
Corporate Responsible Behavior: Navigating Europe's Changing Regulatory Landscape

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Abstract

Goal: This thesis explores how large companies in the Netherlands can adjust their ESG reporting practices to effectively navigate and use the changing regulatory environment. A combination of theoretical and practical insight using literature and conducted interviews answers the following research question: *“How can large companies in Europe adapt their ESG reporting practices to uncertainty in CSRD regulations?”*.

Methods: The study begins by examining existing literature on corporate sustainability, reporting challenges, potential value creation, and information technologies. Despite many relevant articles on the various topics, it identifies gaps in current research, particularly in the light of recent regulatory changes. Since setting up ESG strategy in an uncertain environment is very complex, research on this topic is highly relevant. The gaps in literature are addressed using semi-structured interviews with seven ESG managers from different sized companies across the Netherlands. These results were tested on completeness and generalizability using interviews with three ESG experts within PwC.

Results: Key results are captured in a visualization. Design science research was used to initially draft one from the literature findings. This drafted version was later refined using the interview outcomes. The final visualization contains five key aspects that should be considered when establishing corporate ESG strategy. potential value creation is the main motivator for companies to invest in ESG and should be discovered. Determining long-term planning and goals rather than being agile is a success approach, keeping the value creation in mind. Stakeholder and value chain communication is a valuable strategic choice that can drive value creation for the company and its entire value chain. Data management and technology will be important in the near future but should not have priority right now. Most important is getting the processes and data streams right. The last one, organizational structure, is about the internal processes and department collaboration when it comes to data gathering and reporting. Interview with experts also led to a future outlook on the regulations and sustainability development in Europe. Experts see sustainability grow to core business procedure in the coming years, with many regulations coming on top of the current version of the CSRD.

Contributions: The study contributes to both theory and practice by providing guidance for corporate ESG strategy. It addresses the knowledge gap regarding corporate ESG strategy with company guiding conclusions. Results are directly applicable by large companies. The thesis can also serve as basis for further research on cross-country differences and deepen specific parts of the conclusion.

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Abbreviations

AI	Artificial Intelligence
BMS	Behavioral, Management and Social
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directive
DMA	Double Materiality Analysis
ERP	Enterprise Resource Planning
ESG	environment, social, and governance
ESRS	European Sustainability Reporting Standards
EU	European Union
FTE	Full Time Employee
GRI	Global Reporting Initiative
IAASB	International Auditing and Assurance Standard Board
IFAC	International Federation of Accountants
IoT	Internet Of Things
ISAE	International Standards for Assurance Engagements
ISO	International Standardization Organization
IT	Information Technology
NFRD	Non-Financial Reporting Directive
PwC	PricewaterhouseCoopers
RQ	Research Question
SDG	Sustainable Development Goal
US	United States
VSME	Voluntary Sustainability Reporting Standards

1. Introduction

As the world grapples with challenges of sustainability, the corporate world is undergoing a significant shift, driven by evolving regulations and changing stakeholder expectations. (Jacobo-Hernandez et al., 2021). With the European Union (EU) introducing the Corporate Sustainability Reporting Directive (CSRD) in 2022, companies operating within the EU needed a significant shift in technology and methodology of their reporting processes (Yu, 2023). With the CSRD, companies are obligated to integrate environment, social, and governance (ESG) reporting in their annual report. New regulations are in line with the European Green Deal and would affect 49.000 companies (KPMG, 2024).

Companies across Europe have invested heavily to be ready for the reporting requirements. With the European Commission trying to reduce regulatory burden in February 2025, they suddenly proposed a reduce in CSRD in the form of the EU Omnibus package. The number of companies in scope of CSRD is suddenly reduced by 80%, and for the remaining companies there are changes ongoing.

Such frequent modifications to sustainability reporting create challenges for large organizations operating in the EU. Companies now face uncertainty regarding their internal processes, controls, governance, and reporting practices. Especially companies with 250+ employees, since the scope moved from 250 to a thousand employees.

Existing literature has contributed to various parts of corporate sustainability. Prior studies have explored reporting standards like GRI and CSRD. Challenges and opportunities from both auditors- and firms' perspective are well covered topics (Che, 2025; Bukari et al., 2024; Algeri et al., 2025). Use of technology to improve efficiency and accuracy of reporting is existing (Azizi et al., 2024). And last, researchers have shown that good reporting not only comes with compliance, but also with some sort of value creation. By integrating ESG factors in reporting processes, companies improve transparency which builds into trust with stakeholders like investors and customers. This increased trust can lead to a more favorable reputation and can improve financial performance by for example a lower cost of debt (Eliwa et al., 2019). ESG reporting also enables organizations to identify inefficiencies and risks. This makes way for a better strategic approach.

Because of the very recent changes, literature on specific challenges, and also how to deal with changing regulations is, if already existing, very scarce (Personal communication, 2025). This leaves a knowledge gap about companies navigating their strategy. The study aims to address that gap by conducting exploratory research on the RQ: *“How can large companies in Europe adapt their ESG reporting practices to uncertainty in CSRD regulations?”*

The findings exist of challenges and best practices. This can guide companies in improving their strategy by adapting it to the evolving institutional environment. This study gives assurance providers insights into how to structure their service offering and guide them with aligning services with client needs and demands. Regulators may find interesting perspectives to inform when designing new

recommendations. And last, since this is (one of) the first studies on this topic, it provides a basis for future research.

2. Literature review

Introduction

The environment of corporate sustainability has undergone a transformation in the recent years. Stakeholders demanding transparency and regulators producing new guidelines on behavior and reporting are the main drivers for companies to take this topic seriously. With the EU introducing regulations and changing them before they are even in force uncertainty is created for both reporting firms as well as their assurance providers. This presents challenges for the reporting and assurance sector.

This literature review aims to explore existing research on the key themes associated with the topic. For a robust research approach and accurate findings, it is critical to review the existing state of knowledge. First it examines corporate sustainability and how organizations integrate this in their strategy and operations. Then it takes a closer look at assurance practices and the changes in regulations.

We then shift towards the client's perspective to gain insights in their challenges and opportunities. They must deal with complications and so do the assurance providers. The perspective of the assurance providers is therefore also highlighted. The last theme is information technology. Since this is the basis for every metric in modern reporting the role and impact cannot be understated.

By analyzing these themes, the literature review aims to identify existing gaps and forms the basis for the methodology section. It contributes to exploration of actionable insights for companies and their assurance providers. The goal is to extend the body of knowledge by exploring how organizations can strategically respond to regulatory changes and uncertainty around sustainability reporting. Table 2 provides an overview of the relevant articles and their contributions in the key concepts of this paper.

Literature search

The research starts with identifying key themes and setting up the literature search. For this review, database Web of Science has been used. Scopus is the first and most used database with articles and citations. It contains a wide range of topics and is known for its reliability in literature.

It is important to note that only articles from 2020 and up are being reviewed since CSRD was first talked about in this year. Articles from years before 2020 lack aspects of modern assurance, -regulations, -technologies, and -methodologies.

To look at the changing regulations through the eyes of the assurance providers, the combination of corporate sustainability and audit/assurance is made. It gives a high number of results (645). Most of these results are focused on impacts from internal audit or audit committee's on ESG disclosure. These are not interesting from this thesis' perspective. However, one article that was marked as relevant by Web of Science really stood out. It was recently published and looked at the European market through the eyes of assurance providers. It also gives attention to the role of the auditor and its

changes due to the initial CSRD. Ruohonen & Kullas (2024) was therefore included in the literature matrix.

The results are broad, and the search must be made more specific. With the initial RQ in mind, I am interested in the challenges that arise with those regulations. So “challeng*” is added to the string. It provides a smaller dataset (61) and a comprehensive view at the existing challenges in both assurance providers as well as the reporting companies. Again, there were irrelevant articles that are focusing on relationships that have nothing to do with the exploratory nature of this study. Four articles are identified that contribute to the literature foundation of this study. The following articles and their contributions are found relevant:

- (Chopra et al., 2024)—This well cited article gives an overview of the challenges that arise with ESG reporting for companies. It also provides future research directions. The first one is the role of technology. This is, according to the article be crucial to examine because the disclosure is it completely reliant on these technological advancements. Second, it mentions the importance on integration with financial accounting although this may be difficult due to the differences between them.
- (Nial et al., 2023)—Nial et al. (2023) defines four levels of assurance in a sustainability context. There was no other article found where assurance in a sustainability context is so well explained. Since this study looks at the assurance provider perspective, this article cannot be missing in the literature review
- (Mezzanotte, 2023)—This article is complementary for Chopra et al. (2024). While most articles are about the methodological challenges for companies, this article focusses on the legal risks and difficulties among the supply chain. It goes deeper in double materiality, the initial standard of the CSRD.
- (Sonnerfeldt & Pontoppidan, 2020)—Most challenges for reporting companies are well defined. The challenges for assurance providers are examined less. Sonnerfeldt and Pontoppidan (2020) provide the basis for that. They identify challenges on non-financial assurance.

Those four articles are all well cited and provide a strong basis for the sections where challenges are discussed.

Corporate sustainability assurance is quite new to financial assurance. As Chopra et al. (2024) already noted, there are differences between the financial- and sustainability assurance. The search term was set up to identify these differences. The search results in fundamental differences between the financial- and sustainability assurance that are crucial for providers to understand (Wagenhofer, 2023). Besides that, an article of the relationship between ESG reporting and financial performance came forward. This gives reasons for companies to invest their sustainable practices although it is not required by law anymore.

Different articles highlight the role of digital technologies in the audit, specifically the ESG audit. A search string combination of digital and corporate sustainability and reporting is therefore executed. The results are two articles. Manita et al., (2020) focuses on the digital transformation and the impact on the audit profession. Asif et al., (2023) really focuses on the role of technology in the ESG disclosure process. Together, those two well cited and reviewed articles provide an understanding about the role of technologies in sustainability practices. Some of those articles had relevant forward or backward references. Azizi et al. (2024) takes a closer look at the digitalization of audit. It has however no link to corporate sustainability and is therefore not found with the search strings. Since there are not so many papers about the combination of sustainability, digitization, and reporting, only 3 papers are selected that contribute to the ‘information technologies’ topic.

Da Conceição Da Costa Tavares and Dias (2018) are examining different theories that came to light when reading other papers this one is also not to be found with the used search strings. Those papers mentioned fundamental theories that may explain the choices of various companies (Asif et al., 2023; Chen et al., 2023; Chopra et al., 2024).

The search strings, number of results, and chosen articles are presented in table 1, snowball results in table 2 Their contribution to the key themes are further explained in the literature review and analysis and in table 3.

Table 1 – Search matrix

Search String	# of results	Relevant findings
Corporate Sustainability AND (Audit OR Assurance) AND challeng*	61	-Sonnerfeldt, A. L. L., & Pontoppidan, C. A. (2020) -Chopra et al., 2024 -Mezzanotte (2023) -Nial et al. (2023)
Corporate Sustainability AND (Audit OR Assurance)	645	-Ruohonen & Kullas (2024)
Corporate Sustainability AND Financial AND Comparison	81	-Wagenhofer, A. (2023) -Chen et al. (2023)
Corporate Sustainability AND Reporting AND Digital	61	-Manita et al., (2020) -Asif et al., (2023)

Table 2 - Snowball findings

Relevant finding
Azizi et al (2024)
Da Conceição Da Costa Tavares and Dias (2018)

Table 3 - Literature matrix

	<i>Ruohonen & Kallias, 2024</i>	<i>Wagenhofer, 2023</i>	<i>Manita et al., 2020</i>	<i>Sonney-fatoh, A. L. L., & Powerppidan, C. A., 2020</i>	<i>Niat et al., 2023</i>	<i>Chopra et al., 2024</i>	<i>Chen et al., 2023</i>	<i>Asif et al., 2023</i>	<i>Mezzanotte, 2023</i>	<i>Da Conceição Da Costa Tavares and Dias, 2018</i>	<i>Azizi et al., 2024</i>
Corporate sustainability	X	X		X	X	X	X		X		
Reporting company's perspective	X	X			X	X	X		X	X	X
Reporting and assurance	X	X		X	X				X		X
Assurance provider's perspective	X	X		X				X			X
Information technologies			X					X			X

2.1 Corporate sustainability

Definition and context

According to Chen et al. (2024), corporate sustainability is an approach to conducting business while achieving environmental, social and governance goals. The broader impact of business operations is considered. The concept is widely accepted and encourages organizations to thrive on other goals besides the traditional financial optimization. Other goals are optimizing impact on stakeholders like employees, customers, and the environment (Nial et al., 2023).

Integration of ESG criteria in decision-making is central. Environmental criteria examine how a business impacts the environment. Social criteria assess how it manages relationships with employees, suppliers, customers. Governance is about the company's processes, leadership pay, and shareholder treatment. By defining ESG metrics the company's impact on the planet can be measured and compared.

The adoption of the United Nations SDGs has provided framework for organizations. The goals can guide businesses in the world's most challenging problems of this time. They offer a blueprint for achieving a better and sustainable world.

Together, the SDG's and ESG's fit in the European Green Deal. This initiative was introduced to create a sustainable Europe and be the first continent to become completely carbon neutral.

The disclosure of non-financial information has emerged as essential component of business practices. It aims to provide stakeholders with a view of a company's activities besides the financial performance. This type of reporting contains a wide range of qualitative and quantitative information about the ESG impact. The objective is to improve transparency and accountability.

The concept stems from the global conception that financial metrics alone do not capture all the important activities of an organization. Non-financial information. Companies need to take accountability for their actions on several areas. Non-financial information goes wider than environmental impact alone.

Evolving regulatory pressure

The CSRD marked a shift within the European regulations (Farkas & Matolay, 2024). The goal of CSRD is to improve the scope, quality, and comparability of ESG reporting. The CSRD aims to provide stakeholders with more reliable and standardized sustainability information. This information should help them making informed decisions and ensuring corporate accountability in ESG (European Union, 2024). For more information about CSRD, see Appendix G.

In February 2025, the European Commission launched a proposal in which they try to reduce the regulatory burden in Europe. The reporting obligations for companies in scope are large and require money and other resources. They also decrease the pace of innovation. The problem for companies is large investments in their IT infrastructure and data gathering to be ready while this was (probably) unnecessary (Chopra et al., 2024). The European Commission has six months to either

accept this proposal or turn it down. Table 4 shows an overview of the regulatory changes in scope over the recent years.

Table 4 - Overview of CSRD and EU Omnibus

	CSRD	EU Omnibus
Year in force	Applicable since 2023	Expected to enter in force in 2025
Scope	-Listed companies -Large companies with at least two criteria of the following: 250+ employees, total assets over 40 million euros, net turnover over 20 million euros. -External companies with over 150 million euros turnover in EU	- Large companies with 1000+ employees AND one of the following: total assets over 25 million euros, net turnover over 50 million euros. -External companies with over 450 million euros turnover in EU
Amount in scope	49 thousand	10 thousand
Disclosure requirements	Sector specific requirements	No longer sector specific requirements
Reporting standards	ESRS	New ESRS expected
Materiality	Double materiality	Financial materiality
Assurance	Mandatory limited assurance since introduction. Mandatory reasonable assurance expected in 2030	Mandatory limited assurance
Format and location	Publish by including in management report. Should be in machine readable format.	Publish by including in management report. Should be in machine readable format.

2.2 Reporting Companies Perspective

Complications in sustainability reporting

EGS reporting comes with challenges that hinder the sustainable development. Chopra et al. (2023) identified four main challenge categories. These are behavioral, data credibility, methodological, and contextual.

Behavioral challenges are coming from organizational and individual mindsets. They often prioritize short-term economic gains over long-time sustainable development goals. Reputational risk considerations influence the decisions on what information to disclose or keep for themselves. Boards often fear that disclosing too much information may cost them their competitive advantage. Powerful stakeholders can however exercise influence and steer companies by doing so.

Data credibility is a major obstacle according to Chopra et al. (2023). Excessive costs that come with data gathering and processing are making ESG reporting an expensive activity (Drempetic et al., 2019). Since the data is often from various sources/methods and standardization is missing, it is hard to

structure the data in the right way. The result is that companies report their ESG information without uniformity and incomparable. Limited historical information makes past analysis hard.

Methodological challenges relate to the sophisticated nature of the sustainability reporting. The reporting process difficult for companies with different entities or business units. Unclear boundaries for reporting companies makes it harder to determine the scope and parameters to disclose. The absence of metrics can create difficulties in the forming of corporate strategies on this topic.

Last, Chopra et al. (2023) mentions the contextual challenges that are outside the organization. Customer attitudes towards ESG data influences the role of sustainability in management. The factors differ across industries and regions. The regulatory environment is complex. With diverse guidelines and a constantly evolving targets and reporting obligations there lacks a clear consensus on what to do. The lack of a clear and fixed definition of sustainability and its scope leads to a multiple possible interpretations.

These behavioral, data, methodological, and contextual challenges negatively impact the quality and reliability of the ESG reporting. Companies face challenges in obtaining data and presenting this to their stakeholders. Overcoming these challenges is crucial to make ESG reporting effective and to create value with it. (Chopra et al., 2023)

Mezzanotte (2023) analyzed the CSRD and describes challenges and legal risks in double materiality assessments. According to the article the dual focus comes with a novel and complex approach compared to the traditional reporting.

An area of concern is the engagement process with stakeholders which is needed for determining the impacts. Companies are expected to identify and engage the stakeholder who are impacted by the operations of the company. This engagement introduces legal complexities. The binding nature of commitment and potential conflicts that may arise are difficult. or failing to adequately engage stakeholders could lead to legal problems.

Another challenge is the availability of needed data for correct reporting. Determination of impacts involves data collection across the whole value chain. This makes reporting difficult and easy for mistakes. Inaccurate reporting comes with the risk of (unintentionally) misleading stakeholder, also known as greenwashing. (Mezzanotte, 2023)

Companies can judge themselves on what their material impacts are and which information to disclose. This “freedom” leads to inconsistencies. Lack of standardization can lead to uncertainty.

Overall, the article pleads for a more concrete and standardized way of reporting. This may come with the EU Omnibus but is unsure for now. Companies do not know what there up to. (Mezzanotte, 2023)

Value creation

While compliance with regulation is important, ESG reporting have more to offer according to Chen et al. (2023). Their study provides evidence that strong ESG performance is positive related to value creation. They made over 24.000 observations among 3332 listed companies globally. The study revealed multiple significant relationships.

The positive impact of ESG on financial performance varies across industries and location. Companies in developed countries and environmentally sensitive sectors benefit more. These are sectors like real estate and pharmaceuticals.

Combined with stakeholder theory the study claims that companies with strong ESG performance send positive stakeholder signals. This improves trust and the stakeholders feeling engaged. Result of this positive stakeholder signals are increased funding access and lower financing cost. Chen et al. (2023) also suggest that companies with better ESG performance are better in managing risks. They have less regulatory penalties. Risk management is valuable for companies operating in any sector.

Besides the financial benefits the study reveals qualitative advantages. It leads to a better reputation and improvement of stakeholder trust. These provide the competitive edge and support value creation eventually. Demonstrating ESG responsible behavior attracts talent and strengthens relationships among the value chain.

Chen et al. (2023) conclude that while ESG compliance is important, the possible value creation in the future is worth more for companies. Managing risks effectively and strengthening the relationships with stakeholders and the community unlock opportunities for improvement and innovation. (Chen et al., 2023)

Several articles mention underlying theories for a company to disclose their ESG data (Asif et al., 2023; Chen et al., 2023; Chopra et al., 2024). When searching for those theories in sustainability reporting, one article is found that examines exactly those theories mentioned. Da Conceição Da Costa Tavares and Dias (2018) have conducted a literature review on the theoretical perspectives in sustainability reporting. These theories form a framework and have a big impact in the corporate behavior and -actions of an organization according to Camilleri (2019). The following relevant theories were identified:

- Stakeholder theory —Stakeholder theory says that organizations have a responsibility to consider the interests of stakeholder groups. These can be shareholders, employees, customers, suppliers, and society. This theory suggests that companies disclose non-financial information to meet demands and expectations of stakeholders since they are increasingly concerned about ESG issues (Da Conceição Da Costa Tavares & Dias, 2018). Companies can show their commitment to stakeholders and strengthen their bond by providing. This is crucial in preventing information asymmetry with their stakeholders (Camilleri, 2019).
- Legitimacy theory —The legitimacy theory proposes that organizations seek to align with norms and values of society. This is needed for legitimacy and survival of the company,

according to the theory. In the context of sustainability companies use disclosure to gain and maintain this legitimacy. By doing so, companies communicate their efforts to address ESG problems and align with the interests of stakeholders and the broader community. Failing to do so can have consequences like reduced demand or restricted access to resources (Camilleri, 2019).

- Institutional theory —This theory says that organizations are shaped by external factors. Factors like regulatory frameworks, industry standards, and social expectations influence their behavior and practices. There are three types of external pressures according to this theory. Regulative pressure, normative pressure, and cognitive pressure (Da Conceição Da Costa Tavares & Dias, 2018). For example, companies may comply with mandatory reporting requirements (regulative pressure), adopt industry-specific reporting standards (normative pressure), or respond to societal expectations for sustainable development (cognitive pressure) (Camilleri, 2019).

2.3 Reporting and assurance

Origin and transformation of assurance

The origin of audit and assurance services can be traced back to the late 19th century. The need for verification of financial information grew when business got larger and more complex. The audit function emerged to provide credibility in financial statements.

The role of the auditor expanded overtime. As organizations adopted innovative technologies like computers for data processing the IT audit arose as a specialized practice to assess the reliability of these systems (Van Biene-Hershey, 2007).

In the 1990's AICPA and IAPC (predecessor to IAASB) sought to develop assurance services that built on auditor's skills to provide independent verification across on financial areas. This made way for standards like ISAE 3000 to frame guidance on assurance engagements beyond financial statement audits (Sonnerfeldt & Pontoppidan, 2020).

The scope of assurance services continued evolving rapidly in the 2000s. IT audits became more important as organizations relied on information systems. Auditors also took on broader advisory roles in areas like risk management and cybersecurity (Azizi et al., 2024).

More recently, new regulations like the EU's CSRD have further transformation by mandating assurance over sustainability reporting for thousands of companies (Bunget et al., 2024). This has necessitated innovation in audit and auditor skillsets to provide credible verification over non-financial information.

As long as stakeholder expectations and the regulatory environment keep evolving the audit and assurance profession continues to adapt. Starting in financial statements it has expanded into a multi-disciplinary service providing independent risk assessment, enhancing transparency across diverse organizational disclosures and activities.

Assurance on sustainability

The concept of assurance is important in financial and non-financial reporting. Stakeholders should be able to rely on the reported information. In the context of sustainability reporting, assurance plays a crucial role in verifying the ESG data. With the introduction of CSRD there is an increasing demand for assurance.

Nial et al. (2023) defines four types of assurance. Limited-, reasonable-, hybrid- and not specified. There are only two levels of assurance relevant under CSRD changes: limited assurance and reasonable assurance. Limited assurance provides a lower level of confidence about the given report and auditor comes with a negative statement that nothing has come to his attention that indicates misstatements. Reasonable assurance is a more thorough and deep process (Ruohonen & Kullas, 2024). It requires data verification, testing, and control evaluations. This is the level of assurance that is provided in financial statement audits and leads to a more positive conclusion by the auditor by stating that the information on the report is correct. It comes with a higher degree of confidence by auditor as well as stakeholders. The level of assurance needed for CSRD is limited initially and would become reasonable around 2030 (Gorrin, 2024; Nial, 2023).

Benefits of sustainability assurance

Sustainability assurance has gained importance with the CSRD and sustainable demands from stakeholder. Nial et al. (2023) identifies different benefits that come with the mandatory assurance on sustainability reporting.

- Improving credibility and reputation—A key benefit highlighted in the article is that assurance helps the improvement of credibility and reputation. External verification of the reported metrics has a strong relationship with the overall credibility of a company among stakeholders.
- Ensuring accurate reporting—Assurance also plays a role in ensuring the accuracy of ESG reporting metrics. The assurance providers thoroughly examine the data collection methods and assumptions that have been made and provide a well explained judgement. The effect of assurance depends on the level of assurance provided.
- Improving or creating legitimacy—Through the assurance report companies can gain legitimacy for their operations. Companies show commitment by disclosing an assured report which improves trust in the company.
- Pressuring responsible behavior—The assurance can create pressure on companies to act more responsible and align with global sustainability goals. The assurance provider's review process challenges organizations to implement better practices.
- Improving transparency and accountability—A well designed process can contribute to improved transparency and accountability of practices and impact. By evaluating processes and gathered data assurance providers can identify areas for improvement. This can lead to better ESG disclosures and stronger accountability.

- Improving stakeholder confidence—One of the overarching benefits of assurance on sustainability is the stronger stakeholder confidence in the reporting company. Trust among investors, regulators and consumers increases by adding an independent and professional opinion on the disclosure.
- Reducing greenwashing —The assurance reduces the risk of greenwashing or selective disclosure of positive sustainable information to mislead the markets. Audits are designed to detect bias and greenwashing in disclosure of information. Hereby stakeholders are being protected. (Nial et al., 2023)

Comparison: financial- and sustainability reporting

The financial reporting is an examined field in the literature. Numerous studies have conducted research to the related components. Sustainability is a less examined field. Some of the literature on financial reporting is applicable to sustainability reporting as well. Still there are some fundamental differences. Wagenhofer (2024) drafted an article about these fundamental differences. These differences are crucial to understand organizational behavior in sustainability reporting.

The core distinction between the reporting area's is that the financial statements provide performance measures like profit and cashflows derived prescribed measurement and reporting principles. In contrast, sustainability reports consist of disclosure of numerous individual datapoints and metrics related to ESG matters. The overarching performance measures like in financial reporting are missing. The lack of these overarching measures can make it difficult for users to assess and compare organizations. (Wagenhofer, 2024)

Financial reporting applies the concept of accruals and the revenue recognition to align timing of economic impacts with periods of revenues. Sustainability reporting is production oriented and reporting metrics like emissions or resource usage are in the period of production instead of a yearly cycle. There is also no stock variable or surplus variables that connect various metrics over time.

Another key point of departure is the reporting outline. Financial statements contain the financial position and performance of the legal entity. Sustainability reports contain disclosure of information from firms across the entire supply chain like suppliers and customers. Wagenhofer (2024) gives an example in emission counting. Scope 1 covers direct emissions from a firm's operations. Scope 2 cover indirect emissions from purchased electricity. Scope 3 requires estimates of emissions from the entire value chain with some products having a multi-year downstream.

The last difference in the article is that financial reporting is focused on past (year) performance. Sustainability reporting requires forward looking targets up to 2050. Such long-term disclosures require a completely different approach.

(Wagenhofer, 2024)

2.4 Assurance Provider Perspective

Complications in sustainability assurance

According to Sonnerfeldt & Pontoppidan (2020) assurance providers in Europe face numerous challenges in the provided assurance services on sustainability reports. This is due to the evolving nature of this domain. The sustainability is different to the traditional financial audit as explained in chapter 2.3. Still the assurance providers are adopting traditional standards in order to create their methods. The existing standards like ISAE 3000 are broad, contain a wide range of subjects, and have a lack of precision. (Sonnerfeldt & Pontoppidan, 2020).

A challenge for assurance providers is navigating the influence clients over reporting content. This can impact the credibility of reporting. The report may reflect managerial interests rather than the interest of stakeholders. On top of that the engagement with stakeholders is often limited. This questions the relevance of the report.

Technical side also present challenges. The assessment of qualitative and future oriented data requires new methodologies that are not established yet. Assurance provider must produce innovative approaches to consistently deliver quality reports. Given that assurance providers are subject to commercial pressure this is not an ideal situation. The interconnected nature of non-financial reporting further complicates the engagements. Providers must often interpret overlapping standards, which is time consuming and challenging (Sonnerfeldt & Pontoppidan, 2020).

The CSRD introduced complications for assurance providers that audit the sustainability reports by companies. Ruohonen & Kullas (2024) conducted a literature study on the complications that come with the regulations of initial CSRD. Some of these hurdles are still applicable after introduction of the EU Omnibus in February 2025.

Standardization is key to auditors in making consistent and reliable judgements. However, the evolving regulations demand continuous adaption of methodologies. Auditors face the challenge of developing expertise on a wide range of areas regarding the topic to be able to assess diverse ESG metrics.

The first version of the CSRD was expected to have about 49 thousand companies in scope. This sudden increase in reporting companies compared to the NFRD strains the resources of assurance providers. They started investing in hiring new people as well as developing new methodologies for the assurance services. Now that the reasonable assurance has been removed, it is uncertain what companies will do with their investment and with that uncertain how many engagements to expect.

Ruohonen & Kullas (2024) introduce the expectation gap. They divide this gap into three types of gaps: knowledge gap, performance gap, and evolution gap. Auditing firms may experience negative comments about their services due to the delivery of limited assurance. People expect more from an auditing firm based on their experiences with financial assurance.

Assurance providers must navigate challenges in resources, new methodologies, and a constant evolving regulatory field. (Ruohonen & Kullas, 2024)

In the comparison of sustainability vs. financial reporting by Wagenhofer (2023) several challenges for sustainability reporting can be identified. A central issue is the current format and content of disclosures. They lack standard metrics and methods. The diffusion of information across various indicators without widely accepted key metrics complicates assurance processes and evaluations.

Service providers also face challenges in value chain reporting. The sustainability information needed is located across the entire ecosystem. Assurance providers should validate data from the entire up- and downstream entities to prevent double counting for example. The need to confirm long term sustainability targets also demand more than usual. Developing robust frameworks for service providers is step one in this process. (Wagenhofer, 2023)

Evolving audit profession

The audit profession is undergoing a transformation. Manita et al. (2020) show how technologies are transforming the audit practice and the role of the auditor itself. Audits served as a governance mechanism to provide assurance. Corporate scandals and increasing expectations have increased concerns about quality and the relevance of the audit. Authors of this article argue that digitalization offers possibilities to improve audit quality.

Auditors can no longer rely on checklist compliance according to Manita et al. (2020). They must adapt to deliver added value to their clients. Rather than checking boxes their role is growing to broader services in systems and processes at the client.

This evolution requires auditors to learn new techniques and adapt. The future auditor must possess strong data capabilities and should be comfortable with digital tools. Critical thinking and problem-solving skills are becoming increasingly important. Audit firms are in the middle of cultural change. They need to adopt an innovative environment, something that can be difficult in the current partner-structure of most assurance firms. Also recruitment must change to attract the right talent.

Digitalization is changing the way auditors work, think, and act. Their current way of working f could be not the best for the auditing future ahead. (Manita et al., 2020)

2.5 Information Technologies

Asif et al. (2023) conducted research to industry 5.0 integration in the ESG disclosure. This is relevant because it gives a current state of technology. Companies have invested and are now to decide whether to keep going or stop due to the EU Omnibus. The article shows the plays a crucial role in the new ESG reporting. It shows ways in which companies can gather data across their entire supply chain and analyze this for their own optimization. Is suggests blockchain for data integrity and analytics tools for insights and trends.

AI and machine learning can assist auditors with data driven decision-making. AI can detect complex patterns and causalities in sustainability data. Generative AI can produce reports with visualizations. The continuous gathering of data can improve safety by making use of continuous auditing systems that are being sold by big assurance providers. These developments are necessary to move forward from periodic snapshots to continuous assurance.

Manita et al. (2020) confirms some of the mentioned technologies above and expands on them. They mention robotic process automation and AI as replacements for data entry and modification. This allows the auditors to spend time to more value-adding work. They also mention that data analytics and data mining tools equip the auditors to analyze large sets of data. Using client's data can overcome the limitations of sample testing. Algorithms can identify weird things and discover risk that could be missed earlier.

Manita et al. (2020) discuss the potential of cloud computing. According to the article cloud computing has potential in real-time data and auditing. They also mention the use of internet of things (IoT) devices for verification and data monitoring. Both can be relevant in the sustainability audit.

Asif et al. (2023) elaborates on the potential of digital twins in ESG reporting. It can provide a representation of the physical supply chain. This enables more accurate monitoring.

Overall, the articles confirm that both the ESG reporting and the audit quality can be improved by adopting technologies in the methodologies. The literature suggests that the technologies that technology needed is already available. The challenge lies in effectively implementing in current operations. (Asif et al., 2023; Manita et al., 2020)

2.6 Literature analysis and visualization

The literature review shows a changing environment in ESG reporting and assurance. Especially about the CSRD that came in 2023. It provides valuable insights in challenges and potential benefits of ESG reporting. The literature lacks information about the very recent EU Omnibus and its implications on companies.

Studies by Chopra et al. (2023) and Mezzanotte (2023) have identified challenges in sustainability reporting. These findings provide understanding in the challenges that companies face. They however do not dive into how these challenges develop with regulatory changes. The literature lacks examples of how companies have tried to overcome these challenges in preparation for CSRD and how these efforts are now impacted by the Omnibus proposal.

Wagenhofer (2023) highlights the differences between financial and sustainability reporting. While this research shows differences of both it does not explore how companies are addressing these differences. The interviews dive into the methodologies companies have developed to bridge this gap.

Chen et al. (2023) shows that strong ESG performance can lead to value creation. This particularly for companies in developed countries and environmentally sensitive sectors. This research suggests a business case for ESG efforts beyond compliance. However, it does not address how companies

perceive and pursue these value creation during of regulatory uncertainty. The interviews should investigate if companies are maintaining their ESG efforts. It is also possible that the Omnibus proposal has led to a reevaluation of their ESG strategies. The interviews also investigate if the value creation proposed by Chen et al. (2023) are complete or if some aspects are missing.

Sonnerfeldt and Pontoppidan (2020) and Ruohonen and Kullas (2024) both show need for adaptation of methodologies in ESG assurance. However, the literature does not provide specific insights into how assurance providers are adjusting their services and methodologies in response to the Omnibus package. The interviews with experts should explore the practical implications of these regulatory changes on assurance practices and how providers are preparing for various scenarios.

The potential of information technology reporting and assurance as discussed by Manita et al. (2020) and Azizi et al. (2023) is big and offers solutions to challenges. Technologies such as AI, data analytics, and blockchain have the potential to improve data. The literature lacks examples of how companies use these technologies. Specifically in combination with regulatory uncertainty. The interviews should investigate which technologies are being adopted and their effectiveness in the ESG reporting process.

A gap in the current literature is the missing insight into decision-making regarding the Omnibus proposal. While the literature discusses general challenges and benefits of ESG reporting, it does not address how companies are weighing these factors against reduced requirements. The interviews need to explore how companies are deciding whether to scale back their ESG efforts or maintain them.

Furthermore, the literature does not provide a clear picture of how companies are managing the operational aspects of ESG reporting in this uncertain environment. Questions remain about how they are allocating resources and restructuring processes in response to the changing regulatory environment. The interviews should dive into these operational decisions.

Last, the literature lacks insights into the specific challenges and best practices that have emerged as companies navigate this period of uncertainty. While general challenges in ESG reporting are well-documented, the difficulties posed by the introduction of CSRD requirements are not explored. The interviews should aim to uncover these specific challenges and identify approaches that companies have developed to address them.

Based on the literature analysis, a visualization can be created (see figure 2). This shows the aspects that companies should consider when establishing their ESG strategy.

Figure 1 - ESG strategy from literature



2.7 Conclusion

The literature review provides insights into the ESG reporting environment. It highlights key challenges potential value creation opportunities. Knowledge gaps remain, which this study aims to address through company and expert interviews. These gaps are needed to understand how large companies can adapt their ESG practices to uncertainty in the form of EU Omnibus:

1. Impact of EU Omnibus: current research does not adequately address how companies are modifying their strategies in response to the Omnibus package. This information is important to show the effects of regulatory uncertainty on corporate approaches.
2. Challenges and Best Practices in Uncertainty: while general challenges are identified in the literature, the specific difficulties faced by companies are not fully explored. Identifying these challenges and emerging best practices, both methodological and technical, is crucial for developing effective adaptation strategies.
3. Future Regulatory Outlook: The literature lacks expert predictions on future regulatory changes and their potential impacts, particularly in light of the Omnibus proposal. This forward-looking perspective is essential for companies to develop long-term, adaptable ESG strategies.

By addressing these gaps this study aims to provide a comprehensive understanding of how large companies are adapting their ESG strategies to the uncertainty introduced by the EU Omnibus. The study produces insights for companies navigating the evolving ESG environment, guide assurance providers in adapting their services, and inform regulators on the practical implications of policy changes. This research contributes to both academic knowledge and industry practice in the rapidly evolving field of ESG reporting.

3. Research Methodology

3.1 Purpose and questions

The fast-changing regulations regarding sustainability reporting has created an environment of uncertainty for both companies and service providers. The recent proposal of the EU Omnibus package aims to reduce the regulatory burden and introduced only two years after introduction. This leaves companies with unnecessary investments. Should they keep going with their reporting ambitions, or should they stop investing time and money in voluntary reporting? This study investigates the future of companies ESG practices. Following sub questions are formulated:

- Sub question 1 —How did companies prepare for their ESG reporting obligations?
- Sub question 2 —How does EU Omnibus impact organizations' ESG strategies?
- Sub question 3 —What are perceived challenges and best practices in navigating uncertainty?
- Sub question 4 —How do experts see the regulations change in the coming years.

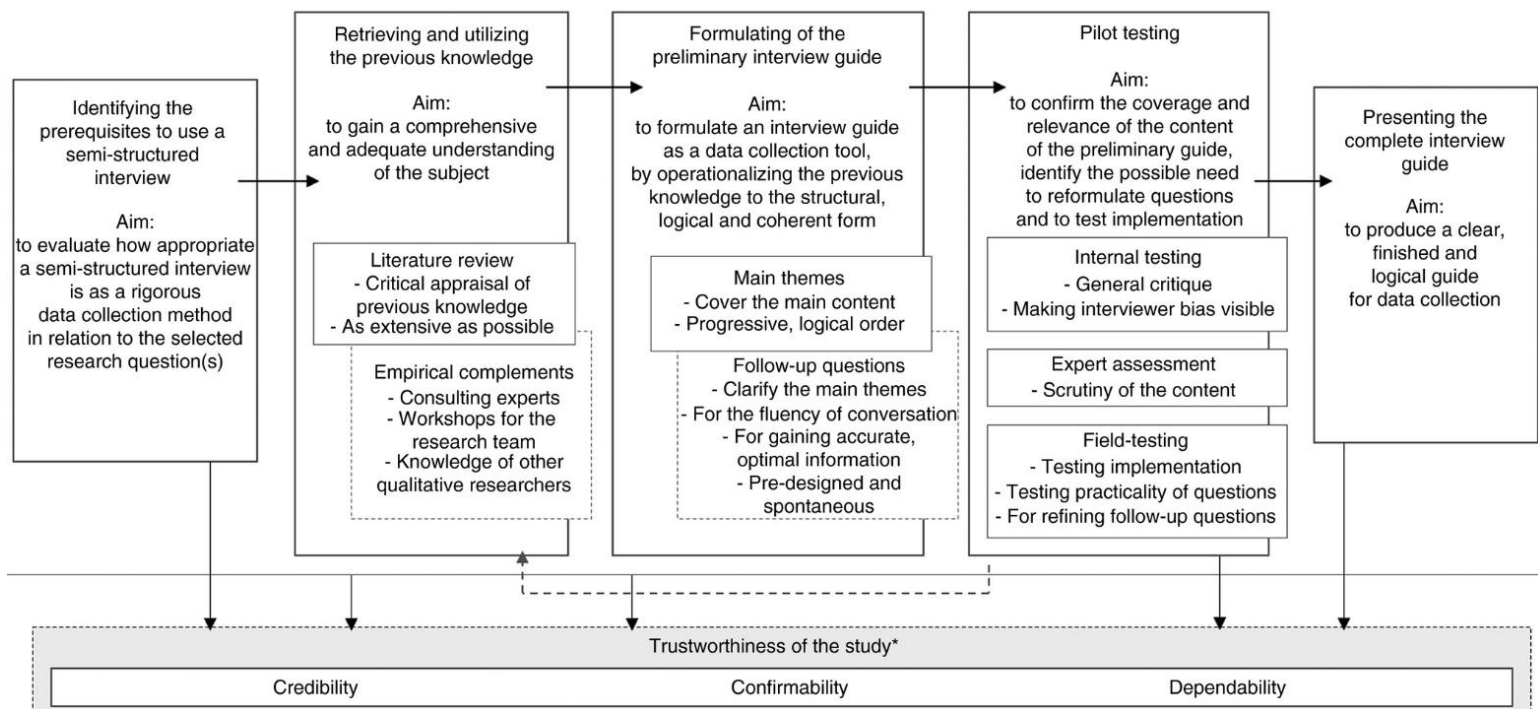
By exploring these questions, the study tries to understand decision-making for companies as they face uncertainty due to the changing requirements. The findings provide insight into the changes of regulatory environment CSR.

3.2 Design

The methodology used in this research is semi structured interviews. Kallio et al. (2016) developed a framework for the development of the interview guide of this type of interviews. The framework is shown in figure 3. Outcomes of the interviews, combined with existing knowledge from literature, answers the questions given in the previous section. Interviews are conducted to companies and assurance provider professionals to gain a understanding of the topic. Company specific parts are discussed at organizations while a more general view on this topic as well as the impact on assurance providers are conducted at PwC.

Literature findings form the basis for the interview questions. All aspects from the visualization are incorporated into the interview questions. Outcomes of these questions will be compared to literature findings.

Figure 2 - Framework for the development of an interview guide



Note. Extracted from Kallio et al. (2016)

The article presents a five-phase process for developing a semi-structured interview guide to strengthen the quality and trustworthiness. Phase one evaluates if interviews address the RQ. Phase two views existing literature and expert knowledge. Phase three creates the preliminary interview guide. Phase four tests this draft through pilot testing using techniques like expert feedback. The final phase presents the guide publicly. (Kallio et al., 2016)

This development process improves the study's credibility, confirmability, and dependability. Credibility improves through appropriate method selection and clear operationalization of concepts into questions. Confirmability increases by incorporating literature perspectives and feedback on the preliminary guide. Dependability and replicability are enabled by publicly presenting the full interview guide and its. Overall, this approach improves the trustworthiness of qualitative research using semi-structured interviews. (Kallio et al., 2016)

3.3 Sampling and data collection

To gather insights into the perspectives of companies and assurance providers this study employs a qualitative approach using semi-structured interviews. The participants are shown in table 3. Purposive sampling strategy is used to select participants from two groups:

- Companies—The sample includes seven large companies that are in the scope of CSRD initially but are out of scope now or face major changes in compliance needs due to the EU Omnibus package. Participants are chosen from various industries and company size to capture a diverse

range of perspectives. Informants are managers, financial- and ESG professionals that are directly involved in the company's sustainability reporting activities.

- Assurance providers—The sample also includes three assurance provider professionals. Participants are selected based on activities in different sectors. Potential interviewees include partners, directors, and managers involved in the development and delivery of sustainability assurance engagements.

Table 5 - Interview participants

Type	Role	Number of employees
Company 1	ESG manager at educational distribution company	251 - 500
Company 2	Sustainability Officer at a printing house	501 - 1000
Company 3	Sustainability lead at a contractor	251 - 500
Company 4	ESG lead at a logistics company	1001 - 2000
Company 5	Head of ESG at a supply chain service provider	501 – 1000
Company 6	Sustainability manager at a food production company	5001 - 10000
Company 7	Finance manager at a production company	251 - 500
Assurance provider 1	Manager at PwC	
Assurance provider 2	Manager at PwC	
Assurance provider 3	Partner at PwC	

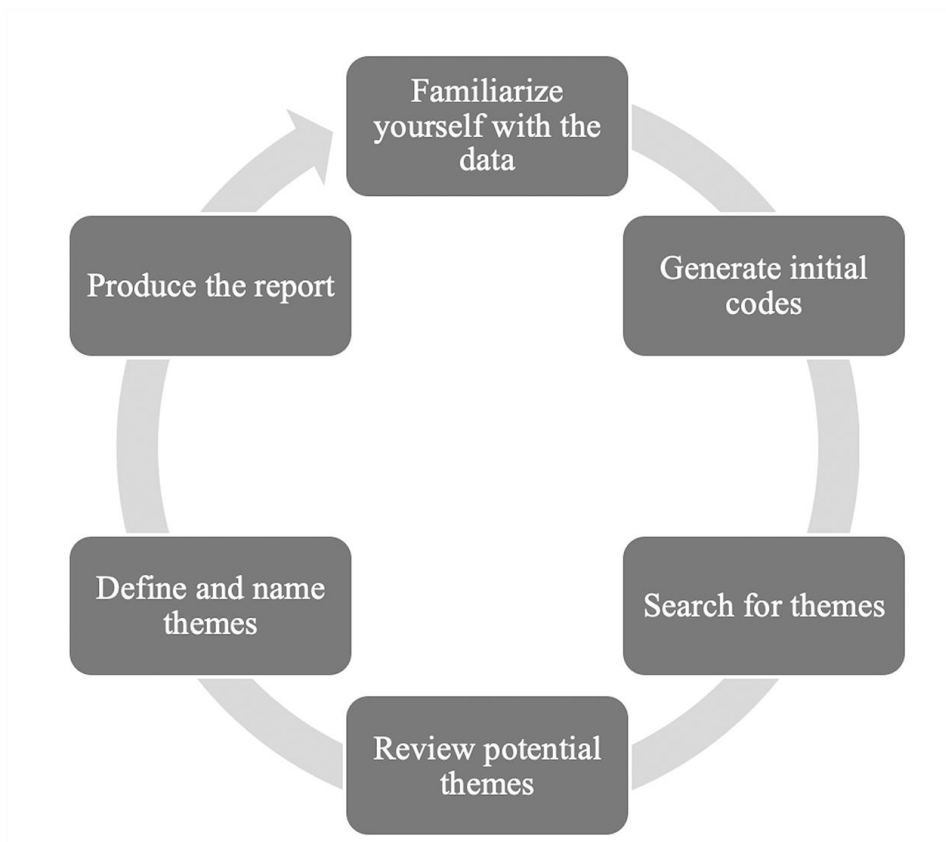
The semi structured interviews are conducted either in person or via video calling depending on the participants preference. Each interview is expected to last 30-45 minutes. The interviews are recorded and transcribed with the participants' consent. The interview guide in appendix A and B will cover areas related to the sub questions in chapter 3.1. This approach offers a view on the current state and future directions of ESG reporting and its impact on assurance practices.

Participants are contacted via email, phone, or LinkedIn. They are provided an information sheet (appendix C) with details about the research goals and their rights regarding informed consent and the right to withdraw at any time.

3.4 Data analysis

Interviews are transcribed using Microsoft Teams (Microsoft, 2025) or Turboscribe (TurboScribe.AI, 2025). The method for analyzing the interview transcripts is thematic analysis. This is a qualitative method used to identify themes within the data. This approach fits this study well for several reasons. Thematic analysis offers flexibility. This helps in examining the multifaceted ESG reporting from different perspectives. It provides a rich and detailed understanding of the data. Thematic analysis also allows for interpretation of the data. This is useful when examining the changing requirements and their impact on the affected companies and their assurance providers. This method can be used inductively and deductively. It allows themes to emerge from the data while approaching the data with predefined themes at the same time. This is beneficial for this study as it has predefined themes defined in the sub questions but remains open for themes that was not anticipated on in the beginning. Software of Atlat.ti (ATLAS.ti Scientific Software Development GmbH, 2025) is used for the coding process. By employing this method we gain an deep understanding of the current state and future direction of ESG reporting practices among large organizations. This offers insight for theory and practice. The analysis is guided by a six step approach in which the following stages are executed. (Wptamara 2024)

Figure 3 - Thematic analysis approach

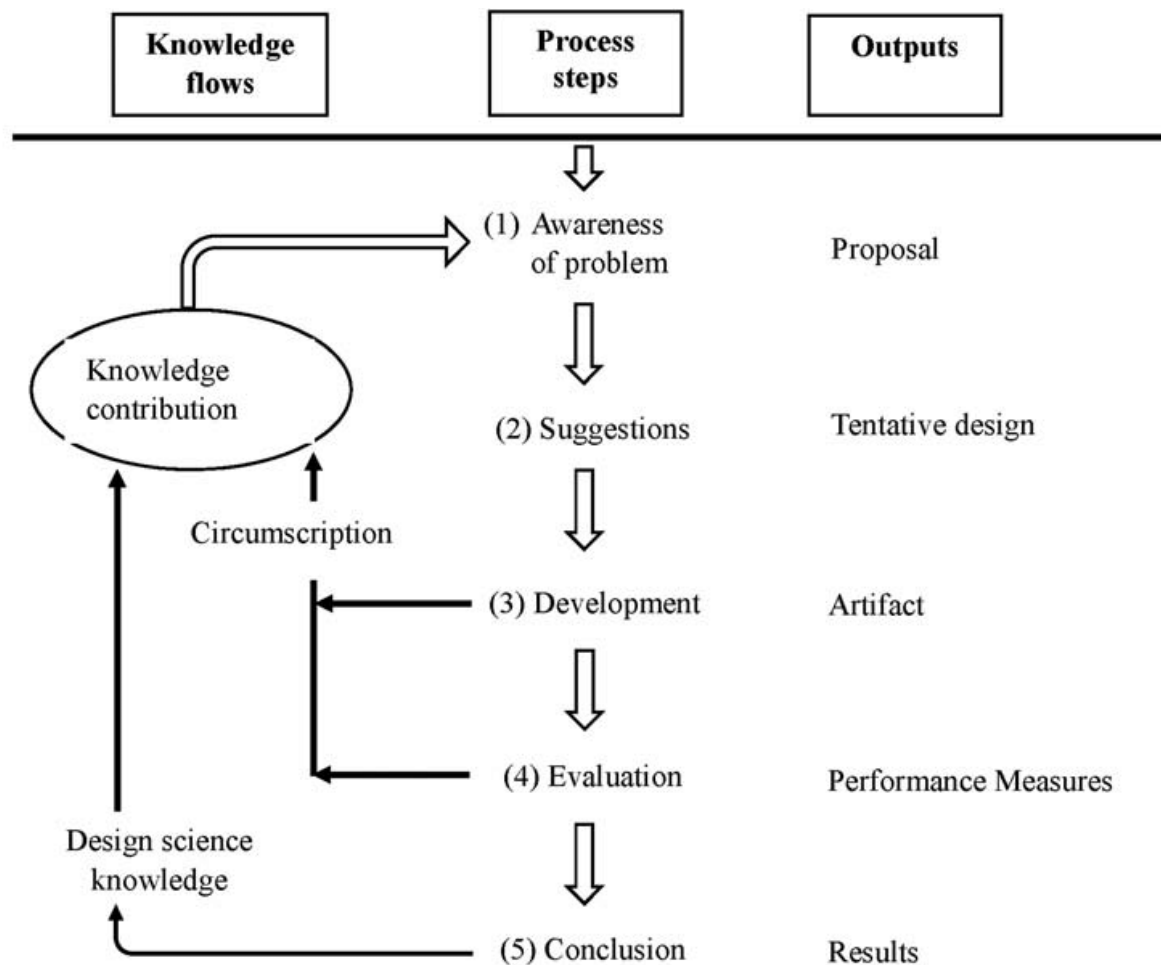


Note. *Extracted from Wptamara (2024)*

3.5 Design science research

This research uses the principles of Design Science Research (DSR) as presented by Vaisnavi and Kuechler (2015). This approach provides a framework for developing and refining results in different steps. It is tailored to address organizational problems like the topic in this paper. The process follows five phases to address the problem: awareness of the problem, suggestion, development, evaluation, and conclusion.

Figure 4 - Visualization design method



Note. Extracted from *Design Science Research in Information Systems* (Vaisnavi and Kuechler, 2015)

It begins with awareness of the problem. A literature search identifies themes in ESG reporting and CSRD regulations. This leads to the suggestions phase where a preliminary visualization is developed based on literature findings. The development phase focusses on knowledge building. Therefore semi-structured interviews are conducted to gain practical insights in company behavior. In the evaluation phase the preliminary visualization is improved with those practical insights. Experts are asked about their opinion on the company interviews. The conclusion phase reflects on the findings and summarizes the contributions.

3.6 Reliability and validity

To ensure the reliability and validity of the thematic analysis consistency is maintained in the coding process and interpretation of the data. A clear framework for coding is developed in Atlas.ti. To improve validity the interpretations are grounded in the interview data. By using quotes and examples evidence are provided as clear as possible.

3.7 Ethical considerations

Ethical considerations are crucial, also in this study. Informed consent is obtained from all participants. A clear explanation of the research purpose and data usage is provided. The data confidentiality and user anonymity is maintained throughout the process. All data is de-identified to protect identifiable information of individuals or organizations. Interview recordings are deleted immediately after transcribing. Given the sensitive nature of corporate reporting practices, any potential confidential or commercial sensitive information is handled with care.

3.8 Limitations

It is important to acknowledge the limitations of a study. Since the study is focusing on large organizations the result may not be generalizable to smaller companies or organizations in another geographical context. The rapidly evolving nature of the regulations means that some of the findings may become outdated soon.

There is potential for some response bias. Despite the anonymity of interviews companies may be inclined to present their reporting practices in a favorable way. The reliance on voluntary participation may introduce bias as organizations with confidence in their ESG reporting practices may be more willing to participate.

Last, the thematic analysis has a limitation. Because of the interpretative nature personal perspectives may influence the way that themes are identified.

4. Results

This chapter presents an analysis of the data collected through interviews with seven companies and three industry experts. The analysis is structured around eight key themes that emerged from the sub-questions as formulated in chapter 3.1. The themes provide a better understanding of organizational behavior during uncertainty by the Omnibus.

4.1 Initial coding and theme emergence

The analysis started with familiarization with the data. This part consisted of listening to audio recordings and reading certain parts of the transcriptions. Then the initial codes were generated. The seven company interviews resulted in 212 codes. Expert interviews were used to test certain claims from the company interviews and resulted in 103 codes. Looking at the data with the knowledge of interviews in mind, eight themes are created to link the initial codes to the corresponding relevant sub-question. The analysis started with the following themes, two per sub question:

- **Preparation for ESG reporting obligations** —The themes "ESG planning and resource allocation" and "Organizational and infrastructural changes" reveal how companies prepared for the initial CSRD. Organizations started new roles and invested in ESG-related technologies. At the same time they started working on their data management and integrated ESG into the business to meet new requirements.
- **Impact of EU Omnibus on ESG strategies** —"Strategy changes post-Omnibus" and "Stakeholder management" highlight the effects of the EU Omnibus package on ESG strategies. Companies have evaluated their ESG priorities and adjusted reporting scopes. This comes with adaptations internal and external. These themes zoom in on their efforts to adapt to Omnibus.
- **Challenges and best practices in navigating uncertainty** —The themes "Challenges in ESG implementation" and "Best practices in ESG uncertainty" provide insights into the difficulties companies face and the solutions they developed. Organizations struggle with things like data quality and reporting complexities. These themes show how companies overcome challenges in the uncertain regulatory environment.
- **Future outlook and value creation** —"Future outlook" and "Value creation beyond compliance" offer a perspective on ESG regulation and corporate strategy in the coming years. Expert opinions on the potential direction of ESG regulations and companies' efforts to implement these predictions into their strategies are examined. These themes demonstrate how organizations are developing adaptive ESG frameworks and risk management approaches to maintain ESG momentum amidst anticipated regulatory changes.

During the coding process, another theme emerged from the data. This theme is about the perspectives of experts on the current regulation and their opinion on related questions. This last theme gives nine themes to work with.

All the codes have been categorized using the existing themes. Some codes are multifaced and are therefore divided in multiple themes. The interviews are of course different and some participants have more relevant information about certain topics than others. Tables 4 and 5 provides an overview of the code distribution among the different companies and assurance experts. As the numbers in this tables show, the focus during the interviews was more towards a forward-looking perspective.

Table 6 - Code distribution among companies

Theme	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Total
Initial ESG planning	3	2	5	4	3	3	5	25
Infrastructural and organizational changes	19	7	4	8	5	13	5	61
Stakeholder management	8	4	5	6	7	1	4	35
Strategy changes post Omnibus	7	1	5	9	3	3	3	31
Challenges in ESG implementation	27	17	17	14	12	13	16	116
Best practices in ESG uncertainty	8	10	8	5	8	7	6	52
Value creation beyond compliance	11	1	6	4	3	4	4	33
Future outlook	16	16	9	7	10	12	7	77
Expert opinions	16	8	6	7	9	14	18	78

Note. Table created with coding software (ATLAS.ti Scientific Software Development GmbH, 2025)

Table 7 - Code distribution among assurance experts

Theme	Assurance expert 1	Assurance expert 2	Assurance expert 3	Total
Initial ESG planning	1	2	0	3
Infrastructural and organizational changes	6	4	2	12
Stakeholder management	3	0	2	5
Strategy changes post Omnibus	4	1	5	10
Challenges in ESG implementation	13	11	11	35
Best practices in ESG uncertainty	9	2	13	24
Value creation beyond compliance	2	1	5	8
Future outlook	9	2	13	24
Expert opinions	7	3	13	23

Note. Table created with coding software (ATLAS.ti Scientific Software Development GmbH, 2025)

4.2 Results company interviews

This paragraph the initial outcomes of the themes are identified. Variety in answers and methods are discussed. Each of the four topics are discussed. Company answers are shown in tables (see appendix D). Some quotes are given italicized and between quotation marks.

Preparation for ESG reporting obligations

ESG planning and resource allocation

The initial actions taken by companies reveal varied approaches. There is a balanced contrast between companies that started directly after introduction of CSRD. It seems there are different perceptions of urgency and importance regarding corporate sustainability and CSRD compliance.

Regardless of their starting times, all organizations started with stakeholder analysis and double materiality analysis, a logical start of CSRD.

Organizations agree on the difficulties of CSRD due to complexity and the large amount of human labor needed. We see that companies counted on big spendings to set up their CSRD processes.

Overall, the initial actions reveal a period of big effort across organizations. While starting points where different companies decided to start at the same way. Data suggests that early starters may had an advantage in cost and complexity problems.

Organizational and infrastructural changes

Many companies have made substantial investments. To start with personnel, most companies decided to employ an extra FTE on sustainability, some companies even multiple FTE. Data is clear about the relation between company size and possibility to do so. It is much easier for larger companies to do so. Companies have set up project teams among their employees to support the process. These teams vary from three to 8 people among the participants.

Some companies integrated sustainability in the top management by making someone in the board responsible for the companies ESG strategy. These companies are sure about the importance of ESG and find that “*ESG has veins across the whole business*”. Top down seems like the way to go. Companies leverage the reporting capabilities of the finance departments to setup these process. Some companies made finance responsible for ESG because of the overlap, but came to other thoughts quick because of the amount of human labor needed.

Technological investments are being made for sustainability platforms. These platforms support organizations in their ESG reporting and are a hot market right now: “*ESG management systems, that's a super hot market right now, everybody and their mother has an ESG data platform now.*

”. Investments in AI or advanced analytics lack behind. All companies argue that they first need to focus on getting their process right before investing in optimization initiatives.

The CSRD resulted in a new way of thinking for some companies. Their priorities seem to shift towards a sustainable business. New initiatives for increasing sustainability and work environment started and they reach beyond the CSRD regulations. These companies suddenly want to show the world that they are green. This however is not the case for everyone. Some companies still see sustainability as burden and waste of money. They often refer to the disadvantage they have compared to their US and Asia competitors. There may be a relation between geographical location and sustainability. Companies with closer connections to Scandinavian companies or investors seem to prioritize sustainability more than those who do not.

Only some companies state that sustainability affects every employee in the organization. Most companies agree that not every worker has to know the details and *“Sustainability should not hinder the core business”*.

The role of external consulting services is crucial for most companies. The expertise by these consultants makes understanding and planning the complex implementation easier. Companies said that the investment in external consulting probably made the total project cost cheaper in the end.

The theme presents some large organizational changes and investments in employees, IT systems, and processes. The nature of these changes differs per company but a larger trend among companies is clearly visible.

Impact of EU Omnibus on ESG strategies

Strategy changes post Omnibus

The introduction of Omnibus has various reactions from companies. Some say: *“Great that CSRD is getting less complex”* while they scaled down their CSRD projects. At the same time some companies do not feel for the new Omnibus. They are keeping their efforts for CSRD on the same level and one even said: *“We want to do more than the regulations require”*. Omnibus really led to organizations reassessing their practices and evaluating their options.

Omnibus has also affected the perceived importance of sustainability within organizations. One ESG manager said: *“Due to Omnibus, my role lost credibility within the organization”*. Managers experience that the focus for sustainability quickly shifts away when out of scope for CSRD. *“This management has other priorities than sustainability”* suggests that companies are inclined to focus on top and bottom line. Assurance experts confirm this last movement. Demand for assurance services is down by 60% according to PwC experts.

While Omnibus is created to release regulatory burden for EU companies many say that Omnibus makes its decision-making harder. Omnibus uncertainty and unclear defined goals makes it hard to act upon and evaluate cost and benefits.

The overall sentiment is one of uncertainty: *“Clients are very hesitant about their strategy”*. Variety of responses suggest that the impact of Omnibus is based on company specific factors, further explored in the next paragraph.

Stakeholder management

A strong trend that emerges from the data is the increasing demand for sustainability disclosure by clients. Especially the bigger clients who need to comply with CSRD starting this year need a lot of data from their entire supply chain. This rising demand is uniform for smaller and bigger companies. It has risen to a level that it is harder to comply with client wishes than with the regulations.

Companies mention that keeping good relationships in the supply chain can be helpful with making the CSRD process more efficient. Some companies even offer help to smaller companies with gathering and delivering the data needed.

Not only are external stakeholders important. CSRD has a lot of internal stakeholders in organizations. Just like finance CSRD is integrated in every aspect of the company. *“Communication with stakeholders is important and compliance cannot be done without them”*.

Challenges and best practices in navigating uncertainty

Challenges in ESG implementation

The implementation of CSRD comes with many challenges for companies. The complexity of and breadth of the requirements can be overwhelming, especially for smaller companies. Or as a sustainability manager said: *“I feel bad for the smaller companies, it’s like they are asked to climb Mount Everest with shorts and a t-shirt on*. Data related issues emerge as primary concern. Challenges occur in gathering and quality with scope 3 emissions being the hardest.

The evolution of regulations adds to the uncertainty. This makes it difficult for companies to establish stable strategies and practices. Organizations struggle with making potential value creation visible.

Within organizations there is a knowledge gap about CSRD and sustainability; *“I see managers who do not dare to mention ESG because they lack confidence in their knowledge”*. This results in managers being unable to convince partners or stakeholders to become proactive. Also the use of technology for ESG purposes lacks behind. Integration of AI and advanced analytics seem to go slowly.

Companies have difficulties with changing needs from stakeholders. Some customers require more or totally different disclosures than the regulation do. This creates additional pressure on businesses to collect and report data beyond compliance.

The European regulations raise concerns about the potential negative impact on competitiveness. Companies worry that the strict and world leading regulation lead to higher cost. Especially when competing with companies in Asia or the US, a disadvantage is expected.

And last there is a thought among companies that the sustainability goals by the European commission are way too ambitious. Companies need more time to adjust and get the necessary processes implemented within their organization.

Best practices in ESG uncertainty

Companies are adopting various strategies to navigate challenges that come with the implementation of ESG. A proactive approach emerges as the best practice. Organizations emphasize the importance of early planning and action despite the uncertainty that may be there at the moment.

Organizational structure plays an important role in this proactive approach. The interviews revealed that in order to be successful in ESG it has to be part of the top management team. This is necessary to create responsibility and helps integration into other departments like finance. The reporting expertise and organizational oversight of the finance department make it a good starting point for ESG disclosure. Almost every company says however that an extra role needs to be created as well as projects teams across different departments: *“Finance is used to reporting, but ESG requires other knowledge and stakeholders”*.

External expertise is widely used. All companies engaged consultants to provide guidance and verify processes. This support is often complemented by internal knowledge sharing sessions and workshops to make the integration of ESG in the future easier.

Data management emerges as a focus area. Especially on data availability and data uniformity. To accomplish this communication with stakeholders is important. Companies admit the importance of cooperation across the value chain in order to make CSRD doable for everyone.

Setting clear goals despite the uncertainty of regulations is seen as the best practice. This allows companies to maintain focus. Company one and two for example: *“Waiting for certainty is not an option”*. And company four: *“We see sustainability as long term goal; short term regulations will not change our way of working”*.

Value creation and future outlook

Value creation beyond compliance

Many companies recognize some ways of value creation that comes with ESG. They also mention that these value creation ways are hard to quantify. The interviewees revealed nine potential sources of value.

- **Stakeholder relationships:** Companies see ESG as an opportunity to position themselves as sustainable partners for stakeholders. This improves their reputation and strengthens relationships.
- **Internal process improvement;** Implementing ESG often leads to improvements in the process. Inefficiencies and bottlenecks are identified and can be renewed. It may result in efficiency and cost savings.
- **Employer branding;** ESG contributes to a company's image as employer. This potentially improves attracting talent in a workforce that is more often concerned about sustainability.
- **Product and service quality;** Focusing on sustainability can lead to improvements in product and service quality.

- **Environmental impact;** The regulations were initially created to improve sustainability initiatives within companies. When companies will implement CSRD then there will be a more sustainable Europe.
- **Transparency;** ESG reporting creates greater transparency which can improve trust among stakeholders and lead to better decision-making.
- **Financial benefits;** Some companies note value in financing opportunities. Things like green finance options and a better access to capital can increase the leverage and thus profits of companies.
- **Risk assessment;** In CSRD companies need to think about e.g. the risks of climate change for the business. CSRD therefore creates awareness which can result in better risk strategies.
- **Customer awareness;** There is a trend towards customers becoming more aware of product lifecycles. This can create opportunities for companies with strong ESG performance.
- **Strategic opportunities;** Some companies embrace ESG with updated business models and innovation. This drives the business forward both in performance and financially.

Interestingly there is a goal among some companies to go beyond what regulations require. This indicates belief in ESG value creation. It shows the shift to more sustainable business models.

Despite the quantification of sustainable initiatives remaining difficult in most cases, companies see some potential in their sustainable efforts. The value creation that comes with those efforts seem to touch the entire business and may therefore be interesting to everyone.

Future outlook

ESG managers and experts are expecting several developments in sustainability reporting practices. There is a consensus that the ESG regulations will continue to evolve and eventually get bigger. The CSRD is seen as the beginning with expectations of *“more requirements in the future and eventually sustainability becoming a license to operate”*. Experts predict that for the first years regulators will go easy on the organizations that do not fully comply, but that lenience will disappear over time.

The future of ESG is expected to be influenced by technological advancements. At this moment it is considered too early for AI or advanced analytics due to the lack of historical data and insights. There is however potential in the future. Experts expect AI driven data collection, analysis and report writing. Anticipation of the big ERP providers is also expected that they will introduce full ESG capabilities into their systems.

The scope of ESG is expected to broaden. Larger companies that are currently falling under CSRD will influence smaller companies in their supply chain when asking for their disclosures. Scope three emissions will remain difficult for coming years.

Experts believe it will take time for the rest of the world to reach similar levels as leading Europe. There is however an expectation that change will come to regions like Asia and the US.

Companies are advised to be proactive rather than waiting for regulatory certainty. Experts believe that sustainability initiatives require investment in resource allocation and that long-term planning is important to overcome challenges of uncertain political decisions.

The CSRD is seen as an accelerator for sustainability. Experts think that ESG will increasingly drive both top and bottom-line growth by the value creation opportunities that come with it. It is not solely a compliance thing.

Data quality remains a concern and so will advanced analytics. However, experts believe that ESG reporting and implementation will become easier over time as companies gain experience and better tools become available.

4.3 Results assurance expert interviews

Assurance experts were used to test the company interviews on generalizability and validation. Assurance experts from PwC have experience with a lot of companies varying in size and sector. In the table in appendix E are the questions and corresponding answers given by the experts that are found relevant. A summary of these answers is written down below.

Expert opinions

There is general agreement on the value creation that comes with it like increased transparency and trust. Experts mention concerns about complexity and sudden implementation.

The CSRD is viewed as a big challenge for companies. Especially smaller ones and those new to ESG reporting. The substantial workload and the difficulties in company-specific aspects make it a big challenge. The costs associated with implementation due to labor, consulting, and IT systems are confirmed but opinions vary on the level of these costs.

The EU Omnibus package receives mixed reactions and opinions. It is seen as providing some relief. Particularly for smaller companies. Frequent regulatory changes however undermine Europe's credibility and potentially disrupt financial stability by creating a competitive disadvantage. Some experts suggest that easing assurance requirements might have been more beneficial. This would allow companies more time for improvements.

Despite the experts agree that ESG is becoming increasingly important in strategy. Some experts assert that a strategy without ESG is no longer viable in modern businesses.

Regarding technology, experts agree it is too early for most companies to invest in advanced tools like AI for ESG reporting. The focus should be on creating and getting to know basic processes first. ESG data quality will likely lag behind financial data for many years. There is a need for improvement in data collection and practices.

European regulations are the most far-reaching globally. This makes Europe a leader in ESG. This also raises concerns about the competitiveness of European companies on the global market. Experts believe that other regions like Asia and the US will eventually adopt similar standards in the future.

The 2030 goals set by various ESG initiatives are viewed by some experts as too aggressive, suggesting that the world needs more time to adjust. There is a view that sustainability can only be prioritized when companies costs and profit are good.

Looking to the future, experts anticipate that while companies may not fully comply with CSRD as initially envisioned, they will likely continue some level of ESG efforts. There is an expectation that regulations will become stricter over time. Sustainability will become a license to operate in the business world.

Experts see the CSRD and broader ESG focus as positive developments. They hope these initiatives will lead to more companies improving their sustainability practices and creating greater

transparency. The potential for value creation through ESG reporting is recognized. Benefits range from improved trust from stakeholders to internal processes and commercial opportunities.

Best practices

Based on expert answers several best practices for navigating ESG reporting and compliance came to attention. The overarching message is that early start and adoption is crucial. Companies should definitely start with their ESG efforts even when regulations are uncertain.

A key recommendation is to use technology effectively. ESG systems are becoming popular and can streamline reporting processes. Experts caution that at early stages these tooling are not optimal. *“First focus on your processes and then start with optimization”*. The quoted expert aims at the companies knowledge and data management practices. With a mature ISO certificated company this will be not so hard. For smaller and less organized companies this may be quite hard.

An important expert advice is about the internal stakeholders. Expert mentions the golden triangle as the way to go for companies. This means that finance because of its reporting skills, ESG because of their sustainability knowledge, and management because of their strategic vision should cooperate in the strategy of a company.

Implementing the CSRD should be seen a way to make the company better. Not just as regulation. When the regulations is implemented like it should be, there is lot of value being created. Both now and in the future.

4.4 Interview conclusions

Companies have varied ways to prepare for CSRD and ESG reporting obligations, although most approaches are quite similar. The results show that despite the different starting times their starting actions are the same, namely with DMA and stake holder analysis. Organizations have made investments in personel. Every company seeked help with an external consulting firm. Seven out of eight did hire an FTE to deal with sustainability matters. One organization even hired multiple FTE. All organizations have set up project teams to accommodate the needs across various departments in the organization. Technological investments in ESG platforms are common. Use of advanced analytics and AI has not really started yet in the early stages but is expected to grow every year. Assuranc experts see the high workload of the CSRD and confirm that the companies preparation actions are widely spread across the client portfolio.

The introduction of the EU Omnibus package has different reactions. Some companies welcome it as simplification and a release of pressure on their employees. They argue that compliance was to difficult and are scaling back their CSRD efforts. Others see it as a break of sustainability trend and argue that other measures would have been more appropriate. Everybody agrees that EU Omnibus comes with more uncertainty. Companies have no idea what to expect. Experts confirm that the Omnibus is making long-term planning and strategy creation difficult.

Companies identified many challenges that come with the implementation of ESG practices. These challenges include all kinds of data related issues, uncertain regulations, internal knowledge gaps, hard to quantify benefits, and big workload. Especially the smaller companies are struggling to keep up with their larger competitors.

Both companies and experts seem to agree on several best practices. Most important is taking a proactive approach. Companies should implement ESG where possible. This begins with top management where ESG responsibilities have to be included. Experts suggest that a golden triangle has to be formed with sustainability, finance, and management departments. Data management and value chain cooperation is also named as key to success.

The value creation potential of ESG is recognized by some companies and all experts. Companies that implemented ESG in their strategy are certain that this creates a win for both companies and the environment they are operating in. Nine sources of value are identified, from improved stakeholder relationships and greater risk management to better financing opportunities and more attractive employment opportunities. Just compliance with these regulations is costly but embracing them and integrating them into the strategy will bring a lot of value to the table in the future. A great opportunity to improve top and bottom line growth.

Looking into the future, companies and experts agree that this CSRD was the first step and there are many to come. Both groups foresee more regulations in the coming years. Both groups see that Europe is leading in sustainability and expressed concerns about the potential competitive disadvantages. However, an expert noted that investment now comes with big value when the rest must change their way of working in a more rigorous manner.

Concluding, the combines insights show a complex and evolving ESG environment. Challenges are significant but the strategic importance that comes with them is recognized by most. Proactive and regulations-embracing approach is the way to go. Companies that integrate ESG into their core business processes are likely to be better positioned for future success and value creation.

5. Discussion and Conclusion

5.1 Company and expert discussion

Discussion

The combination of literature and interviews reveal a complex environment within ESG practices. The literature provided a theoretical framework that was captured in an initial visualization. The interviews resulted in practical insights to complement this visualization.

Literature highlighted the potential for value creation through strong ESG performance (Chen et al., 2023). The interviews revealed more potential value creation opportunities. CSRD and EU Omnibus did most certainly raise awareness and this results in a “greener” environment. The corporate environment is more involved in sustainable practices. This causes the value creation potential to grow with it (Camilleri., 2019).

Challenges in reporting, like data gathering, were mostly confirmed (Drempetic, 2019). The interviews did add some more specific challenges related to an organization characteristics. Internal knowledge gaps and Omnibus complexity are examples of challenges that arose during the interviews. This shows the need for guidance that addresses the “how” of ESG implementation.

Interviews revealed organizational changes companies are making. The creation of sustainability roles and project teams across departments align with literature recommendations (Mezzanotte, 2023). Interviews did however provide with more information about the way to integrate responsibilities and tasks across departments, golden triangle being one of those best practices.

The potential in information technology was presented in literature. Despite the high potential, companies are not implementing advanced IT for ESG purposes. Experts confirm that since companies are still in early stages of adopting methodologies, this will take a few years to happen. Experts advice companies to first get their methods and practices aligned before starting with optimization projects.

The future outlook from interviews adds a dimension to ESG strategy. While the literature advocates for an adaptable and agile strategy, companies and experts say that long-term goals are the way to go. Every participants agrees on the increasing role of sustainability and the increasingly strict regulations that will come with it

An effective guidance for corporate ESG strategy must balance theory with practice according to Wolf et al. (2013). Following visualization (figure 6) summarizes the key findings from the literature and combines this with practical interview findings. It reflects core elements strategy and implementation and can guide large companies to a sustainable future.

Figure 5 - Adjusted ESG strategy



Note. Generated in Lucid chart

Potential value creation goes beyond compliance. It focusses on benefits that strong ESG practices can bring. The research identified nine sources of value varying from financing opportunities to risk management. This aspects encourages companies to view ESG not just as regulation but as strategic opportunity. Identifying specific value creation opportunities helps in establishing the right strategy.

Long-term planning and goals represent the need to set clear and sustainable objectives. One of the objectives should be to withstand regulatory changes. That is the reason for regulatory changes to be removed from the visualization.. With value creation in mind companies should take a long term approach instead of making large expenses for short-term compliance.

Stakeholder and value chain communication involves engaging with internal and external stakeholders. Transparent communication and cooperation helps companies across the value chain to efficiently gather data and manage expectations of increasing customer demand for disclosure of sustainability information.

Data management and technology covers collection and management of ESG data. This emerged as big challenge for many companies. Technology is seen as driver of future efficiency in ESG reporting.

Companies are however not yet ready to adopt advanced technologies. Companies should start with more simple ESG platforms and get their processes right before moving to more advanced analysis methodologies. Aspects like data uniformity and data gathering can help future implementation of technologies.

The final aspect of the visualization is organizational structure. This is fundamental to integrate ESG in the organization in an effective way. The findings are clear about the importance of ESG integration in top management layers. Companies should combine expertise by using the golden triangle approach of finance, ESG, and management departments.

Conclusions from literature and validation

Results that are drawn from the company interview results, are validated by conducted interviews with PwC ESG experts. We see that some conclusions that were drawn from literature are confirmed by the interviewed companies.

Results that are drawn from the literature- and company interview results, are validated by conducted interviews with PwC ESG experts. We see that some conclusions that were drawn from literature are confirmed by the interviewed companies. The challenges that have been found in literature (Chopra et al., 2024; Nial, 2023) are also experienced by the respondent companies. These challenges however were not complete as current uncertainty brings some more problems. Experts do confirm that they see comparable obstacles with their clients.

Value creation is mentioned in the literature (Chen et al., 2023). Interviews had a lot to add to those literature findings. A total of nine value creation opportunities were identified. Experts did confirm that strong ESG performance comes with value. These experts are however not completely unbiased as their service offerings are about the ESG strategy.

Examples of information technologies are found in literature (Azizi et al., 2024; Asif et al., 2023). However, there are no examples found from companies that already implemented these technologies for ESG purposes. Companies and experts see indeed the opportunities of information technologies in the future but say that it is too early for advanced tech in this stage.

Companies and experts were very consistent. Answers that were given by the different companies are often confirmed by experts with large client bases. This gives reasons to think that the sample with respondents is a representative sample and that it provides a reliable picture of the entire population of companies in Europe.

5.2 Sub questions

How did companies prepare for their ESG reporting obligations?

Despite different starting times, companies chose the same first steps. Starting with stakeholder analysis and DMA. This common starting point already gives away a bit about the importance of cooperation between different stakeholders.

Investments in the workforce was key among interviewed companies. Most organizations hired at least one FTE focusing on sustainability. Some larger firms even bring multiple FTE to this topic. This shows that CSRD is indeed a labor intensive practice. All companies formed cross organizational project teams to accommodate the process in different departments.

Many organizations took a top-down approach. They integrated sustainability into their top management. With board members directly responsible for ESG performance they show their perceived importance of this topic. This was sometimes complemented by the reporting capabilities of finance departments. Companies realized that ESG reporting demanded specialized knowledge beyond traditional financial expertise and most of them have moved ESG away from finance.

Technological investments in sustainability platforms and ESG systems were common among companies. More advanced technologies like AI or analytics were generally neglected. Firms prioritize the basic processes first.

The role of external consulting services proved crucial for companies. It provided expertise in navigating the complex process of implementation. Many organizations found that this investment in external help reduced overall project costs. This highlights the value of specialized knowledge in this new regulatory environment.

The CSRD requirements motivated some companies to shift their organization towards sustainability more. New initiatives for improving sustainability and work environments were launched. Sometimes even extending beyond the scope of CSRD regulations. This shift indicates that for some organizations ESG compliance is resulting in broader corporate sustainability efforts.

It is important to note that this embrace of sustainability was not for everyone. Some companies continued to view sustainability primarily as a regulatory burden. They expressed concerns about potential competitive disadvantages in comparison to non-EU competitors. These different attitudes highlight the varying perceptions of ESG value across different organizations.

The overall trend shows organizational changes and investments in personnel, processes, and technology. This preparation shows the impact of CSRD and the labor needed for compliance.

How does EU Omnibus impact organizations' ESG strategies?

The introduction of the EU Omnibus package has resulted in different reactions from companies. For some impacting their ESG strategies.

Some companies have welcomed the Omnibus package as a simplification of CSRD requirements. It motivates them to scale down their CSRD projects. These organizations view the package as a reduction of pressure on their employees and resources. Their response suggests that the original CSRD requirements were perceived as a burden for some. The Omnibus package represents an easier to comply with framework.

Other companies have kept their original effort towards CSRD compliance. Some even show intentions to do more than the requirements. This indicates a priority to sustainability that goes beyond mere compliance. It suggests that these companies see value in ESG practices regardless of regulations.

The Omnibus package also came with some negative consequences. In some organizations it affected the perceived importance of sustainability. ESG managers have said that they experienced a loss of credibility within their companies. Management attention shifted away from sustainability when it fell out of the regulatory scope. This shift suggests that in some companies, sustainability is driven by compliance requirements rather than value.

Perhaps the most impact of the Omnibus package is the creation of uncertainty in strategy. Many companies report that while Omnibus intends to reduce regulatory burden, it has made planning more difficult. The lack of clear goals makes it challenging for companies to evaluate the cost of their ESG strategies.

The impact on the assurance industry is big. Experts report a decrease in demand for assurance services. According to PwC experts there has been a 60% reduction in demand following the Omnibus. This indicates a broader trend of companies reducing their ESG efforts of the regulatory changes.

Despite the regulatory easing external pressures continue to drive ESG efforts. Many companies report increasing demands for sustainability disclosures from customers. Especially larger ones who need to comply with CSRD. This rising demand is the same across company sizes and has become more demanding than the regulatory requirements in some cases.

In conclusion, the EU Omnibus package has had an impact on organizations ESG strategies. While it is a relief for some it has also created new challenges. The responses show the need for companies to balance regulatory compliance and long-term sustainability goals.

What are perceived challenges and best practices in navigating uncertainty?

The implementation of ESG strategies presents companies with a set of challenges (Chopra et al., 2024; Nial, 2023). Organizations are developing practices to navigate this uncertain environment effectively.

One of the most important challenge is complexity. The complexity and breadth of CSRD requirements stand out as hard, especially for smaller companies. As one sustainability manager said: "I feel bad for the smaller companies, it's like they are asked to climb Mount Everest with shorts and a t-shirt on." This shows the gap between the demands of the regulations and the resources available to smaller organizations.

Data issues are a concern across companies of all sizes. The challenges in gathering quality data are known as one of the most difficult aspects of ESG reporting. In particular scope 3 emissions because of its involvement throughout the whole value chain. The evolving regulations makes it challenging for companies to establish strategies and practices. This uncertainty not only affects compliance efforts but also makes quantifying the potential value from their ESG initiatives harder.

Internal knowledge gaps present another hurdle. Organizations report a lack of confidence among managers in their understanding of ESG concepts and requirements. As one interviewee noted, "I see managers who do not dare to mention ESG because they lack confidence in their knowledge." This knowledge gap can hinder efforts to convince partners or stakeholders to adopt ESG strategies.

The changing needs of stakeholders add more complexity. Some customers demand disclosures that go beyond regulations. This creates additional pressure on businesses to collect and report data. Concerns about competitiveness are important within European businesses. Especially companies with foreign competitors. US and Asia are mentioned as regions where sustainability is less important and regulatory burden is non existing.

Best practices emerge as companies try to navigate. A proactive approach seems to be key. Organizations see the importance of early planning and action despite uncertainties.

Integrating ESG into the top management structure is effective for many companies. Doing so ensures that sustainability is considered at the highest levels of decision-making. This helps to integrate ESG across the organization. Creating sustainability roles and project teams has also been best practice. This allows for knowledge gaining and ensures that ESG is included in all aspects of the business.

External expertise is utilized with all of the companies interviewed by engaging consultants for guidance and process verification. This external support is sometimes complemented by internal ESG sessions and workshops for employees working on sustainability. This builds knowledge and helps create a culture of sustainability across the organization.

Data management emerged as critical. It is important to improve data availability and uniformity. Good data practices form the basis to effective ESG reporting and strategy. To achieve this organizations communicate and help stakeholders to set up cooperation across the value chain. ESG success requires data and knowledge sharing.

Experts advocate for a "golden triangle" approach. This means integrating finance for its reporting expertise, ESG for sustainability knowledge, and management for strategic purposes. The golden triangle contains everything needed for developing and implementing ESG strategies. This approach makes sure that ESG is integrated in both operations and strategy.

Experts tell the importance of viewing CSRD not only for compliance but as an opportunity for business improvement. Setting clear goals despite uncertainty and focusing on long-term sustainability can create value and drive top and bottom-line growth.

In conclusion, while the challenges of implementing ESG are large, companies are developing the best practices to navigate. By focusing on long-term value creation they can turn the challenges into opportunities for sustainable growth.

How do experts see the regulations change in the coming years?

Experts expect developments in ESG regulations in the coming. Their opinions provide foresight for companies navigating ESG. There is a consensus among experts that ESG regulations will continue

to expand. The current CSRD is viewed as just the beginning with more requirements in the future and eventually sustainability becoming a license to operate. Companies should prepare for increasing regulations in ESG practices.

Experts predict that regulators will initially show some leniency towards organizations that are not fully compliant with CSRD. They caution however that this period is likely to be short and that non-compliance can lead to high fines. As regulations mature and become more established the tolerance for non-compliance is expected to disappear. This underscores the importance of early adoption and proactiveness.

Technological advancements will probably play a role in the future. But it is important to focus on establishing basic processes and data management practices first. Experts foresee potential for AI data collection and analysis when the basic processes are more mature. They also expect large ERP providers to introduce ESG capabilities into their systems.

The scope of ESG is expected to grow and more detail is needed. Experts say that larger companies falling under CSRD will influence smaller companies in their supply chains. This extends the reach of regulations. This means that companies that are out of scope for now will probably need to do some reporting to their customers. Experts warn that scope three emissions are likely to remain a challenging area for several years.

Europe is currently leading in ESG regulations. Experts believe it takes time for the rest of the world to reach similar levels. There is however a general idea that regions like Asia and the US will eventually adopt comparable standards.

Experts strongly advise companies to adopt a proactive view rather than waiting for certainty. They say that sustainability initiatives require big investments and that long-term planning is key to overcoming challenges. This advice is in line with the view that ESG is becoming a part of business strategy instead of only a compliance issue. Experts see CSRD regulations as accelerators for sustainability. They also say that ESG will increasingly drive profit through value creation opportunities. This perspective strengthens the idea that ESG integration can offer competitive advantages and open opportunities.

In conclusion, experts foresee a future where ESG regulations become more important. Challenges in data quality and scope three emissions remain. ESG becomes an integral part of every business strategy. Companies that prepare for this future by adopting proactive approaches and long term goals are likely to be better positioned for success.

5.3 Conclusion

Because of evolving CSRD regulations and the introduction of the EU Omnibus package large companies in Europe need to adapt their strategy. Regulations are very uncertain with the Omnibus not officially being confirmed. Companies must navigate and decide whether they invest in a costly ESG project or halt their efforts, despite the lack of research on this topic.. The RQ is as follows: “How can

large companies in Europe adjust their ESG reporting practices to align with uncertainty in CSRD regulations?". Research into existing literature, complemented with interviews from practitioners, provided best practices for when companies are developing their ESG strategy. This answers the need for practical guidance in strategy development.

At the core of the answer to the RQ is the recognition that ESG is not only a regulatory burden but really a great opportunity for business improvement. Companies should integrate ESG into their long-term strategic planning. Therefore they must set clear goals despite current uncertainties. This approach allows organizations to enjoy many value creation opportunities and gain advantages over competitors, especially in the long-term.

To bridge knowledge gaps organizations should invest in their workforce through specialized hires and training programs. Internal capabilities can be supplemented with external expertise. This can provide guidance in navigating the complex regulations.

To unlock full potential with ESG reporting the organization needs a strong organizational structure. The integration of sustainability into top management ensures that ESG is considered in strategic decision-making. The creation of dedicated sustainability roles and cross-functional teams that report to this ESG top manager creates this strong structure. Companies should somehow make a "golden triangle" responsible for the reporting activities. This approach that integrates finance, ESG, and management provides the team with all relevant knowledge and managerial power to get things done.

Data management emerged as a difficult factor in ESG reporting. Companies should prioritize establishing solid data collection and management processes. When these process run like foreseen, they can start investing in advanced technologies. This method supports future technological advancements and prevents excessive cost for technology.

Stakeholder and value chain collaboration are essential since value chain data is in scope of ESG requirements. Cooperation is particularly needed in managing scope 3 emissions. Besides that it can help to meet customer demands, which differ from regulatory demands sometimes. By cooperating across the value chain, companies can improve data quality and make a sustainable impact in a more efficient way.

Expert opinions about the future of ESG reporting is simple; ESG is becoming more and more important and will dominate the regulatory environment in the coming years. A more detailed disclosure is expected. This will eventually drag every company inside scope of the regulations. Whether it is direct or indirect, companies from various sizes will have to adjust to the trend. By adopting these themes in the right way large European companies can create a strong reporting framework that makes them futureproof. This does not only align them with current CSRD regulations but also makes companies ready to drive sustainable business practices and value creation in the long term. ESG evolves from a compliance issue to a core business strategy. Companies that proactively embrace these practices are be better positioned for success in an increasingly sustainability focused world.

5.4 Contributions

The study provides insights into how large Dutch organizations are adapting to regulations. By examining practices and strategies it bridges the gap between theory and practice. It offers a perspective on how companies are navigating the uncertainty in regulations and on their motives to do so. Literature was lacking this perspective because of the very recent nature of EU Omnibus.

By using both companies and experts the study captures a full view of the current situation. This allows for better understanding of challenges, best practices, and a future outlook ESG reporting. It contributes to knowledge with a current state and future direction of regulations and corporate actions.

The research identifies new challenges and best practices to overcome them and complements studies from Chopra et al. (2024) and Mezzanotte (2023). With most important aspects captured in a visualization this study provides to knowledge by testing current literature and to practice by guiding companies. It provides a better view on the impact of regulations on companies and their motives to act in the way they do.

The study also offers a future outlook on ESG regulations and sustainability trends. It combines expectations of experts with thoughts of those working in the corporate sustainability field. Parties like companies, assurance providers, consultants, and researchers can act upon those expectations.

Potential value creation by strong ESG performance of Eliwa et al. (2019) has been extended. The research identified nine value opportunities that come with sustainability practices.

This study improves the understanding of organizational behavior during uncertainty. It guides companies with strategy creation and adds to existing literature on best practices, for example with the finding to not be agile but commit to long-term goals. The findings can serve practitioners and academics in further exploring this relevant area as it forms a basis for future research in this highly relevant and state of the art topic.

5.5 Limitations and future research

This study has several limitations that should be considered. The focus on large companies in the Netherlands may limit the generalizability of the findings. The experiences and strategies of may not be the same for smaller or larger companies than the sample. This is also the case for companies in different regulatory environments or geographical locations.

The research was conducted during a period of large regulatory changes. This timing makes it very relevant at this moment but may affect the relevance of this study in the long term. Regulations can change basically any moment.

The sample size of seven companies and three ESG experts provided rich qualitative data. This data may, despite expert validations, not be applicable on the entire Dutch industry due to lack of variance between branches. These limitations should be considered when using the results.

There are several possible research directions that can be build upon this research. The first one is a comparative study to examine how these results differ among the EU countries. An interview

respondent said that Scandinavian countries are more into ESG. There is a high change that value creation or optimal strategies differ depending on their environment.

This study provides a helicopter view of the entire industry. Future research could be done to investigate the differences between various industries that companies are operating in.

IT is mentioned in the study as too early. Research to relevant IT systems is very scarce and since companies are going to scale their IT infrastructure in the coming years, research on best IT practices may be highly relevant for companies.

Companies worry about their competitive advantage over US and Asian companies because of the difference in regulations. Research should be done about the impact on competitiveness in both short- and long-term.

To conclude, this study can serve as starting point for more studies to enrich knowledge about companies and regulatory requirements.

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Appendix A. Interview Guide for Companies

Introduction

Thank you for participating in this interview. My name is Nick, and I am conducting this interview as part of my master's thesis, aimed at the understanding of organizational behavior regarding the changing CSRD requirements. The goal is to gain insights in the way your company acts and strategically positions itself in this changing environment.

I want to assure you that everything you say will remain anonymous and your responses will be solely used for this research and nothing else. If you are comfortable, I would like to record this conversation to make sure I capture all your thoughts accurately. You are free to decline recording and skip any question that you prefer not to answer. Do you consent with this interview being recorded?

The interview should take about 30 minutes. I will ask some open-ended question. Feel free to share any thoughts and experiences that you might think will add to the research results.

Preparation for ESG Reporting Obligations

1. How has your organization prepared for the initial CSRD requirements?
2. According to several articles, ESG reporting is costly. What investments have you made in terms of personnel, training, and systems for ESG reporting?
3. Can you describe the main challenges you have faced in preparing for ESG reporting? For example in data gathering or setting up new IT systems.
4. What issues came up related to data collection and trustworthiness of the data? How were these addressed?
5. What organizational changes, if any, have you implemented to support your ESG reporting efforts?

Technology in ESG Disclosure

6. What technologies are you currently using for ESG data collection and reporting?
7. How has technology helped in addressing methodological challenges in sustainability reporting?
8. Have you considered or implemented any emerging technologies like AI, blockchain, or advanced analytics for ESG reporting? If so, how?
9. What are the main barriers to adopting new technologies for ESG reporting in your organization?

Impact of EU Omnibus on ESG Reporting practices

10. How has the proposed EU Omnibus package affected your organization's ESG reporting strategy?
11. Are you planning to scale back or continue with your current ESG reporting efforts? Why?
12. I read some articles that found a relation with ESG– and financial performance. What is your perspective on this. Is ESG reporting creating value besides the compliance?

Future outlook and Value Creation

13. How do you see ESG reporting evolving in your organization over the next 3-5 years?
14. What do you think about the current regulations that came from the EU

15. Where do you think regulation is heading in the coming years

Conclusion

- Any additional comments or insights the interviewee would like to share
- Thank the participant

Appendix B. Interview Guide for Assurance Providers

Introduction

Thank you for participating in this interview. My name is Nick, and I am conducting this interview as part of my master's thesis, aimed at the understanding of organizational behavior regarding the changing CSRD requirements. The goal is to gain insights in the way assurance providers look at/deal with this changing environment.

I want to assure you that everything you say will remain anonymous and your responses will be solely used for this research and nothing else. If you are comfortable, I would like to record this conversation to make sure I capture all your thoughts accurately. You are free to decline recording and skip any question that you prefer not to answer. Do you consent with this interview being recorded?

The interview should take about 30 minutes. I will ask some open-ended question. Feel free to share any thoughts and experiences that you might think will add to the research results.

Evolving Assurance Practices

1. How has your organization adapted its assurance practices to meet the requirements of the CSRD?
2. What challenges do you face in providing assurance for sustainability reports, especially given the qualitative and future-oriented nature of some disclosures?
3. What are the main challenges that you saw with clients?
4. What investments have you made in terms of personnel, training, and systems to support ESG assurance services?
5. According to different articles I read, ESG reporting is costly. How do you experience this with clients? Does this differ among sectors in which client is active?

Technology in Assurance Services

6. What technologies are you currently using to support your clients sustainability processes? How does it help?
7. Are you implementing any emerging technologies (e.g., AI, blockchain, advanced analytics) in your client practices? If so, which ones and why?
8. What are the main barriers to adopting new technologies for ESG reporting?

Impact of EU Omnibus on Assurance Services

9. How has the proposed EU Omnibus package affected companies?
10. What changes do you anticipate in the demand for your services as a result of the proposed regulatory changes?
11. How are you adapting your service offerings and methodologies in light of the evolving regulatory environment?
12. How can companies address the uncertainty in the regulatory environment?

Future Outlook and Value Creation

13. How do you see the role of assurance providers evolving in the ESG reporting ecosystem over the next 3-5 years?
14. What potential opportunities do you foresee for companies in the changing ESG environment?

15. How do you see this regulatory changes work out for clients? Will they scale back their ESG reporting processes?
16. Where do you think the regulation is heading in both near and far future?

Conclusion

- Any additional comments or insights the interviewee would like to share
- Thank the participant and explain next steps

Appendix C. Participants Information Sheet

Study title: Corporate Responsible Behavior; Navigating Europe's Changing Regulatory Landscape

Researcher: Nick Brinkman

Institution: University of Twente

Hi there, thanks for considering participation in this study. This sheet provides important information about the study and what your participation would involve. Please read it carefully before deciding whether to participate.

The research aims to investigate how large companies in the Netherlands are adapting their ESG reporting practices in the light of changing regulations, particularly the EU Omnibus package. The goal is to explore the perspectives of both companies and their assurance providers on these changes.

If you agree to participate you will be invited to take part in a semi structured interview lasting 30-45 minutes. The interview will take place in person or in a video call at a time that is convenient for you. With your permission the interview will be recorded for transcription and analysis.

I take your privacy serious*. All information you provide will be anonymized. The audio recording will be transcribed and then deleted. The data provided will solely be used for research purposes.

As a participant you always have the right to:

- Withdraw from the study at any time
- Request access to your provided data
- Request correction or deletion of your personal data
- Refuse to answer any question during the interview

For remarks or questions, please contact nick.brinkman@pwc.com

I am looking forward to the interview!

Kind regards,
Nick Brinkman

* The questions, methodology, and data processing have been reviewed and approved by the Ethics Committee BMS, University of Twente.

Appendix D. Interview Results Companies

Preparation for ESG reporting obligations

Table 8 - Company questions 1, 2, 5, 6, 8

Question	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7
1	Started late (end 2024) with stakeholder and DMA	Started late (end 2024) with DMA	Started early (2023) with stakeholder and DMA	Started early (2023) with stakeholder and DMA	Started early (2023) with stakeholder and DMA	Started early (2023) with stakeholder and DMA	Started late (end 2024) with stakeholder and DMA
2	Consultant; ESG FTE; ESG platform for complexity explained	Multiple consultant; ESG FTE	Consultant, ESG FTE	Consultant, ESG FTE; ESG platform for reporting, data lake	Consultant, ESG platform for gap analysis	Consultant, multiple ESG FTE; ESG platform to collect and verify data	Consultant
5	ESG department; ESG ownership in top management	Employees register more data; IT responsible for ESG dashboarding	ESG project team	ESG project team; ESG ownership in top management; monthly sustainability sessions	ESG project team;	ESG to finance department; split of ESG reporting and operational ESG	ESG project team; ESG responsibility of finance manager
6	PositionGreen for analytics and reporting; Carbon+Alt+Delete for CO2 footprint; AI chatbot for explaining the CSRD	N.A.	Fleet management system for travel data	Sustainability platform for reporting the CSRD	Warehouse management; transport management; order management	ESG platform to collect and verify data	N.A.
8	Will use it in the future; but not yet; its too early for advanced analytics	Both are being looked into; analytics for overview is in development	Analytics platform is under development, privacy concerns about AI	Blockchain very hard to use atm. AI is integrated in ESG platform	Use of AI forbidden by management, participant sees potential; thinking about overarching system	Looked into it, but hard if not using already for other purposes; when profitable then they will be used	PowerBI for data analytics and report creation

Impact of EU Omnibus on ESG strategies

Table 9 - Company questions 10, 11

Question	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7
10	Nothing changed, keep doing what was planned.	Uncertain, first finish the projects we started and then look further; create a strategy that will bring value to company	Participant lost credibility within organization; omnibus causes more uncertainty; will stay reporting for now	Omnibus changed nothing for company	It gives the company more time but they are not sure if they need to report eventually; pressure release for some departments	Not much, has clear strategy and goals and works towards them despite regulations. Omnibus gave more time	Out of scope for now; with limited investments it does not hurt to scale down as with many investments
11	Everything that was planned will be executed. Investor demands that; Is sure about the potential value that comes with ESG reporting	Keep effort for ongoing projects; potential scale down after clarity about Omnibus	When reporting the value creation becomes visible; keeps effort for reporting	Will keep efforts and report according to plan	Scales down effort for now, waiting for more certainty about regulation; keep working on CO2 effort because of customer demand; voluntary report	Keep effort the same, will be obligated to report in the future	Scales down effort but still do something because probably in scope within five years

”.

Challenges and best practices in navigating uncertainty

Table 10 - Company questions 3, 4, 7, 9

Question	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7
3	CSRD is very complex; scope 3 difficult	Data gathering, especially scope 3; lack of knowledge in organization	Stakeholder management because many value chains; ESG already integrated because government as client,	Data gathering; different methods across business units; lack of knowledge in organization and among managers	ESG priority within organization; CSRD complexity, ESG benefits hard to quantify; use of AI forbidden within organization	CSRD is so much work and very complex especially the company specific part	Very complex for smaller companies like us; scope 3 very hard
4	Data uniformity; non existing data	Non existing data	Non existing data	Data uniformity across business units; never gathered this data before	Lots of wrong unput data, data centrality from the various systems	Data not gathered before; different stakeholders provide different formats	Data uniformity across countries; data input was often not filled or wrong filled
7	It mainly helped with complexity of regulations	Analytics tool is needed for progress management	Helped in data gathering for some needed information	It helped with complexity;	N.A.	Collected data from various platforms and verifies it, also provides audit trail for traceability	N.A.
9	Lack of historical data; privacy concerns, lack of data uniformity	Lack of data and the differences in data sources	AI can help, but not take over all the work, it's a black box; doing it yourself will teach stuff about the company and how to do better	Data uniformity is the main issue, we cannot easily consolidate data and build on that	Managements prohibit AI; too early for advanced analytics because of variety and lack of historical data; management prioritizes top and bottom line	Existing data is not sufficient, not used to AI and blockchain so hard to learn it with difficult CSRD	Not on that level yet, first get these processes up and running;

Value creation and future outlook

Table 11 - Company questions 12, 13, 14, 15, 16

Question	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7
12	Lot of value in ESG practices; sustainable employer; sustainable for environment; commercially interesting; better quality and longer lasting product development	Value creation from a commercial perspective; good for binding customers and delivering sustainable services and solutions; higher turnover prices	Sure about value creations, reason to keep effort; mainly internal processes	Value creation in financing; in internal processes; in sustainability for environment;	For sure on the long term, commercially, internal optimization; short term very costly;	Commercial pressure will be the main driver, but also risk assessment, quality products and sustainable impact on world, also sustainable employer	Big customers require disclosure so commercially, we make better quality products now and changed the business model; Internal processes are getting looked at better
13	Keep getting better in ESG. It would be done not to take this opportunity as a way to gain performance.	Reporting depends on Omnibus. Sustainable initiatives will stay because we want to be sustainable.	We keep working on sustainability, but already did, is our core business; we want to do what we can	ESG will become a core business. We want to be a sub top ESG performing company	It will grow, but takes time, its like a culture shift; Shareholder shift will turn out positively for ESG	ESG has veins across the whole company and will be growing; don't want to lead but want to stay close	Will be in scope when growing so definitely upscaling in a few years, for now take it easy and wait requirements
14	Transparency is growing. At a certain time they will feel pressure to become sustainable. Great deal. Omnibus is weird and unclear. CSRD great for people planet profit	CSRD is a positive thing but too much. Omnibus will be somewhat better in workload; uncertainty is very bad for European companies. More focus towards operational sustainability.	CSRD is great to improve transparency and trust and sustainable initiatives;	Sooner or later it is a must for companies, but not Europe is struggling; long term politics does not exist; CSRD was too complex, especially for the smaller ones	Financially not great for companies; really a bureaucratic burden: but when working on it you discover more and more potential value; we needed time and got it with Omnibus	Omnibus is really bad for sustainability trend, shifts focus away; Europe loses credibility; Omnibus needs some adjustments to work out	Europe is not credible at all. Waste of resources; also bad for competition with US; Value creation not enough; EU leader by to much
15	Thinks it will get more strict in long term. However, the coming years are unpredictable and unclear.	It really is two minutes to midnight; if we want to change the world it has to be done in the coming year. Regulations will grow.	Politics are unclear, but eventually we will end with many rules; every company will have to	ESG will become a license to operate for companies. Almost as important as financial	CSRD is the first step with more to come;	More to come, CSRD will become a license to operate for every company; ESG will become standard business procedure	Will stay for a while but at a certain time the rest of the world will follow and things will get tighter

Appendix E. Interview results experts

Table 12 - Assurance expert questions

Question	Assurance expert 1	Assurance expert 2	Assurance expert 3
3	The CSRD is really complex; CSRD is way too much work, especially for the smaller companies; hardest part is to determine the company specific part; companies who did nothing before had a huge gap to fill. From employees to non existing data.	Is complex; a lot of human labor; technology not yet relevant; hesitant regulations; first time that companies need specific data.	Companies overestimate the cost; new topics and lack of knowledge; a lot of human labor; gap between ESG practice and ESG reporting;
5	Sure ESG is costly, most costs are in labor, external consulting and for some companies an ESG IT package. Really hard for smaller companies.	ESG is costly for every sector, companies with multiple value chains have even more cost; human labor and consultancy are the biggest cost.	Companies overestimate it, some say even 5% of total turnover. If that is the case you organized very bad; it does not need to cost a lot of money, besides that, it brings even more value in the future.
7	Not yet, it is too early for these advanced tools. Focus is setting up these processes and getting used to them before optimizing.	Yes we are thinking about platforms to support the reporting process. Currently this is in the development stage. ESG platform development is very hot right now	We see that for most companies this is too early. They should first focus on meeting the requirements in an optimal way before implementing such rigorous systems.
8	There is no data existing or the data needed is of such low quality that it cannot be done.	The lack of historical data and hallucinating AI is difficult; there is also a lack of field expertise in the subjects	Lack of data; lack of expertise; lack of good working and optimized platforms at the moment. All these things will be there in just a few years. Until then, some simple software will do.
9	We have a 2/3 decrease in assurance demand so that shows that companies are choosing to something different. Some companies are continuing without assurance on voluntary basis.	N.A.	
12	They should definitely not stop with sustainability efforts. They can however take a step back and report the voluntary VSME.	N.A.	Companies should define clear goals and implement the golden triangle (finance, ESG, and management) for implementation. It doesn't have to be very expensive. Embrace sustainability and the company value will grow. Sooner or later you will have to so you better start early

14	The opportunities for companies are endless. The value creation that comes with ESG reporting is significant and plays a role in every aspect of the business. Really from commercially to internal process optimization.	The reporting creates transparency and trust; optimization of internal processes.	CSRD can be done in two ways, with value creation and without. When u embrace the CSRD like its meant, sure there will be value creation in risk management, sustainable business models, commercial goals,
15	I think a lot of clients already started with efforts for the CSRD and they don't want to waste these efforts so they will do something. I don't think that companies will fully comply with CSRD as initiated.	They will probably look at their current expenses and want to keep some effort for the potential later regulatory changes; great that Europe is looking at a way to take away some of the burden: better for competitive edge of Europe in general	The timing of Omnibus was absolutely horrendous. Companies already invested heavily and started reporting. Should have done other changes like assurance. Bad for long term sustainability. Also it focusses on wrong criteria. Some small investment companies have a huge impact on the planet, and some 1000 employees companies have less.
16	CSRD was very complex and a big step in requirements. Almost every company, direct or indirect, got hit by it. Omnibus are better regulations but they definitely slowed down the green trend. It will however be back quick with the value chain regulations that remain for bigger companies.	N.A.	It has to be financially favorable to do in order for it to happen. If companies see no value regulations have to step in. I think this is the case in the coming years. Regulations will get stricter. Sustainability will be a license to operate in the future. Companies should start now

Appendix F. Technology statement

During the preparation of this work the author used the following tools to improve quality of the final document:

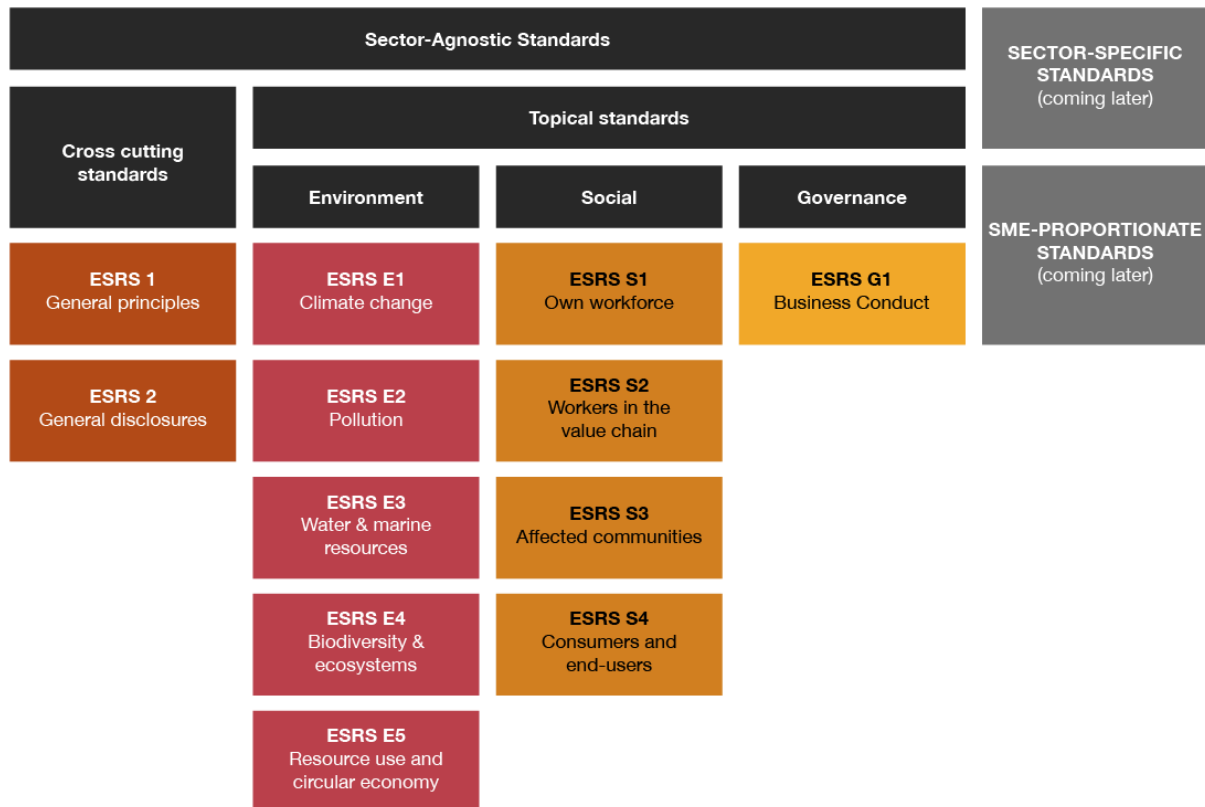
- **Atlas.ti** Used for coding and analyzing interview results
- **ChatPwC** Used as brainstorm, to check for errors, and rewrite text to other tense
- **LucidChart** Used to create visualizations
- **Microsoft Excel** Used to create tables, and planning
- **Microsoft Teams** Used to conduct interviews online
- **Microsoft Word** Used to write, and format the document, and to check text for errors
- **Scribbr** Used for references
- **Turboscribe** Used for transcribing interview recordings

After using these tools/services, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.

Appendix G. CSRD explained

A key concept in the CSRD framework is double materiality which requires companies to assess and report sustainability from two perspectives. The inside out perspective, where companies must disclose how their operations impact society and the environment. This includes emissions, biodiversity, and social equity. And the outside in perspective, where organizations need to assess how sustainability related risks and opportunities may affect their financial performance. This includes components such as climate change risk, regulatory changes and resource scarcity as can be seen in figure 1. This dual approach is not only about compliance but also about both risks and opportunities that can affect the business on the long-term (Deloitte, 2024).

Figure 6 - ESRS included in the CSRD



Note. Image from corporate website (PricewaterhouseCoopers, 2024)