the case companies, interviews were conducted, as the method for empirical data collection. Based on the applied conceptual framework, it could through the case study of the three companies, be concluded that the case companies all face challenges they have to deal with in order to ensure compliance with the CSRD. However, it was also revealed that these organisational changes are not extensive but more process related and can be assessed to be classified as *Developmental Changes* and *Transitional Changes*.

Furthermore, it can be concluded that the external pressure for change in the companies does not necessarily come from the implementation of the CSRD, but to a greater extent from the *Marketplace* as a demand for ESG information from the case companies' customers. In addition, it was found that there also is an internal drive for changes in the companies. This drive stems from *Corporate identity*, through which companies are under pressure as they themselves want to be identified as companies that prioritise sustainability. It can also be concluded from the application of the organisational model *7-S Framework* that all three case companies have the most pervasive need for change in the *System* category. This can be concluded to deal with changes in "how things are getting done", meaning the formal and informal procedures regarding e.g. IT systems for data collection, handling and verification as well as training of employees to increase their opportunities to integrate sustainability knowledge into relevant decision-making processes.

Overall, it can be concluded that the requirement in the CSRD and the new ESRS standards affect the way in which the case companies internally work with sustainability and sustainability reporting, in several aspects due to the fact that it has been found that organisational changes that are necessary for the case companies to become compliant with the CSRD.

7.1 Further Research

Throughout this thesis, the focus has been on organisational changes that arise as a result of reporting requirements set through the CSRD. However, there are several aspects of the CSRD that have not been relevant to investigate as they fall outside the scope of this thesis. Therefore further research is recommended to concern, for example, the competences and knowledge related to the issue of both limited assurance and reasonable assurance as well as a case study examining the possible challenges related to the sector-specific standards.

Both of these research areas have been highlighted through the conducted interviews to be relevant to investigate further. It would be interesting to examine whether the profession associated with the issue of both limited assurance and reasonable assurance has the right competencies and knowledge regarding sustainability to be able to carry out this task. Assurance has previously only been related to financial data and auditors have a financial educational background. Thereby a knowledge gap can arise between this financial assurance and sustainability assurance. It is this knowledge gap and future competence development that is recommended to be investigated further.

Another topic that would be interesting to investigate is the sector-specific standards. This thesis is based on a maximum variation sampling strategy and an information-oriented sampling strategy, where cases are selected on the basis of not being in the same sector. No evidence has been found to delimit this thesis to a specific sector. However, it is still recommended that this should be investigated in the future when the sector-specific standards are published. This can be through a case study where one of the regulated sectors is investigated. It is recommended that this study be carried out to investigate whether sector-specific challenges can be found.

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Appendix A

A.1 Overview of the Assessed Companies in Conjunction with Case Selection

Companies	Industry	Sector
AP Pension	Pension company	Insurance/Financial institution
Arbejdernes Landsbank	Financial institution	Insurance/Financial institution
Arla Foods	Manufacturer of dairy products	Manufacturing
ATP	Pension company	Insurance/Financial institution
Bestseller	Clothing manufacturer	Manufacturing
Coop	Retail	Distributor/Retailer
Dagrofa	Retail	Distributor/Retailer
Danfoss	Manufacturer of energy-efficient technologies	Manufacturing
Danish Crown	Manufacturer of meat products	Manufacturing
Danish Agro	Farm supply company (grocery group)	Distributor/Retailer
DanPilot - Lodseriet Danmark	The state (Maritime) pilot	Service/consultant
Danske Spil	Provider of casino, lotto, betting	Service/consultant
DLG	Farm supply company (grocery group)	Distributor/Retailer
DSB	Operators of the Danish state railways	Service/consultant
Ecco	Manufacturer of shoes	Manufacturing
Egmont	Media production company	Media production company
Equinor Refining Denmark	Energy company	Energiselskab
Evida	Energy company (gas distributor)	Energiselskab
Falck	Provider of health care	Service/consultant
GF-Forsikring	Insurance	Insurance/Financial institution
Grundfos	Pump manufacturer	Manufacturing
Hempel	Production of coating solutions	Manufacturing
Jysk	Retail	Distributor/Retailer
LB Forsikring	Insurance	Insurance/Financial institution
LEGO	Manufacture of (plastic) toys	Manufacturing
LEO Pharma	Pharmaceutical company	Pharmaceutical company
Lunar Group	Financial institution	Insurance/Financial institution
Metroselskabet	Operators of the Metro	Service/consultant
Middelfart Sparekasse	Financial institution	Insurance/Financial institution
Monjasa	Trade and maritime operations + oil etc.	Logistics + service
Naviar	Provides safe and efficient traffic management for	Service/consultant
Nykredit	Financial institution	Insurance/Financial institution
PensionDanmark	Pension company	Insurance/Financial institution
PFA, PFA Pension, PFA-koncernen	Pension company	Insurance/Financial institution
PFA-koncernen	Pension company	Insurance/Financial institution
Rambøll-Gruppen	Consultancy	Service/consultant
Rema 1000	Retail	Distributor/Retailer
Salling Group	Retail	Distributor/Retailer
Sampension	Pension company	Insurance/Financial institution
Saxo Bank	Investment business	Insurance/Financial institution
Semler	Import and sale of cars and agricultural machinery	Distributor/Retailer
Sparekassen Danmark af 1871	Financial institution	Insurance/Financial institution
Sparekassen Kronjylland	Financial institution	Insurance/Financial institution
Stark Group	Detail of building materials	Distributor/Retailer
Sund & Bælt	State-owned holding company that manages bridge	Service/consultant
T&W Medical	Holding and investment company, focusing on medical	Pharmaceutical company
TDC	Telecommunications	Service/consultant
TV2 DANMARK	Media production company	Media production company
USTC	Freight and logistics	Logistics
Velliv	Insurance	Insurance/Financial institution

Figure A.1. Overview of the assessed companies for case selection - the eight selected large non-listed danish production corporations are shown highlighted in green

A.2 Overview of the Literature in the State of The Art

In figure A.2 and A.3, it was chosen to illustrate a colour code for the articles. The colour red refers to exclude articles, yellow refers to articles read and then excluded and the colour green refers to used articles.

No.	Author and year	Title
SEARCH 1		
1	Pronec, A. & Batak, J. (2022)	Sustainable CSR: Legal and Managerial Demands of the New EU Legislation (CSRD) for the Future Corporate Governance Practices
2	Bielawska, A. (2022)	Socially Responsible Activity of Micro-, Small-, and Medium-Sized Enterprises: Benefits for the Enterprise
3	Dwekat, A. et al. (2020)	The effect of the board on corporate social responsibility: bibliometric and social network analysis
4	Dirih, T. et al. (2022)	Corporate Sustainability Reporting in Europe: A Scoping Review
5	Ferner, I. M. (2021)	Corporate Social Responsibility Disclosure (CSRD)
6	Singhania, M. & Saini, N. (2023)	Institutional framework of ESG disclosures: comparative analysis of developed and developing countries
7	Hassani, B. K. & Bahini, Y. (2022)	Relationships between ESG Disclosure and Economic Growth: A Critical Review
8	Pulino, S. C. et al. (2022)	Does ESG Disclosure Influence Firm Performance?
9	Anidsson, S. & Dumay, J. (2022)	Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?
10	Janicka, M. & Sajnog, A. (2022)	The ESG Reporting of EU Public Companies. Does the Company's Capitalisation Matter?
11	Rehman, Z. U. et al. (2020)	Do corporate social responsibility disclosures improve financial performance? A perspective of the Islamic banking industry in Pakistan
12	Indyk, M. Ph.D. (2022)	Are the Companies Prepared for Sustainability Reporting under the EU FRS 1 and S2? Evidence from Poland
13	Akhurafat, H. et al. (2023)	Do different dimensions of corporate social responsibility disclosure have different economic consequences: multi-approaches for profitability examination
14	Bald, V. & Jayaraman, V. (2022)	Amplifying and promoting the "S" in ESG investing: the case for social responsibility in supply chain financing
15	Klimontowicz, M. et al. (2021)	Bank's energy behavior: Impacts of the disparity in the quality and quantity of the disclosures
16	Lin, W. (2022)	Corporate Non-Financial Reporting in the UK: Diversions from the EU Sustainability Reporting Framework
17	Kumoga, N. et al. (2022)	Performance Differences between ESG Indices and Conventional Market Indices: A Multivariate Analysis of Indices
18	Zheng, Y. et al. (2022)	Corporate Social Responsibility Disclosure and Firm's Productivity: Evidence from the Banking Industry in Bangladesh
19	Wozniak, J. et al. (2022)	Declaration of the Sustainable Development Goals of Mining Companies and the Effect of Their Activities in Selected Areas
20	Buallay, A. et al. (2020)	Sustainability reporting and bank performance after financial crisis: Evidence from developed and developing countries
21	Mezzio, S. S. et al. (2022)	ESG Integration and Small Business
22	Miniaoui, Z. et al. (2022)	Corporate Governance and CSR Disclosure: International Evidence for the Period 2006–2016
23	Gené, A. & Puig-Romeu, A. (2021)	Engaging Employees for the Long Run: Long-Term Investors and Employee-Related CSR
24	Antoine, P. et al. (2022)	Challenges and practical solutions to sustainable investing in the EU
25	Pilgrim, K. & Bohnet-Joschko, S. (2022)	Corporate Social Responsibility on Twitter: A Review of Topics and Digital Communication Strategies' Success Factors
26	El-Jourjuri, J. & Gura, P. P. (2022)	In Space, No One Can Hear You're Green: Standardization of Environmental Reporting, the SEC's Proposed Climate Change Disclosure Rules, and Remote Sensing Technology
27	Vander Bauwhede, H. & Van Cauwenberge, P. (2022)	Determinants and Value Relevance of Voluntary Assurance of Sustainability Reports in a Mandatory Reporting Context: Evidence from Europe
28	Ottensmeyer, F. et al. (2022)	From voluntarism to regulation: effects of Directive 2014/95/EU on sustainability reporting in the EU
29	Anggusti, M. (2022)	Cybercrime Change Consumers' Purchase Intention in Indonesia: A Moderating Role of Corporate Social Responsibility and Business Law
30	McBride, R. et al. (2022)	How AI affects the future relationship between corporate governance and financial markets: a note on impact capitalism
31	Anon (2022)	Illumina Inc To Host Second Annual Virtual ESG Investor Event - Final
32	Canoletto, S. et al. (2022)	Corporate Social Responsibility due diligence among European companies: The results of an interventionist research project with accountability and political implications
33	Hanic, A. et al. (2021)	Environmental disclosure practice in the Serbian banking industry
34	Flondrina, S. et al. (2022)	The multi-faceted dimensions for the disclosure quality of non-financial information in revising directive 2014/95/EU
35	Robinson-Bond, A. N. (2021)	A Wicked Opportunity?: Exploring an Entrepreneurial Strategy for Global Social Value Creation within Multinational Corporations
36	Galego-Sosa, C. et al. (2021)	Corporate social responsibility in the European banking sector: Commitment to the 2030 agenda and its relationship with gender diversity
37	Samagaio, A. & Diogo, T. A. (2022)	Effect of Computer Assisted Audit Tools on Corporate Sustainability
38	Pham, D. C. et al. (2021)	The impact of sustainability practices on financial performance: empirical evidence from Sweden
39	Myers, C. & Czapieski, J. J. (2021)	Sustainable Business Law? The Key Role of Corporate Governance and Finance
40	Dacin, M. T. et al. (2022)	Business Versus Ethics? Thoughts on the Future of Business Ethics
41	Haselmann, R. et al. (2023)	Gas and Nuclear Power as Transition Technologies – What does this Mean for Investments?
42	Harymawan, I. et al. (2020)	Sustainability report practices in Indonesia: Context, policy, and readability
43	Lung, R. (2022)	Constructs for Assessing Integrated Reports-Testing the Predictive Validity of a Taxonomy for Organization Size, Industry, and Performance
44	Acosta-Ruiz, M. D. et al. (2022)	Sustainability Committee Resilience: A Bibliometric Study
45	Czajka-Czeszyńska, H. et al. (2021)	How to make corporate social disclosures comparable?
46	Acquisdata Pty Ltd, Kuching (2021)	Santander Consumer Finance SA – Annual Report, 2021
47	Industry SnygShots (2022)	Global Ranking 77 Jan 22
48	News Bites - Private Companies (2022)	SECTOR WEEKLY: REAL ESTATE (USA) NEWSLETTER OF WEEK-ENDED JAN 30, 2022
SEARCH 2		
49	Lenz, R. & Hoss, F. (2023)	THE FUTURE ROLE OF THE INTERNAL AUDIT FUNCTION: ASSURE, BUILD, CONSULT
50	Sukowski, A. & Jebe, R. (2022)	Evolving ESG Reporting Governance, Regime Theory, and Proactive Law: Predictions and Strategies
51	Balp, G. & Strampelli, G. (2022)	Institutional Investor ESG Engagement: The European Experience
52	Banka, M. et al. (2022)	ESG Ratings in the Corporate Reporting of DAX40 Companies in Germany: Effects on Market Participants
53	Singhania, M. & Saini, N. (2023)	Institutional framework of ESG disclosures: comparative analysis of developed and developing countries
54	International Financial Law Review (2022)	Development of ESG in capital markets: global trends to watch
55	Euronews (2022)	What Faber did next: The ISSB's chair on the challenge of shaping new ESG standards
56	schneiderelectric (2022)	3BL Biops - 3BL Media: ESG Disclosure Regulations are Strengthening in Asia Pacific
57	Paolone, F. et al. (2023)	Longer board tenure and audit committee tenure: How do they impact environmental performance? A European study
58	Helm, T. (2022)	France leading the way on Europe's ESG regulation
59	Helm, T. (2022)	ESG ratings regulation not essential for transition to sustainable economy
60	Battistella-Drewe, C. et al. (2022)	ESG challenges for the asset management and investment funds industry: Americas and European perspectives
61	Lin, W. (2022)	Corporate Non-Financial Reporting in the UK: Diversions from the EU Sustainability Reporting Framework
62	Lai, K. (2022)	Transition bonds to play a key role in Asian ESG drive
63	Press, F. (2023)	Financial Press: Mining's top ten 'S' trends in ESG for 2023
64	Yusifova, D. & Petrova-Kirova, M. (2022)	THE NEW EU CORPORATE SUSTAINABILITY REPORTING FRAMEWORK IN THE CONTEXT OF GRI STANDARDS
65	Bak, L. et al. (2021)	ESG opportunities and challenges for the financial sector in the Netherlands
66	Papalexandri, N. D. (2022)	Sustainable Development and the Critical Role of HRM
67	Kamp-Roelands, N. (2022)	Is Assurance bij duurzaamheidsinformatie, wat is de status bij Nederlandse beursfondsen?
68	International Financial Law Review (2022)	Same goal, different methods: comparing EU and US approaches to green finance
69	Willeke, E. et al. (2022)	The Role of the Accounting and Control Professional in Monitoring and Controlling Sustainable Value
70	Abuab, H. et al. (2022)	Harmonization of Sustainability Reporting Regulation: Analysis of a Contested Arena
71	Food Science and Technology	Reporting food service emissions
72	Miskowaska, D. (2022)	An Exploratory Study on Preparer's Perception of ESEF Reporting: Evidence from the Warsaw Stock Exchange
73	De Cristoforo, T. & Gullucio, C. (2023)	In Search of Double Materiality in Non-Financial Reports: First Empirical Evidence
74	Carmichael, D. et al. (2023)	Sustainability Assurance as Greenwashing
75	Clarkin, C. et al. (2022)	Sullivan & Cromwell Discusses EU's Corporate Sustainability Reporting Requirements
76	Poul Schmitt et al. (2022)	EU Taxonomy Regulation: Compliance obligations and value creation from a Danish perspective
77	International Financial Law Review (2022)	EFRR framework delay could solve interoperability concerns
78	Reedtz, P. M. (2021)	Financing the Environmental Transition in Europe
79	McGuinness, M. (2022)	Shaping Europe's financial future
80	Zetzsche, D. A. & Anker-Sørensen, L. (2022)	Regulating Sustainable Finance in the Dark
81	Bergman, M. & Rogers, J. (2021)	Financing Sustainable Growth in the European Union: Global Lessons
82	Maechler, S. (2022)	Accounting for whom? The financialisation of the environmental economic transition
83	Antoine, P. et al. (2021)	Supporting sustainable investment with the EU Taxonomy
84	Battistella, P. (2021)	SFDR's delay does little to tackle existing issue - expert
85	Busch, D. (2022)	The Future of EU Financial Law
86	GlobalData Company Profiles	BE Semiconductor Industries NV (BESI)
87	Frost, L. (2022)	Data collection and bonds among EU taxonomy's biggest issues
88	Frostfjelds Bruchhaus Dørringer (2022)	On the path to net zero: enhancing climate disclosures in the financial sector
89	Acquisdata Pty Ltd, Kuching (2021)	Terna Rete Elettrica Nazionale – Annual Report, 2021
90	Acquisdata Pty Ltd, Kuching (2021)	Steinhilf International Holdings Ltd. – Annual Report, 2021
SEARCH 3		
92	Dow Jones Institutional News (2022)	Press Release: BUREAU VERITAS : Solid H1 2022 -6
SCOPUS - SEARCH 1		
93	Akemi, J., Buallay, A., Saudagaran, S. (2023)	Corporate social responsibility disclosure and banks' performance: the role of economic performance and institutional quality
94	Crut, C.A., Mateo, F. (2023)	ESG Maturity: A Software Framework for the Challenges of ESG Data in Investment
95	Velte, P. (2023)	Does sustainable board governance drive corporate social responsibility? A structured literature review on European archival research
96	Dwekat, A., Segal-Masi, E., Zaid, M.A.A., Tormo-Carrió, G. (2022)	Corporate governance and corporate social responsibility: mapping the most critical drivers in the board academic literature
97	Moreno-Ureba, E., Bravo-Urquiza, F., Reguera-Alvarado, N. (2022)	An analysis of the influence of female directors on environmental innovation: When are women greener?
98	Lui, T.K., Zaman, M.H. (2022)	Do foreign banks disclose corporate social responsibility practices more than their local counterparts? Empirical evidence of an emerging market context
99	Naz, C., Tian, G., Razi, F., Nawaz, K. (2022)	Do financial performance and firm's value affect the quality of corporate social responsibility disclosure: Moderating role of chief executive officer's power in China
100	Hassan, I., Singh, S., Kashyap, S. (2022)	Does corporate social responsibility disclosure impact firm performance? An industry-wise analysis of Indian firms
101	Kumar, K., Kumari, R., Nandy, M., Sarin, M., Kumar, R. (2022)	Do ownership structures and governance attributes matter for corporate sustainability reporting? An examination in the Indian context
102	Stefalska, M., Zasawa, G. (2022)	The impact of doing bad on consumer (dis)trust in the company: The moderating role of moral values
103	Reguera-Alvarado, N., Bravo-Urquiza, F. (2022)	The influence of board social capital on corporate social responsibility reporting
104	Teslovicová, Z.J., Kichová, H. (2022)	Implementation of Corporate Social Responsibility Environmental Actions in Comparison of Small, Medium, and Large Enterprises in the Slovak Republic
105	Cho, J., Ryan, J. (2022)	Impact of Managerial Ownership on Corporate Social Responsibility in Korea
106	Lombardi, R., Schimpema, F., Padoni, P., Galotti, M. (2022)	The climate-related information in the changing EU directive on non-financial reporting and disclosure: first evidence by Italian large companies
107	Maama, H., Gen, S. (2022)	Carbon accounting, management quality, and bank performance in East Africa
108	Sarani, N., Overland, C., Sabelfeld, S. (2022)	The role of the EU non-financial reporting directive and employee representation in employee-related disclosure

Figure A.2. Overview of the articles excluded or included in the state of the art (part 1/2).

109	Cardoni, A., Kiseleva, E., Bellucci, A. (2022)	The quality of SMEs stakeholder communication during strategic crises: The case of Italian unlisted SMEs
110	Van Nguyen, T., Bui, H.T.T., Le, C.H.D. (2022)	The impacts of corporate social responsibility to corporate financial performance: A case study of Vietnamese commercial banks
111	Dicounazo, G., Donofrio, F., Ranaldo, S. (2022)	The Jungle of Sustainability Frameworks and Standards: Evidence from European Listed Companies
112	Ogunlaju, G.O., Alakofe, R.I., Abiola, O., (...), Olayinka, M.I., Ali	Influence of country governance factors and national culture on corporate sustainability practice: an inter-Country study
113	Cao, R. (2022)	The efficacy of board independence on C.S.R. practices: empirical evidence from China
114	Lin-Hs, N., Gao-Uihahn, X., Biemann, T., Koch-Bayram, I.F. (2022)	Internal CSR and blue-collar workers' attitudes and behaviors in China: a combination of a cross-sectional study and a field experiment
115	Gerged, A.M., Chijike-Mgbame, A.M., Konadu, R., Cowton, C.J. (Does the presence of an environmental committee strengthen the impact of board gender diversity on corporate environmental disclosure? Evidence from sub-Saharan Africa
116	Alahmari, S., Qaderi, S., Alhmoud, T., Maqbel, R. (2022)	The role of slack resources in explaining the relationship between corporate social responsibility disclosure and firm market value: a case from an emerging market
117	Anderson, F.N.G., Arvidsson, S. (2022)	Understanding, mapping and reporting of climate-related risks among listed firms in Sweden
118	Owari, K.M., David Kivoku Beldhway, K. (2022)	Exchange and moral capital of CSR disclosure and financial distress likelihood of family management firms: evidence from India
119	Thuy, H.X., Khuong, N.V., Anh, L.H.T., Quyen, P.N. (2022)	Effect of corporate governance on corporate social responsibility in Vietnam: state-ownership as the moderating role
120	Alkayad, H., Omar, B.F. (2022)	Determinants of the extent and quality of corporate social responsibility disclosure in the industrial and services sectors: the case of Jordan
121	Kumar, S., Kumari, R., Kumar, R. (2021)	The state of corporate sustainability reporting in India: Evidence from environmentally sensitive industries
122	Bansal, M., Samad, T.A., Bashir, H.A. (2021)	The sustainability reporting-firm performance nexus: evidence from a threshold model
123	Töbi, Á., Szegedi, C., Sula, A. (2021)	Carbon accounting measurement with digital non-financial corporate reporting and a comparison to European automotive companies statements
124	Stettin, L. (2021)	Leveraging or for sustainability: Assessing performance implications of sustainability reporting in a national business system
125	Saeed, A., Noreen, U., Azam, A., Tahir, M.S. (2021)	Does csr governance improve social sustainability and reduce the carbon footprint: International evidence from the energy sector
126	Al-Hamadeen, R. (2021)	Environmental accounting and reporting: Evidence from the MENA region
127	Gerged, A.M., Beddewela, E.S., Cowton, C.J. (2021)	Does the quality of country-level governance have an impact on corporate environmental disclosure? Evidence from Gulf Cooperation Council countries
128	Oyewo, B.M. (2021)	Outcomes of interaction between organizational characteristics and management accounting practice on corporate sustainability: the global management accounting principles (GMAP) approach

Figure A.3. Overview of the articles excluded or included in the state of the art (part 2/2).

A.3 Example of Selected Interview Guide

Interview guide, Vasileia Stavrakaki from Hempel

Interview guide, Vasileia Stavrakaki, Hempel

- ESG Strategy Manager

Briefing	
Præsentation of us	<p>Vi er Simone og Ida</p> <p>Uddannelse: Environmental Management and Sustainability Science.</p> <p>Speciale: Working with the new CSRD directive from EU.</p> <p>Problemstillingen: How does the requirement in the CSRD and the new ESRS standards affect the way in which companies internally work with sustainability reporting, and which organisational changes are necessary to make for the companies to become compliant with the CSRD?</p>
Purpose of the interview	The focus of the first part of the interview is to know more about Hempel, how you currently have worked with sustainability reporting and which challenges you face with the CSRD.
Recording and approval	<p>Can we record the interview so that we are able to use it in our thesis?</p> <p>It will be used by us as background knowledge</p>

Theme	Questions
Presentation of respondent	<p>Present yourself</p> <ul style="list-style-type: none"> - Title at Hempel - Education - Experience with sustainability / ESG - Department at Hempel - Tasks <p>How did you come to work with CSR/sustainability/ESG/CSRD</p> <p>What significance does it have for your work with ESG that you are ?? - advantages and disadvantages?</p>
Presentation of Hempel	<ul style="list-style-type: none"> - <i>We have looked at your webpage</i> - <i>We have read your Annual Report 2022 and E-folder</i> <p>What can you tell us about Hempel that we cannot immediately read</p> <ul style="list-style-type: none"> - For example, a little more about the work with ESG?

<p>Current organisation Sub. Q. 2 <i>How are the companies organised currently (before CSRD) and how do they work with sustainability?</i></p>	<p>Structure How is Hempel's environmental work organized? - Which departments, areas of responsibility, who refer to whom How is Hempel's environmental reporting work organised? - Can you take us through the process? Who (department) / what / when / how / why - Are there clearly defined areas of responsibility?</p> <p><i>If she has not talked about where Group Sustainability are placed in the organisation - then ask!</i></p> <p>Staff How many employees do you currently have to work with or environment and reporting? And is that enough going forward?</p> <p>Do the employees have the right skills? - Do they have the will and motivation for what is to come?</p> <p>Which aspects/parts of your current/previous work with the Annual report can you <u>keep and continue with</u>? - <u>no longer use?</u> - <u>must be created from scratch?</u></p> <p>Integrated Reporting You have made an integrated Report in 2022 - can you tell more about that and why? (2020-2022) - The development of your integrated report (2018/19-2022)</p> <p>Has Hempel done your sustainability report yourself so far or do you get help for parts or the whole thing? - Guidance, data collection, etc. (advice/consultant)</p> <p>Will Hempel itself do your sustainability reporting with the new requirements from CSRD - or do you need help / advice / data collection?</p> <p><i>We can see that you have limited assurance on your ESG data.</i> What significance does assurance have on CSRD? - Is it important to Hempel and why? - Is a limited assurance enough? - When do you expect to have a reasonable assurance?</p>
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	<p>Is there any other regulation from the EU affecting Hempel? CSDDD</p> <ul style="list-style-type: none"> - What does this mean in the work with CSRD? <p>CSRD will contain 1144 data points. How many data points does Hempel report on now?</p> <ul style="list-style-type: none"> - How far are you from being compliant with CSRD? <p><i>We can read that you have a material assessment in your report - impact or financial?</i></p> <ul style="list-style-type: none"> - Where is Hempel in relation to Double materiality?
<p>Challenges by the CSRD Sub. Q 3. <i>Which challenges do the companies face cf. the CSRD?</i></p>	<p>What challenges does Hempel face, for example? with CSRD?</p> <ul style="list-style-type: none"> - Employees (number, training) - Data (quantity / collection / handling) - Board/management - <i>material + financial data</i> - <i>new area/topics</i> <p>Can you see areas that need / challenges require organizational changes?</p> <p>Does Hempel have a plan for how these organizational changes are to take place and when?</p>

Second part

Focus and purpose	The purpose of the second interview is to investigate what kind of organizational change Hempel has to do or has started
Theme	Question
<p>Organisatorisk change Sub. Q 4 <i>Which organisational change are the companies going to do to meet the CSRD requirements?</i></p>	<p>Pressure / drivers for change</p> <ul style="list-style-type: none"> - What external pressure is there on Hempel in relation to change? <ul style="list-style-type: none"> - Why? - What internal motivation is there in Hempel in relation to change? <ul style="list-style-type: none"> - Why? <p>Change agent/leader</p> <ul style="list-style-type: none"> - Who drives the change in Hempel? <ul style="list-style-type: none"> - a person, employees, a department, the management, the board

	<ul style="list-style-type: none"> - CTO..! (martin tror ham vi også belv sendt videre til) - How is it operated? - Where is the change rooted? <ul style="list-style-type: none"> - Where in the company should the change take place? - Is this the best way for Hempel or would you like the change to be driven in a different way? <p>Readiness for change</p> <ul style="list-style-type: none"> - Is Hemepl ready for the change? - Are the employees that the CSRD affect ready for the change? <p>Type of change</p> <p>What changes do your challenges require and why?</p> <ul style="list-style-type: none"> - Minor improvements? <ul style="list-style-type: none"> - Continuing education, process/quality improvements, better communication - More complex - Changes in processes? <ul style="list-style-type: none"> - New technology, new systems/processes/policies, new organization/structure - Significant/radical changes? <ul style="list-style-type: none"> - in the organization, strategy, products, systems, technologies, employees' mindset/culture <p>What is going to change - 7-S Framework</p> <ul style="list-style-type: none"> - Structure <ul style="list-style-type: none"> - What does the structure of the Hempel organization (sustainability department) look like in order for you to be compliant with the requirements of CSRD? - How is the environment/sustainability department organised - How do you get there, what needs to change? - Strategy <ul style="list-style-type: none"> - What is your current ESG/sustainability strategy? - How can Hempel use CSRD as an asset (aktive)? (customers etc.) - nyt spørgsmål: Do the standard certification help with achieving the CSRD - f.eks. STBi eller ISO standard - System <ul style="list-style-type: none"> - What does the internal process look like going forward, formally and internally in the work with CSRD? BESVARET?
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	<ul style="list-style-type: none"> - How to deal with the new amounts of ESG data - what needs to change? (Excel vs. new software) - Style <ul style="list-style-type: none"> - What is Hempel focusing on, what signal is being sent internally with regard to prioritization and attitude to change in order to become compliant with CSRD? - Staff <ul style="list-style-type: none"> - Are the employees motivated and what is their attitude to the change? (the new requirements) - Does Hempel have enough employees with the right skills? <ul style="list-style-type: none"> - Are the employees trained/received training in relation to CSRD? - Hiring more employees? Do you need more people to solve the task of reporting on CSRD? - Skills <ul style="list-style-type: none"> - What is Hempel really good at in terms of sustainability/sustainability reporting? <p>What is the ambition the first year they report on CSRD and in the long term?</p> <ul style="list-style-type: none"> - Should Hempel "just" be compliant? - <p>Does CSRD require changes in Hempel, or will it "just" be a reporting task?</p>
Step 4 - Future	<p>How does Hempel ensure that you meet the change?</p> <p>How does Hempel assess whether the change has succeeded / has been a success?</p> <ul style="list-style-type: none"> - the success criterion <p>Future: the sector specific standard = what are the expectation of this ? what can they bring beside the ESRS?</p>
Debriefing	
Deltagelse i Speciale	Talk about how Danfoss is part of the thesis and how they are mentioned in the report and how data/knowledge is processed

	<ul style="list-style-type: none">- Mentioned by name in the report? Or Anonymous?- If there is something you say in the interview that must not be written in the report, let us know, and then it is not included- We will send the report to you before delivery - approx. a week to respond - if we do not hear from you we will take it as approval of what we have written
Information	Do you have anything else that you think might be relevant for us to know in relation to what we've been through, or something we forgot to ask about?
Thank you for your participation	<p>May we contact you again if further questions arise?</p> <ul style="list-style-type: none">- Possibly just with some written questions over mail? <p>Would you like to receive my project when it is finished?</p> <p>Thank you for wanting to participate</p>