



University of Vaasa  
FINLAND

Govind Karunakaran Sivasankara Pillai

**Conceptualising and Operationalising Sustainable  
Supply Chain Management: A Content Analysis of ESG  
and Supply Chain Policy Disclosures in Nordic  
Corporations**

School of Management  
Master of Business Economics  
Strategic Business Development

Vaasa 2026

---

**UNIVERSITY OF VAASA**  
**School of Management**

**Author:** Govind Karunakaran Sivasankara Pillai  
**Title of the thesis:** Conceptualising and Operationalising Sustainable Supply Chain Management:  
A Content Analysis of ESG and Supply Chain Policy Disclosures in Nordic Corporations  
**Degree:** Master of Business Economics  
**Degree Programme:** Strategic Business Development  
**Supervisor:** Tuire Hautala-Kankaanpää  
**Year:** 2026 **Pages:**83

---

## ABSTRACT

The thesis focuses on how the Sustainable Supply Chain Management (SSCM) is represented and put into practice in corporate disclosures such as the Environmental, Social and Governance (ESG) reports, sustainability reports, and supply chain governance documents. The study takes place in a business context of increasing institutional pressure and stakeholder demands for embedding sustainability into supply chain activities, and the growing demand for formal sustainability reporting. With sustainability disclosures gaining more traction and visibility, it remains unclear how much sustainability reporting is actually put into practice when it comes to supply chain operations.

The purpose of the study is to discuss the presentation of SSCM in corporate disclosure and to discuss the connection between formal sustainability commitments and their implementation in supply chains. Theoretically, the research is guided by the Triple Bottom Line framework, stakeholder theory and institutional theory. These are the angles used to understand the structuring, communication, governance and legitimization of sustainability in organisational settings.

A qualitative research design was used, the main method being document analysis. The empirical material comprises ESG reports, sustainability reports, codes of conduct from suppliers, and policies on governance from companies in the Nordic region, which are related to industries with expansive and complex supply chains. The analysis was deductive and was organised by the three categories of the sustainability dimensions: environmental, social and governance.

The findings suggest that SSCM has firmly entrenched in the disclosure practice of companies. Climate strategies, emissions reduction plans and resource-efficiency projects are the main methods of communication for environmental sustainability. Social sustainability is demonstrated by labour standards, requirements for labour responsibility and ethical sourcing commitments of suppliers. The governance tools of supplier standards, sustainability monitoring systems, procurement governance processes and compliance frameworks are introduced as key instruments for achieving sustainability goals across supply chains.

Meanwhile, the results show gaps between the reporting of sustainability and practice. Organisations generally publish their sustainability statements, but not all are equally comprehensive, transparent and consistent with how they put them into practice. Thus, the role of the disclosure is not just as a communication tool, but also as a governance, legitimacy and institutional alignment tool.

The study finds that the application of sustainability in supply chains is uneven and SSCM has become very formalised in ESG reporting and governance. The study also helps to advance the understanding of communication, governance and institutionalisation of sustainability in modern organizations and

the need for critical reading of corporate disclosures as representations of actions rather than as representations of action.

**Keywords:** Sustainable Supply Chain Management, ESG Reporting, Corporate Disclosures, Sustainability Governance, Supply Chain Governance, Institutional Theory, Stakeholder Theory, Triple Bottom Line

## Contents

ABSTRACT .....	2
1. Introduction .....	8
1.1 Research Problem .....	9
1.2 Research Gap .....	10
1.3 Intended Contribution .....	11
2. Theoretical Background .....	13
2.1 Sustainable Supply Chain Management (SSCM) .....	13
2.2 Triple Bottom Line and Sustainability Integration.....	15
2.3 Stakeholder Theory and Sustainability Expectations.....	17
2.4 Institutional Theory and Organisational Legitimacy .....	19
2.5 ESG Disclosure and Sustainability Reporting .....	21
2.6 Supply Chain Governance .....	24
2.7 Theoretical Framework .....	26
3. Methods .....	29
3.1 Research Approach .....	29
3.2 Sample and Case Selection. ....	30
3.2.1 Empirical Context (Nordic Setting).....	30
3.2.2 Sampling Strateg .....	30
3.2.3 Selection Criteria.....	31
3.2.4 Final Sample .....	32
3.2.5 Sample Justification .....	33
3.2.6 Data Consistency and Comparability .....	34
3.3 Data Collection .....	34
3.4 Data Analysis .....	36
3.4.1 Analytical Approach .....	36

3.4.2 Analytical Framework .....	37
3.4.3 Coding Framework .....	37
3.4.4 Analytical Process .....	38
3.4.5 Cross-Case Comparison Logic .....	38
3.5 Data Quality and Reliability.....	39
3.5.1 Limitations of Corporate Disclosures .....	39
3.5.2 Reliability Measures .....	39
3.5.3 Interpretation Approach .....	40
4. Findings .....	41
4.1 Introduction to Findings.....	41
4.2 Overview of ESG Disclosure Practices.....	41
4.2.1 General ESG Reporting Patterns .....	41
4.2.2 Supply Chain Disclosure Patterns.....	43
4.2.3 Variations Across Firms .....	44
4.3 Environmental Dimension Analysis.....	45
4.3.1 Climate and Emissions Reporting.....	45
4.3.2 Environmental governance along the supply chain .....	47
4.3.4 Environmental Integration Patterns.....	48
4.4 Social Dimension Analysis .....	50
4.4.1. Supplier Responsibility and Ethical Sourcing. ....	50
4.4.3 Supplier Monitoring and Enforcement .....	51
4.4.3 Supplier Monitoring and Enforcement .....	53
4.4.4 Social Governance Integration .....	54
4.5 Governance Dimension Analysis.....	55
4.6 Cross-Dimensional Integration Analysis.....	59
4.6.1 ESG Alignment across Firms.....	59

4.6.2 Governance and Operationalisation .....	60
4.6.3 Implementation Gaps and Decoupling .....	61
4.7 Cross-Firm Comparison .....	62
4.7.1 Industry-Based Comparison .....	62
4.7.2 Variation in governance structures among firms.....	63
4.8 key patterns discussion .....	64
5. DISCUSSION AND CONCLUSION .....	66
5.1 Overview of Finding .....	66
5.2 Interpretation of Findings .....	66
5.2.1 SSCM as Conceptualised in Corporate Disclosures.....	66
5.2.2 SSCM as Operationalised through Governance .....	68
5.2.3 Difference between Reporting and Practice .....	69
5.3 Theoretical Implications.....	70
5.4 Practical Implications .....	71
5.5 Limitations of the Study .....	73
5.6 Future Research Directions .....	73
5.7 Conclusion.....	74
REFERENCE.....	76
APPENDICES .....	81
Appendix A: Final Sample of Companies Analysed.....	81
Appendix B: Corporate Disclosure Documents Analysed .....	82
Appendix C: Analytical Coding Framework .....	82

## TABLES

Table 1 Sample Distribution by Country and Industry .....	32
Table 2 Final Sample of Companies .....	32
Table 3 Data Sources and Analytical Purpose .....	35
Table 4 Overall ESG Disclosure Patterns .....	45
Table 5 Environmental Governance Patterns.....	49

## FIGURES

Figure 1 Theoretical Framework for the Analysis of Sustainable Supply Chain Management (SSCM).....	28
--	----

## Abbreviations

Abbreviation	Full Form
CSRD	Corporate Sustainability Reporting Directive
ESG	Environmental, Social and Governance
GRI	Global Reporting Initiative
SSCM	Sustainable Supply Chain Management
TBL	Triple Bottom Line
EU	European Union
CSR	Corporate Social Responsibility
KPI	Key Performance Indicator
GHG	Greenhouse Gas
Scope 1	Direct greenhouse gas emissions
Scope 2	Indirect emissions from purchased energy
Scope 3	Indirect value chain emissions
OECD	Organisation for Economic Co-operation and Development
ESGR	Environmental, Social and Governance Reporting
SDGs	Sustainable Development Goals
SOK	Suomen Osuuskauppojen Keskuskunta (S Group)

## CHAPTER 1: INTRODUCTION

### 1. Introduction

The restructuring of organisational governance mechanisms and supply chains has been greatly affected by growing environmental concerns as well as tighter regulatory requirements (Gualandris and Kalchschmidt, 2016; Busse et al., 2017). Supply Chain Management (SCM) was traditionally focused primarily on operational efficiency, responsiveness and cost minimisation. The overall environmental and social impacts from global sourcing activities, however, were often neglected in such approaches (Sarkis et al., 2011; Beske-Janssen et al., 2015). In response to these criticisms, Sustainable Supply Chain Management (SSCM) has been developed, which incorporates three components: environmental, social, and economic goals into supply chain management (Ahi and Searcy, 2013).

One of the key features of SSCM is its focus on the importance of 'inter-organisational relationships'. Unlike the focus on internal operational improvements, SSCM emphasizes cooperation and coordination with the extended supply chain partners such as suppliers, contractors, logistics partners (Gimenez & Tachizawa, 2012). This wider view is based on the recognition that sustainability-related risks and impacts are not only present on the far end of the value chain, but can also be felt on the near end, and that organisations should take responsibility for both ends of the value chain (Wilhelm et al, 2016). As a result, more focus has been given to transparency and traceability, including practices of suppliers and sourcing.

Meanwhile, Environmental, Social, and Governance (ESG) reporting has become a prominent way to convey an organisation's sustainability promises and actions (Ioannou & Serafeim, 2017). Issues related to supply chain governance are becoming part of ESG disclosures, such as responsible sourcing policies, supplier codes of conduct and due diligence procedures (Locke, Amengual & Mangla, 2009; Villena and Gioia, 2020). This disclosure is not only an expression of the organisation's priorities but it also influences how people behave and govern in your supply chains.

Regulatory developments, particularly in the European Union, have also been supportive to the growth of ESG reporting. The Corporate Sustainability Reporting Directive (CSRD) will

trigger more demanding disclosure, standardization and comparability requirements with a higher level of accountability of companies on sustainability practices (European Commission, 2021). Reported and structured reporting plays a more important role in this regulatory change especially when it comes to supply chain governance related issues.

The Nordic countries are especially a very good empirical environment to analyze these developments. The institutions in Finland, Sweden, Denmark and Norway are quite well governed, highly transparent and highly sustainable (Midttun, Gjølborg and Granda, 2013). Consequently, the information in this section is more detailed and structured, leading to a robust basis for the analysis of the expression and implementation of SSCM in practice..

## 1.1 Research Problem

The evaluation of Sustainable Supply Chain Management (SSCM) has been studied extensively in the last 20 years either qualitatively or quantitatively. Case studies, interviews and investigations of the specific industry have played a major role in gaining knowledge of how sustainability aspects are considered in the supply chain activities (Seuring and Müller, 2008; Pagell and Wu, 2009; Ahi and Searcy, 2013). However, the majority of this research has been conducted in specific organisational settings, so comparisons across organisations is limited, and the results of this research can only be generalised to specific industrial and institutional settings.

Meanwhile, sustainability reporting by businesses has continued to become more organised and standardised. Organisations are now releasing official Environmental, Social and Governance (ESG) reports, which include supplier codes of conduct, responsible sourcing policies and strategies, sustainability goals and governance processes to support the paths taken within the supply chain. In addition to being used for communication, these disclosures are also governance tools which influence the behaviour of companies and facilitate coordination of sustainability practices across companies and inside companies (Grewal et al., 2019; Christensen et al., 2021).

Although ESG reporting has become increasingly significant, issues persist related to the extent that commitments are supported by actions taken in practice within the organisation. Previous studies show that organisations can have robust strategies and declarations on sustainability and struggle to achieve these strategies at the operational level (Hahn and

Kühnen, 2013; Michelon et al., 2015; Cho et al., 2015). This leaves a number of questions regarding the effectiveness of ESG disclosures in reflecting the actual use of sustainability in supply chain practices unanswered.

While the issue of sustainability disclosure and stakeholder communication has received extensive research attention, less focus has been dedicated to the manifestation of governance and operationalisation of SSCM in the ESG disclosures. Consequently, the status of formalisation of sustainability commitments at the company level and the link between these commitments and the governance and management of companies' supply chains remains poorly understood.

Therefore, there is a need to examine the corporate disclosures more systematically to get a better understanding of the way organisations are structured, communicate and implement sustainability-related initiatives throughout their supply chains.

## 1.2 Research Gap

Although well-established theories exist (e.g. Triple Bottom Line theory (Elkington 1997), Stakeholder theory (Freeman 1984) and Circular economy thinking (Geissdoerfer et al. 2017)), there is not a lot of understanding on how these concepts are implemented in organisations. Despite extensive research on SSCM, most of the literature adopted a case-based or industry specific approach, hindering the possibility of making cross-firm comparisons and comparative understanding of both SSCM organisations (Seuring and Müller, 2008; Pagell and Wu, 2009; Masi et al., 2017).

Research to date, however, has neglected the potential of the corporate disclosure as a source of empirical evidence for further investigation into SSCM practices in a more nuanced way, particularly. Sustainability reporting literature has often focused on the drivers, features and effects of the ESG disclosures (Hahn and Kühnen, 2013; Christensen et al., 2021), but less on the way in which SSCM is defined, regulated and implemented in the disclosures of a variety of organisations. This means there is still a lack of knowledge about the translation of sustainability expectations to governance structures and operational practices of the supply chain.

In the Nordic context, this is particularly relevant as organisations operate in very institutionalised contexts, where the demand for sustainability regulation, transparency and governance is high (KPMG, 2022). The Nordic context is therefore an interesting empirical context to explore the structuring and implementation of sustainability commitments in terms of governance and reporting processes in the corporations. The systematic cross-firm analysis of SSCM in Nordic company's reports, on the other hand, is still relatively in its infancy.

To fill this void, this paper takes a disclosure-based and cross-firm analysis method to explore the concept and operation of sustainability in supply chains. Based on this, the study has the following research question:

**How is Sustainable Supply Chain Management (SSCM) conceptualised and operationalised within corporate disclosures, specifically ESG reporting and supply chain governance documents, among Nordic firms?**

### 1.3 Intended Contribution

This study is of both empirical, theoretical and practical value to the field of Sustainable Supply Chain Management (SSCM).

On the empirical level, the study adds to the current literature on SSCM by using a cross-firm approach and analyzing a Nordic sample of companies' sustainability disclosures. Many prior SSCM research studies have been based on single-case studies, which made it difficult to make comparisons across organisations in general (Seuring and Müller, 2008; Pagell and Wu, 2009). This study provides a more holistic view of the differences between organisations in terms of their sustainability disclosures, governance and reporting by analysing a number of firms at the same time.

The study also makes a theoretical contribution by examining the need for the convergence of three widely used theoretical lenses in SSCM practices and disclosures, the consideration of the Triple Bottom Line (TBL) framework (Elkington, 1997), Stakeholder theory (Freeman, 1984), and Institutional theory (DiMaggio and Powell, 1983). The research does not presume a direct relationship between theory and practice, but it seeks to critically analyse how far the theories are applicable to governance and reporting in practice. In so doing, it extends the

awareness of the linkage between conceptual frameworks of sustainability and its implementation in companies.

In terms of practice, the study highlights the various trends, differences and tensions in SSCM in organizations. This is especially with regard to changing EU sustainability legislation and the growing harmonisation of ESG reporting requirements (European Commission, 2021). The results offer valuable guidance for organizations wishing to enhance sustainability governance and boost the efficiency of reporting processes, especially in the development of sustainability commitments into processes and management (Christensen et al., 2021).

## CHAPTER 2- THEORETICAL BACKGROUND

### 2. Theoretical Background

#### 2.1 Sustainable Supply Chain Management (SSCM)

In debates about the governance of Global Supply Chains (GSCs) Sustainable Supply Chain Management (SSCM) has become an important subject area of academic research and managerial practice (Seuring and Müller, 2008; Carter and Rogers, 2008). Traditional supply chain management practices have tended to concentrate on the operational efficiency and cost reduction aspects of the chain and on speeding up its response to customer needs, while much less attention has been paid to environmental and social effects (Ahi and Searcy, 2013). The scope of supply chain management has, however, evolved over the years to include not only economic goals, but now also regulatory requirements, stakeholder expectations, and sustainability-related risks (Pagell and Wu, 2009). As consequence, SSCM has been developed as a method that integrates environmental, social, and economic issues in the way that supply chains are managed and that can be integrated in the decision making processes of the organisations.

Among the most cited definitions of SSCM can be found in Seuring and Müller (2008) who define it as Management of Material, Information and Capital Flows including integration of environmental, social and economic goals along the entire supply chain. This view focuses on how inter-organisational activities in the supply chain can be coordinated and how sustainability principles can be considered in the operational processes. Carter and Rogers (2008) describe SSCM as the strategic and transparent incorporation of sustainability goals into organisational and supply chain practices that result in an enhanced long-term economic outcome. Both definitions emphasize the need for integration in sustainable practice, but the definition put forward by Carter and Rogers (2008) focuses more on strategic alignment, transparency and value creation over time in supply chain management practices.

Ahi and Searcy (2013) also critically reviewed SSCM, raising concerns that it has undergone significant changes over the years. Their review revealed that early SSCM strategies were predominantly environment related and involved pollution prevention and resource efficiency, as well as waste reduction. More recent perspectives, however, have begun to

consider sustainability a multi-dimensional and systemic issue, thus considering environmental, social and economic concerns simultaneously (Ahi and Searcy, 2013). This paradigm change foregrounds an awareness of the interconnectedness of sustainability problems across value chains, and a recognition that simply taking one action at a time is insufficient.

As the globalisation of the supply chain business models has grown in importance, so have increasingly interwoven supply networks (Pagell and Wu, 2009). Geographically dispersed suppliers, outsourcing and multi-tier supply chain structures are increasingly vital to organisations, and such arrangements have led to added exposure to sustainability-related risks in supply chains. Firms are encountering more difficulties in tracking and regulating problems like environmental impacts, human rights violations, unethical sourcing and governance gaps as supply chains are growing more complex, both in terms of geographical distribution and the complexity of the individual supply chains. (Seuring and Müller, 2008). Therefore, organisations are expected to take responsibility for sustainability issues in their own operations as well as in their suppliers' operations and their value chains (Carter and Rogers, 2008).

In time, SSCM has emerged from being largely operational towards a more comprehensive governance-based approach (Pagell and Wu, 2009). Sustainability is no longer considered just about optimizing operational efficiency or controlling environmental impacts in single organizations. Currently, more attention is shifting to governance arrangements like 'supplier standards', 'monitoring systems', 'compliance frameworks', and inter-organisational 'coordination processes' that integrate sustainability demands into supply chains. This transition has been driven by an increasing understanding of the importance of relationship and governance dynamics throughout supply chain networks in achieving sustainable performance.

The principles of SSCM have been greatly influenced by the Triple Bottom Line paradigm that focuses on the convergence of environmental, social and economic aspects of performance (Elkington, 1997). This has influenced organizational practices around sustainability through encouraging companies to go beyond solely financial goals, and take into account other stakeholder expectations as well as the broader social responsibility of supply chain activities (Carter and Rogers, 2008). However, although SSCM theory is evolving and developing,

previous studies show that the rate of SSCM adoption and implementation is still unevenly distributed among different organisations and industries (Pagell and Wu, 2009).

While Sustainable Supply Chain Management (SSCM) has been explored extensively during the last 20 years, there are a number of gaps in the current literature. However, case studies and industry-specific investigations are a major focus of SSCM research and have provided detailed information on specific organizational contexts, but the chance to compare and generalize across firms has been limited (Seuring and Müller, 2008; Pagell and Wu, 2009). Furthermore, there has been relatively limited research on systematic analysis of the corporate disclosures as formal structures, structures of communication and operationalisation of sustainability in supply chains (Ahi and Searcy, 2013). There is therefore limited knowledge about the institutionalisation of SSCM in organisations and the governance, representation and embedding of sustainability practices as organisational processes.

Therefore, SSCM is not only regarded as a method to enhance the efficiency of the supply chain but rather as a governance and institutional framework that influences the way organisations operate, report and interact with other organisations in their supply chains (Seuring and Müller, 2008; Carter and Rogers, 2008).

## 2.2 Triple Bottom Line and Sustainability Integration

The Triple Bottom Line (TBL) framework has been one of the basic approaches to understand sustainability in organizations and supply chains and has greatly influenced the evolution of Sustainable Supply Chain Management (SSCM) (Elkington, 1997). Traditional practices are based on measuring the success of organisations mainly using financial indicators; however, the TBL perspective suggests that sustainability should be measured on three interconnected dimensions: environmental responsibility, social performance and economic performance (Elkington, 1997). The three dimensions allow organisations to consider the economic goals alongside environmental and social aspects, in making decisions around strategic and operational matters.

On the environmental side, organisations may want to sort out issues concerning their emissions, energy usage, waste management, and the management of resources (Elkington, 1997). Environmental sustainability is also going beyond the boundaries of the organization

and to include the environmental performance of suppliers, sourcing and logistics networks within a supply chain (Carter and Rogers, 2008). Lastly, companies are expected to extend beyond their own limits and monitor and manage their environmental impacts in more complex supply chain systems.

The social aspect of the TBL is concerned with aspects of labour standards, human rights and employee wellbeing and ethical business practice (Elkington, 1997). The importance of social sustainability has increased in the world of global supply chains as the demand for monitoring the working conditions of suppliers and their ethical sourcing and respect for human rights in outsourced production networks has grown (Carter and Rogers, 2008). The geospatial spread of supply chains and their increasing complexity of structures puts pressure on companies to demonstrate social responsibility along supply chains as well as in their own operations.

However, the economic aspect of TBL is still relevant in SSCM where organisations are still striving to achieve profitability, to be efficient in their operations and to be competitive in the long run (Elkington, 1997). The TBL framework suggests, however, that it is not possible to evaluate only economic performance without taking into account environmental and social effects. Instead, the sustainability concept requires organisations to take, and apply, all three dimensions of sustainability into their organisational strategy and decisions (Carter and Rogers, 2008). This holistic approach has clearly affected SSCM as businesses are more encouraged to consider more sustainable issues in the long-term governance of their supply chains.

The relevance of the TBL framework has also been expanded as it is closely linked with Environmental, Social and Governance (ESG) reporting. The environmental component of TBL is reflected in the emission disclosures, climate targets, energy use disclosures, resource management disclosures. Similarly, information on social dimension is frequently provided on human rights, social responsibility of suppliers and diversity. Governance-related disclosures, such as monitoring systems and accountability mechanisms, compliance structures and supplier oversight processes, are becoming more used as tools for formalising and operationalising sustainability commitments in organisations (Christensen et al., 2021). From this perspective, ESG Reporting can be seen as an organised process within an organization of communication and management of the sustainability aspects put forward by TBL.

The triple bottom line is considered a good idea, but it is not implemented in the same way by companies and industries (Carter and Rogers, 2008). While many organisations have public sustainability frameworks, and have committed to reporting on their ESG practices, the degree of implementation, governance integration, and enforcement of practice can vary widely between organisations. In some situations sustainability is incorporated within governance and supplier management systems, while in others sustainability promises are mostly policy oriented or symbolic (Pagell and Wu, 2009). This incongruity is indicative of an important difference between application of sustainability concept and application in supply chain.

The Triple Bottom Line framework is thus a key conceptual basis for dealing with the structure, communication and operations of the sustainability components in SSCM and ESG reporting (Elkington, 1997; Carter and Rogers, 2008). In between, various ways are used to refer to the different degrees of implementation of sustainability in supply chains, both organisationally and institutionally.

### 2.3 Stakeholder Theory and Sustainability Expectations

Stakeholder theory has grown as an important lens to understand the drivers behind why organisations are increasingly implementing sustainability governance practices and providing environmental and social disclosures. In the stakeholder theory, the organisation is responsible to the shareholders and also to a wider group of stakeholders who may affect legitimacy, long-term performance and survival of the organisation (Freeman, 1984). These stakeholders are investors, regulators, customers, employees, suppliers, non-governmental organisations (NGOs) and society.

In this view, organisations should work in open and transparent ways, and be responsible for the environmental and social effects of their operations and those of their supply chains. The growing awareness and concern of the public about sustainability issues have raised expectations of ethical and responsible corporate conduct, including on environmental protection, labor practices, and governance.

These pressures are particularly strong in the context of Sustainable Supply Chain Management (SSCM) as it involves organisations working within global sourcing networks, which present them with environmental, social and ethical risks at many levels of suppliers (Christensen et al., 2021). There is growing pressure on organisations to have their suppliers

uphold labour standards, environmental controls and ethical sourcing practices. The expectations for companies' sustainability performance and governance and monitoring systems have grown amid increasing public attention to issues like environmental degradation, corruption, human rights abuses, and unsafe working conditions within companies' supply chains.

There have also been shifts in the expectations of stakeholders as to transparency and accountability in sustainability reporting (Freeman, 1984). Investors are increasingly interested in information on climate risk, quality of governance, and environmental performance, whilst consumers and civil society groups are interested in more transparency on suppliers' practices, labour conditions and on ethical sourcing activities (Christensen et al., 2021). Because of this, Environmental, Social and Governance (ESG) reporting has grown into a means of communicating and a means to respond to a stakeholder's scrutiny and accountability demands.

In this context, ESG disclosures are organizational tools to signal sustainability goals and indicate an organization's track toward meeting expectations of stakeholders (Christensen et al., 2021). Organisations try to demonstrate their accountability and responsible behavior through their sustainability reports, supplier codes of conduct, and governance disclosures, in their global supply chains. These disclosures also help organisations to manage reputation risks and enhance legitimacy in institutional contexts where there is growing formalisation of expectations for sustainability.

Nordic institutional environments are home to a relatively high level of pressure from stakeholders, including high expectations of sustainability, transparency norms and corporate accountability norms (KPMG, 2022). In the Nordic countries, there is a rising regulatory expectation for organisations to report on sustainability and have responsible supply chain governance. Moreover, ethical sourcing, environmental and governance transparency are important issues for stakeholders in these contexts. Nordic firms are therefore more likely to have a formal sustainability governance system and a structured ESG reporting system.

The stakeholder theory provides insights into the increasing focus on sustainability reporting and governance mechanisms in organisations, but it does not necessarily reflect the effectiveness and/or quality of sustainability practices in real supply chain activities. The

commitment to sustainability may be made public by the organisation, because of stakeholder expectations, and the use of sustainability measures in supplier networks can differ significantly between organisations (Christensen et al., 2021). In spite of this, the stakeholder theory is still a relevant concept to explain how expectations of sustainability affect organisations' actions and how the rise of ESG disclosures is relevant to SSCM.

Based on this, the concept of sustainability disclosure can be interpreted as a way in which organisations are communicating their response to the stakeholder concerns around sustainability governance, responsible supply chain management and accountability (Freeman, 1984; Christensen et al., 2021).

## 2.4 Institutional Theory and Organisational Legitimacy

The answer to why organisations are increasingly reporting on sustainability, having ESG governance, and following similar disclosure systems may be found in the institutional theory, which emphasizes that the adoption of similar practices, governance and disclosure systems within organisations is driven by the relative advantages of those systems (DiMaggio and Powell, 1983). The theory states that organisational behaviour is shaped not only by efficiency and economic goals but also because they must conform to social expectations, regulations and norms to retain legitimacy in their operating contexts (DiMaggio and Powell, 1983). Consequently, when organisations operate in similar institutional environments, their governance arrangements and reporting mechanisms are likely to become similar, and their sustainability practices will be similar.

One of the central tenets of institutional theory is that over time organisations in similar environments develop some similarity in their characteristics, an effect known as institutional isomorphism (DiMaggio and Powell, 1983). It is a process which is motivated by three primary forms of institutional pressure as identified by DiMaggio and Powell (1983): coercive, normative, and mimetic pressures.

Coercive pressures come from formal rules, legal requirements and obligations, for governments and regulatory institutions. The rising pressure on companies to report on ESG and sustainability compliance helps to build formal governance and reporting systems, especially in the field of sustainability reporting.

Normative pressures arise from professional norms, industry expectations and accepted organizational practices (DiMaggio and Powell, 1983). The adoption of sustainability reporting frameworks, responsible sourcing principles, and ESG governance standards have become a widely accepted norm for businesses across the globe, particularly in the context of industries. In the realm of global industries, sustainability reporting frameworks, responsible sourcing principles, and ESG governance standards are gaining recognition as established norms. As a result, organisations may choose to embrace sustainability disclosure processes in order to harmonize with the expectations and standards of professionals.

Mimetic pressures arise when organisations mimic the structures or practices of firms that are seen as successful and legitimate or influential (DiMaggio and Powell, 1983). Organisations often adopt ESG reporting systems, supplier governance frameworks and sustainability practices when they are unsure or at risk of reputational damage that they can model on the ESG reporting of their peers at the forefront of their industry. This has led to the convergence of disclosure practices in ESG across organisations and sectors, especially in more institutionalised markets.

The concept of organisational legitimacy is also strongly linked with institutional theory, and is crucial for understanding the spread of ESG reporting and sustainability governance systems. Mark Suchman defines legitimacy as the “felt” appropriateness of an organisation's activities in a socially constructed system of norms, values and expectations.” In sustainability settings, organisations are increasingly looking to gain legitimacy through their actions by showing that they are environmentally responsible, ethically source their materials and have effective governance arrangements.

ESG reports, supplier codes of conduct, sustainability policies, and governance frameworks, therefore, serve two purposes: to communicate and build institutional legitimacy (Suchman, 1995). Organisations try to achieve these disclosures by showing accountability, meeting the expectations of society and answering growing regulatory requirements related to sustainability performance. Expectations of sustainability are becoming more institutionalized, and governance systems and sustainability practices are becoming more deeply integrated into supply chain management structures.

In the last years pressures have increased in the institutions, especially following the European Union's regulatory changes. The sustainability reporting requirements are increasingly codified, with the Corporate Sustainability Reporting Directive (CSRD) setting out the enhanced transparency, comparability and standardisation of ESG disclosures (European Commission, 2021). The regulatory developments put further demands on companies to set up more formal governance and reporting procedures around sustainability. As a result, sustainability reporting is becoming more and more a formal institutional requirement and less of an organisational activity.

Nordic countries offer a compelling backdrop for the study of these developments because for these countries, regulation, transparency and accountability of corporations are ingrained in their institutional landscape (KPMG, 2022). Nordic organizations have to meet high expectations from stakeholders in sustainability performance, ethical sourcing and transparency of governance. The consequences of this include a greater likelihood of firms having a structured ESG reporting system and formal sustainability governance.

But the presence of sustainability statements and governance structures cannot be taken for granted to mean effective implementation in practice. John L. Campbell suggests that the use of sustainability disclosures by organisations can sometimes be for the purpose of legitimacy and to meet expectations of institutional users, rather than for any significant change in operations. As a result, there can also be a disconnect between the formal declaration of sustainability objectives and the realisation of sustainability practises in supply chain operations and supply chain governance. This is particularly relevant for reporting implementation gaps and possible mismatch between reporting and real-life practices.

In general, institutional theory offers a useful lens through which to consider how regulatory demands, expectations and institutional norms have led to more formalisation and institutionalisation of sustainability governance and disclosure systems within organisations (DiMaggio and Powell, 1983; Suchman, 1995).

## 2.5 ESG Disclosure and Sustainability Reporting

Environmental, Social and Governance (ESG) disclosure has emerged as a key tool for organisations to share their sustainability-related commitments, governance frameworks and organisational priorities (Kolk, 2010). The reporting of structured data is growing in the areas

of sustainability reporting, ESG disclosures and governance statements, considering environmental performance, social responsibility and organisational governance practices. With increased expectations for sustainability, ESG reporting has become increasingly formalized and institutionally standardized over time and industries (Christensen et al., 2021).

According to Kolk (2010), the process of sustainability reporting has become more institutionalized and is increasingly a part of corporate communication, controlled, demanded and facilitated by third parties and international initiatives. As a result, ESG disclosures are now considered to be crucial tools for organisations to let the public know about their sustainability policies, governance and responsible business practices. This disclosures frequently include the items of emissions, climate pledges, labour standards, human rights, supplier duty and governance structures.

In addition to communicating, ESG disclosures are also used as governance tools to affect internal decision making, monitoring and accountability processes (Christensen et al., 2021). Reporting systems affect what organisations report, prioritize, and track in their sustainability management systems. This heightened reporting emphasis on ESG has consequently begun to influence organisational governance, establishing sustainability targets, formalised goals and creating accountability and tools to measure sustainability outcomes.

In supply chain contexts, ESG disclosures often include content that is connected to supplier behaviour, responsible sourcing programmes, compliance frameworks and monitoring systems that engage several companies in the governance processes associated with sustainability. As a result, sustainability reporting is no longer just an external expression of organisational commitment, and more and more sustainability expectations are integrated in organisational processes and other value chain activities (Christensen et al., 2021). ESG reporting, in this regard, can be seen as a communication tool and an important governance tool in Sustainable Supply Chain Management (SSCM).

ESG disclosures are also becoming more salient, but should be viewed as a representation and not as a value free or objective reflection of the situation of an organisation. The literature related to sustainability reporting has recently become a greater focus on the impact of the disclosure's reputation consideration on its disclosure, as well as on institutional pressures and strategic communication objectives of the disclosure (Michelon et al., 2015). Less

desirable aspects of a company's operations may not be more prominent in the reporting, while the information that reinforces the legitimacy or helps to protect the company's reputation may be selectively disclosed.

The notion of decoupling indicates that the formal commitment to sustainability is not necessarily matched by the actual practices of the organisation or in the implementation of its operations (Hahn and Kühnen, 2013). Organisations can make their sustainability goals and governance frameworks public, but implementation is inconsistent or limited when it comes to operations across their supply chain, or ESG commitments. So, there is room for disconnect between sustainability narratives reported, and sustainability results.

Another important one is that of organised hypocrisy (Cho et al., 2015), which implies that some organisations may communicate sustainability for institutional and stakeholder purposes more than to practice sustainability. In these instances, sustainability language, ESG reporting and governance declarations are more of a lip-service gesture to responsibility and compliance than a true indicator of the actual change in operations. For this reason, disclosure of the ESG matters would help organisations gain legitimacy and meet expectations for sustainability even if in practice, they are not doing a lot with it.

The issues covered are even more important in the context of Sustainable Supply Chain Management (SSCM), where companies are increasingly using ESG disclosures to share governance systems, ethical procurement programs and sustainability pledges within complex supply chains spread between various countries all over the world. In this context, ESG reporting is no longer just a reporting exercise, but rather an organising process for structuring, communicating and integrating sustainability expectations into governance processes.

Therefore, ESG disclosure should not be deemed to be a reflection of the actual practices of the organization. They can also be constructed narratives of sustainability, however, based on governance goals, institutional constraints, and legitimacy considerations (Michelon et al., 2015; Cho et al., 2015).

## 2.6 Supply Chain Governance

Supply chain governance involves the organizational, procedural and institutional mechanisms, processes and structures that facilitate and coordinate the relationships among the actors in a chain (Gereffi, Humphrey and Sturgeon, 2005). In Sustainable Supply Chain Management (SSCM), governance mechanisms are becoming more significant as the demands for sustainability are not just being made of the individual organization but also of their suppliers, sourcing networks and logistics operations. Over the last few years, organisations have increasingly been using governance systems to take a formal approach to managing environmental, social and ethical risks in their supply chain activities, as well as setting expectations for what they want from supply chain partners in terms of sustainability.

Gereffi, Humphrey and Sturgeon (2005) cited that the governance of supply chain may be either formal or informal. Various formal governance mechanisms involve supplier codes of conduct, contractual provisions, compliance requirements, auditing, certification and monitoring. The mechanisms create clear sustainability demands and clearly outline what organisations and suppliers are responsible for. They aim to enhance accountability, reduce sustainability risks and establish a common framework for taking sustainable action across value chains.

Conversely, informal governance is rooted more in the ability of SC actors to collaborate, trust and coordinate their relationships, and to share norms (Gereffi, Humphrey and Sturgeon, 2005). Governance can be achieved through longer-term collaborations, collaborative problem-solving efforts, and/or shared sustainability strategies, rather than by formal compliance processes. Organisations tend to mix formal and informal governance in their application of sustainability expectations in their value chains depending on the nature of the businesses and the context.

As a result of globalisation and complexity of supply chains, governance systems in SSCM are more important than ever before (Gimenez and Tachizawa, 2012). The increasing geographical dispersion and operational interconnectedness of Supply chains makes it more difficult to monitor sustainability related risks. Governance systems have thus evolved beyond the internal governance mechanisms and are now becoming more complex, with increased

involvement of external actors such as suppliers, contractors and international sourcing systems.

Common sustainability governance practices in supply chains are supplier monitoring systems, responsible sourcing policies, sustainability audits and compliance assessment frameworks (Wilhelm et al., 2016). The governance mechanisms are aimed at having an impact on supplier behavior in terms of, for example, working conditions, environmental management, ethical sourcing, and human rights protection. Governance systems are therefore operational tools to help realise sustainability commitments in day-to-day supply chain actions and processes.

Meanwhile, governance systems have helped to institutionalise sustainability requirements in the operations of supply chains. Laws, regulations and guidelines are increasingly formalizing sustainability requirements and compliance codes into the procurement and sourcing processes, as supplier codes of conduct (CoC) and sustainability standards come to be part of organizational requirements. (Gimenez and Tachizawa, 2012) These mechanisms have an impact on supplier behavior and the incorporation of sustainability goals in decision making processes within organisations.

However, the effectiveness of the supply chain governance mechanisms is very different between organisations and industries (Wilhelm et al., 2016). Some organisations have extensive supplier auditing programmes and strong enforcement protocols, whereas others have a more symbolic approach of communicating their sustainability commitments in policy and in public statements. This variation focuses on the presence of governance mechanisms and also on the extent to which the sustainability expectations are really met within activities in the supply chain and operations in the value chain.

In general, the governance mechanisms in the value chain are a key aspect in the process of converting sustainability statements into formalized supplier sustainability demands and implemented sustainability management systems (Gereffi, Humphrey and Sturgeon, 2005; Wilhelm et al., 2016).

## 2.7 Theoretical Framework

This study aims to construct an analytical framework to explore the Sustainable Supply Chain Management (SSCM) and its representation and operationalization in corporate disclosure. The framework brings together the elements of both the Triple Bottom Line and the stakeholder theory, institutional theory and supply chain governance literature, aiming to explain how the commitments to sustainability are made visible in the organisation's reporting and governance.

The Triple Bottom Line (TBL) approach (Elkington, 1997) is used as the main basis for the framework, which is divided into three parts: environmental, social and economic. In the context of this study, the TBL approach is used to classify the sustainability disclosures in environmental, social, and governance (ESG) areas, and organizational governance is analyzed as a system in which sustainability commitments are made, monitored, and communicated. This lens is useful for a more holistic evaluation of the ways in which organisations embed sustainability issues across value chain activities, well beyond the financial dimension.

Stakeholder theory has been included in the framework to describe why organisations are increasingly disclosing sustainability and have governance systems in place to meet stakeholder expectations (Freeman, 1984). The pressure on organisations with regard to their environmental actions, labour conditions, and responsible sourcing is growing, from regulatory, political, as well as consumer and civil society perspectives. The disclosure of ESG thus becomes a means of communication showing how organisations are reacting to these expectations, as well as a means of asserting their legitimacy.

Secondly, institutional theory contributes to developing an understanding of the reasons why more organisations are now reporting on sustainability and why organisations are beginning to incorporate governance structures in a similar manner (DiMaggio and Powell, 1983). The regulatory environment and the professional standards and expectations of the industry are pushing firms to establish formal sustainability reporting systems and governance. These pressures help push towards standardisation of ESG disclosures and the governance of sustainability in very institutionalised settings like the Nordic region. The institutional theory also stresses that organisations might implement institutional structures on sustainability

mostly for the purpose of maintaining their legitimacy and fitting in with the institutional expectations (Suchman, 1995).

The governance approach complements these theoretical approaches by considering how expectations for sustainability are put into practice through supply chains (Gereffi, Humphrey and Sturgeon, 2005). Codes of conduct, auditing systems, compliance procedures and monitoring mechanisms are increasingly being used as governance mechanisms to coordinate along supplier networks by supplier codes of conduct, which are used to manage sustainability practices. Supplier codes of conduct are being used as governance mechanisms to coordinate sustainability practices along supplier networks, via codes of conduct, auditing systems, compliance procedures and monitoring mechanisms. In an organizational practice, governance mechanisms can therefore be understood as the functioning of SSCM.

These theories and concepts form the basis for developing a framework comprising three analytical dimensions – the environmental, social and governance. The environmental part particularly focuses on emissions, climate goals, energy consumption and resource management. There are three aspects of the social dimension which are looked at: labour standard, human rights, ethical sourcing and supplier responsibility. The governance dimension emphasises systems of monitoring, supplier audits, systems of accountability and systems of enforcement.

These are dimensions that help to define the empirical study in this research. The framework can be applied for disclosure content coding and classification and systematic disclosure content comparison of firms. The framework also enables for analysis of not just the disclosure of ESG information, but the integration of sustainability commitments into governance frameworks and operations throughout the supply chain.

This framework also provides room for a discussion of the differences in the depth of governance, specificity of implementation, and integration of sustainability across organisations. While the terms and the sustainability formats used by firms may be the same, there are differences in the ways in which sustainability is implemented in the supply chain. The framework provides an approach to the analysis of the institutionalization,

communication and operation of SSCM in corporate disclosures that is contextually analytical.

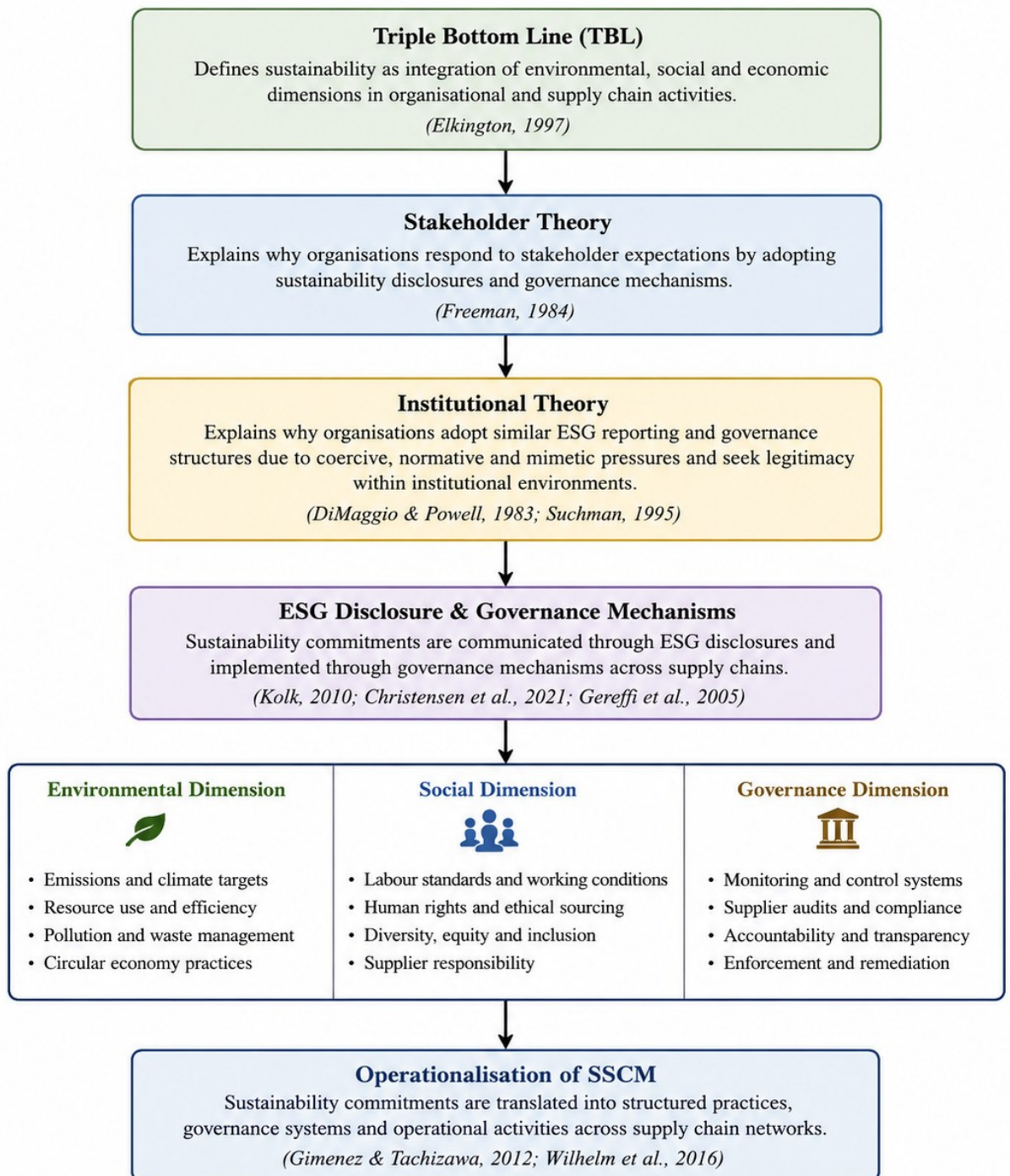


Figure 1 Theoretical Framework for the Analysis of Sustainable Supply Chain Management (SSCM)

## CHAPTER 3 METHODOLOGY

### 3. Methods

#### 3.1 Research Approach

This paper assumes a conceptualisation and operationalisation of Sustainable Supply Chain Management (SSCM) in corporate disclosures to take place within the qualitative, interpretive research paradigm. A qualitative design will be suitable as the research aims to analyse meanings, structures, and representations inherent in organisational texts, as opposed to quantifying causal relationships between variables (Bryman, 2016). This focus is then on the understanding of the formal construction and communication of sustainability in the organisational condition.

Based on the main methodological approach of the analysis of documents, the research was carried out. The use of documents is particularly suitable for the current study because practices in the organisation are embedded in a formalised, institutionalised system, such as corporate reports (e.g. ESG reports, sustainability reports or governance policies), which are made public (Bowen, 2009). They are documents with organised and tested images of how organisations prioritise, allocate responsibilities and create governance mechanisms with regards to sustainability.

Document analysis can provide representations of the organisation in the formal communication level in contrast to the individual level of perceptions and experiences captured through interviews. This distinction is crucial for the present study as it is not to account for the meanings that are negotiated by the subjects, but rather to explore how SSCM is encoded, institutionalized and formalized in systems of formal governance. The study of institutionalisation of sustainability practices is thus better advanced in the context of corporate disclosures (Prior, 2003).

Significantly, the expression of the reality of organisations in corporate disclosures is not looked upon as neutral. Rather, they are seen as manufactured outputs that are shaped by regulatory requirements, stakeholder expectations and strategic communication objectives

(Christensen et al., 2021). It is this perspective that enables a critical analytical approach, with disclosures seen as tools for organisational governance and as representations which can selectively emphasise certain aspects of organisational practice.

The methodological choice is directly related to the research objectives in the present research which was to analyse the representation, structure and operationalisation of SSCM in corporate disclosures, specifically in the ESG reporting and supply chain governance reports. The study can systematically compare firms and establish patterns in the articulation and implementation of sustainability practices across various organisational contexts by focusing on formal organisational texts.

## **3.2 Sample and Case Selection.**

### **3.2.1 Empirical Context (Nordic Setting)**

The empirical setting of this study comprises of companies that are based in Nordic countries (Finland, Sweden, Denmark, and Norway). This geographical focus is analytically pertinent because of the high degree of institutionalisation of sustainability reporting in the Nordic context. Nordic companies have robust regulatory frameworks, well-developed corporate governance systems, and well-developed sustainability reporting standards, which together encourage transparency and accountability in ESG disclosures (KPMG, 2022; Christensen et al., 2021).

Besides regulatory pressures, a high normative commitment to sustainability and stakeholder engagement is characteristic of Nordic companies. Consequently, the corporate disclosures in this respect offer a particularly appropriate empirical foundation to analyse the manner in which the Sustainable Supply Chain Management (SSCM) is formally expressed and entrenched into the organisational governance systems.

### **3.2.2 Sampling Strateg**

A purposive sampling approach was used to ensure relevance of the analysis and a focus on the study's goals (Robinson, 2014). Purposive sampling allows for the adequate selection of information rich cases that are especially relevant to the study of specific organisational phenomena, in contrast to the probabilistic sampling techniques. In the scope of this research the sampling strategy aimed to find companies where Sustainable Supply Chain Management

(SSCM) practices are formalised in the disclosures of the ESG and in the governance systems of the supply chains.

The sampling process has been carried out in two stages.

#### Stage 1: Preliminary Sample Identification

The first step was to identify an initial group of around 120 Nordic companies in industries that experience high complexity and exposure in the supply chain. The industries encompassed manufacturing, energy, retail and logistics, as those sectors usually have complex, multi-tier, and dispersed supply chains that operate across the globe (Seuring and Müller, 2008). Therefore, these industries are relevant with regard to the empirical context of the governance and operationalisation of SSCM practices.

#### Stage 2: Systematic Filtering

The preliminary sample was then whittled down using a structured screening process involving the predetermined criteria. This filtering was performed to offer the consistency, comparability and relevance of the analysis of selected cases. The screening was performed on a limited basis with regard to the availability of sustainability information and the presence of formalized supply chain governance structures.

#### 3.2.3 Selection Criteria

The final sample consisted of only companies that met the following criteria:

Whether or not it has a recent ESG or sustainability report (from 2022 to 2024); and

The existence of governance related disclosures in the supply chain, including supply chain codes of conduct, responsible sourcing policies or supplier governance frameworks;

Signs of multi-tier and/or cross-border supply chain operations, pointing to the presence of formal supplier governance mechanisms;

The industry and supply chain sectors with high complexity such as manufacturing, energy, retail and logistics.

The criteria were developed to guarantee that the chosen organisations are able to deliver information-rich, relevant and comparable disclosure material to analyse SSCM practices and governance structures (Seuring and Müller, 2008).

### 3.2.4 Final Sample

*Table 1 Sample Distribution by Country and Industry*

Country	Number of Firms	Key Industries Represented
Finland	7	Energy, Manufacturing, Retail
Sweden	8	Automotive, Retail, Industrial
Denmark	6	Logistics, Pharma, Manufacturing
Norway	6	Energy, Marine, Industrial
<b>Total</b>	27	—

*Table 2 Final Sample of Companies*

No.	Company	Country	Industry
1	Neste	Finland	Energy
2	Fortum	Finland	Energy
3	UPM-Kymmene	Finland	Manufacturing
4	KONE	Finland	Industrial
5	Kesko	Finland	Retail
6	Wärtsilä	Finland	Marine/Industrial
7	Valmet	Finland	Industrial
8	Volvo Group	Sweden	Automotive
9	Volvo Cars	Sweden	Automotive
10	IKEA (Ingka Group)	Sweden	Retail
11	H&M	Sweden	Retail
12	Ericsson	Sweden	Technology
13	Vattenfall	Sweden	Energy
14	Atlas Copco	Sweden	Industrial
15	Scania	Sweden	Automotive
16	Maersk	Denmark	Logistics

17	Ørsted	Denmark	Energy
18	Novo Nordisk	Denmark	Pharma
19	Vestas	Denmark	Energy
20	DSV	Denmark	Logistics
21	Carlsberg	Denmark	Manufacturing
22	Equinor	Norway	Energy
23	Telenor	Norway	Telecom
24	Norsk Hydro	Norway	Manufacturing
25	Yara International	Norway	Chemicals
26	DNB	Norway	Finance
27	Mowi	Norway	Marine/Food

### 3.2.5 Sample Justification

The sample chosen is not an exhaustive one for the Nordic companies. Rather, it is analytically representative, and similarities, variations and common patterns can be identified in how SSCM is conceptualized and operationalized among organizations (Patton, 2015).

The number of 27 firms provides the needed in-depth qualitative disclosure analysis, but is large enough to provide adequate diversity for systematic cross-firm comparison. The analytical depth and comparative breadth is in line with the principles of qualitative research design. The chosen companies are involved in industries with complex supply chain structures and formal sustainability governance requirements, which is relevant for the aspects of ESG disclosures and supply chain governance practices.

In addition, the organizations selected are at different stages of sustainability integration, governance specificity, and depth of disclosure. This variation adds to the analytical value of the sample by allowing comparison between different industries, governance and organisational approaches to sustainability. The sample makes it possible to examine how the concept of SSCM is interpreted in corporate disclosures, incorporated into governance systems and implemented across the different contexts of the organisations.

### 3.2.6 Data Consistency and Comparability

To get uniformity and comparability in the sample, all the firms were analysed on the basis of corporate disclosure made in one reporting period (from 2022 to 2024). Furthermore, the same type of documents were analysed in all organisations, such as ESG reports, sustainability reports, governance policy and other governance documents related to suppliers.

By using a standardised approach, it increases the ease of comparisons across firms due to the lack of inconsistencies that would be created by reporting periods or the type of document. Consequently, any differences found in the analysis are more likely to be differences in actual SSCM practices and governance structures than differences in how SSCM data is collected or reported.

### 3.3 Data Collection

The data used in this study comes from secondary data obtained from the companies' public disclosures. The disclosures are formally and publicly communicated statements about governance and sustainability practices of the organisation. The application of the document-based data aligns with the research purpose of investigating sustainable supply chain management (SSCM) as it is conceptualised and operationalised in the organisation's reporting and governance systems, as opposed to individual perceptions/experiences (Bowen, 2009).

The data collection process took place systematically according to official corporate sources to guarantee reliability, consistency and comparability among firms. The following were considered as primary sources:

- corporate sustainability and ESG reporting sections;
- investor relations portals;
- corporate governance, ethics and compliance webpages.

These sources cover structured organizational disclosures, which express sustainability priorities, the sustainability governance process and commitments related to the supply chain.

Types of Documents

The study is conducted on a specific group of documents which are directly related to the governance processes of sustainability and supply chains, limiting the scope of the study to be relevant and consistent for analytical purposes. The following types of corporate disclosures were analyzed:

ESG and sustainability reports that detail the sustainability strategies, performance measures and environmental and social commitments of the organisation;

annual and integrated reporting, that puts the company in a larger organisational context and shows how ESG is incorporated into corporate reporting; and

Supplier Codes of Conduct, establishing sustainability expectations, ethical requirements and supplier responsibilities;

Operational policies for sourcing and procurement, including responsible sourcing and procurement policies that lay out operational approaches for supply chain sustainability and risk management; and

corporate governance and ethics policies that identify accountability mechanisms, monitoring mechanisms and compliance protocols.

The documents chosen were those which act as formal governance documents where organisations communicate and implement sustainability expectations in supply chain networks.

*Table 3 Data Sources and Analytical Purpose*

Document Type	Purpose in the Study
ESG / Sustainability Reports	Overall sustainability strategy and performance
Annual / Integrated Reports	Organisational context and ESG integration
Supplier Codes of Conduct	Supply chain governance and supplier standards
Responsible Sourcing Policies	Operationalisation of SSCM practices
Governance and Ethics Policies	Accountability, monitoring and compliance mechanisms

Only the disclosures made by companies between 2022 and 2024 have been analyzed in order to make comparisons across companies. The time period captures recent progress in sustainability reporting, including the growing standardisation of sustainability reporting

disclosures and the impact of European sustainability reporting frameworks and regulatory expectations. Limiting the time period covered by the dataset minimises the effect of reporting methodologies over time and allows the analysis to capture the current organisation's approach to SSCM and ESG governance.

All gathered documents were methodically processed in a structured database, sorted by company, country, type of document and reporting year. An organised approach facilitates clear data handling and facilitates the comparison of data across firms on a systematic basis. Consistency in document type and standardisation of data organisation also helps to improve the internal reliability of the data by providing comparable disclosure data for the analysis of all the selected organisations as similar (Bowen, 2009).

## 3.4 Data Analysis

### 3.4.1 Analytical Approach

This study employs a qualitative content analysis method to analyse the representation and operationalisation of Sustainable Supply Chain Management (SSCM) in corporate disclosures. Qualitative content analysis is appropriate for this research because it allows for systematic analysis of textual data and interpretation of the content without losing the contextual meaning and structure of the examined material (Elo and Kyngäs, 2008).

The method of analysis is deductive and theory driven, where the analytical categories are formed in the light of the theory developed in chapter 2. The study does not aim to identify categories from the data but rather predefines analytical dimensions to analyse the representations of sustainability concepts in the organisational disclosure. This will allow the analysis to be consistent across all cases and provide a way to directly compare theory and data.

The analysis also aims to identify similarities and differences and variations between firms, industries and governance structures for systematic comparison across firms. Thus, the analytical approach goes beyond descriptive reporting analysis into how sustainability commitments are operationalised through governance structures and processes in the supply chain.

### 3.4.2 Analytical Framework

The analysis is organized into three interrelated dimensions of sustainability:

- environmental dimension – emissions, climate targets, resources, environmental management practices;
- social dimension (including labour standards, supplier responsibility, stakeholder relations and human rights practices); and
- governance dimension, including policies, monitoring systems, supplier audits and accountability mechanisms.

The dimensions are based on the Triple Bottom Line (Elkington 1997) which frames sustainability in terms of environmental, social and economic concerns. The stakeholder theory is used to further support the framework, through highlighting the pressure for transparency and accountability, and the increasing expectations of organisations to take responsibility for a wide variety of stakeholders in their supply chains (Freeman, 1984).

In this study, the ESG dimensions are not considered as separate disclosure segments, but as interrelated elements of SSCM. The framework thus includes provisions for analysing sustainability commitments that are disclosed – and for analysing the governance mechanisms by which these commitments are put into practice in the activities and systems of the supply chain.

### 3.4.3 Coding Framework

Dimension	Key Indicators	Analytical Focus
<b>Environmental</b>	Emissions (Scope 1–3), climate targets, energy use, resource efficiency, circular economy	Operational specificity of environmental sustainability practices
<b>Social</b>	Labour standards, supplier conditions, human rights, stakeholder engagement	Supplier responsibility and social sustainability integration
<b>Governance</b>	Policies, supplier codes, monitoring systems, audits, accountability structures	Enforcement mechanisms and governance implementation

### 3.4.4 Analytical Process

This analytical process was done in 2 phases.

#### Stage 1: Framework-Guided Analysis

The second phase involved using the pre-established ESG dimensions on the corporate disclosures. The disclosure content was identified and categorized based on environmental, social and governance indicators. This stage allowed the analysis to be theoretically anchored and methodologically coherent for the entire analysis that covers all the cases.

#### Stage 2: Cross-Case Comparison

After the initial categorisation, comparative analysis was done between firms to identify:

- Comparisons and contrasts of sustainability focus by ESG dimensions;
- variations in the specificity, depth and enforceability of governance mechanisms;
- Gaps in revealed sustainability commitments and governance practices.

The analysis was directed at similarities and differences, and at governance differences between firms and industries, to facilitate systematic cross-firm analysis. This stage thus goes beyond descriptive reporting analysis, while exploring how sustainability is implemented in organisational governance systems, not only communicated via reporting structures.

### 3.4.5 Cross-Case Comparison Logic

The study uses a cross case comparative analysis approach to highlight the differences in how SSCM is implemented and governed across organisations. A specific comparison has been made between:

- differences in environmental, social and governance disclosure priorities;
- differences in the depth of governance, monitoring and accountability; and
- Variations in the degree of disclosure and its implementation between industries; and
- The depth of disclosure of sustainability disclosures with regard to the nature of their substantive content versus symbolic content

This comparative approach allows not only for the study of the presence of ESG disclosures, but also for the study of the level of the integration of sustainability, governance

operationalisation and the specificity of the implementation of sustainability within the firms and in the organisational context.

## **3.5 Data Quality and Reliability**

### **3.5.1 Limitations of Corporate Disclosures**

The following is a discussion of the limitations of corporate disclosures.

Corporate disclosures are organised and accessible data about organisations, but cannot be seen as neutral representations of organisational practice. The regulatory expectations, reputation management and strategic communication goals (Michelon et al., 2015) have been found as a driver of ESG disclosures.

An important restriction is that formal sustainability statements can be in conflict with operational implementation, as can be the selective disclosure and the decoupling (Hahn and Kühnen, 2013). Organisations might highlight positive sustainability activities whilst minimising governance weaknesses, implementation difficulties or gaps in practice.

Likewise, sustainability reporting can serve as organisational legitimacy management in that disclosures can be crafted to meet the expectations of stakeholders, but do not necessarily entail real organisational transformation (Cho et al., 2015). ESG disclosures must therefore be interpreted critically, and not taken at face value as being a representation of operational reality.

### **3.5.2 Reliability Measures**

To make the study more reliable and valid, a number of precautions have been taken during the research.

First, a multi-source analysis of different types of disclosures (ESG reports, governance policies, supplier-related disclosures and sourcing documents) was used to make sure that triangulation across document types was performed. Second, systematic cross-firm comparison minimized reliance on isolated organisational narratives, and helped to ensure analytical consistency across the cases.

Third, instead of relying entirely on narrative sustainability claims, the analysis was limited to governance structures, monitoring systems, and to supplier standards and accountability

mechanisms. This analytical approach has a governance orientation and helps to provide a more critical interpretation of sustainability reports, minimizing the likelihood of constructing an 'echo chamber' of sustainable reporting.

These measures help to increase the reliability of the analysis, supplementing the systematic and critical analysis of organisation sustainability disclosures.

### **3.5.3 Interpretation Approach**

This research treats the corporate disclosures as representations of the organisation, not a reflection of real-world operations. The analysis is thus directed at definitions, communication and operationalisation of sustainability within the governance system, leaving the possibility of strategic and legitimacy-oriented disclosures.

The interpretive approach allows the study to reflect critically on the levels to which SSCM is present within formal organisational structures and governance mechanisms, and recognise the limitations of using secondary disclosure data (Bowen, 2009).

## **CHAPTER 4: FINDING**

### **4. Findings**

#### **4.1 Introduction to Findings**

This chapter shares the results of the empirical research regarding sustainability reporting practices of Nordic companies. The study investigates the conceptualization and operationalization of Sustainable Supply Chain Management (SSCM) in the sustainability reports, supply chain governance documents, and ESG disclosures. The results are presented by the three analytical dimensions as defined in the theoretical framework: environmental dimension, social dimension and governance dimension.

The analysis is carried out using the selected organisations' corporate ESG reports, sustainability reports, codes of conduct for suppliers, responsible sourcing policies and disclosures related to governance. The qualitative content analysis method was used to analyze the representation of the sustainability commitments in governance and the incorporation of sustainability commitments in operational supply chain practices.

The results are compared with other firms and industries on selected issues to look for similarities, differences and variations in governance practices and their operationalisation of SSCM practices. Special focus is paid to differences between organisations in industrial contexts as regards: depth of governance, specificity of governance disclosure, monitoring systems, and structures of implementation.

The chapter starts with an overview of general disclosure practices across the sample, and moves on to an analysis of the environmental, social and governance dimensions. The last parts combine cross-dimensional patterns and include a comparison of the differences in the operationalisation of SSCM between firms and industries.

#### **4.2 Overview of ESG Disclosure Practices**

##### **4.2.1 General ESG Reporting Patterns**

The general ESG Reporting Patterns are as follows:

The analysis reveals that ESG reporting is very institutionalised and standardised among Nordic companies. The majority of the organisations in the sample have structured ESG or sustainability reporting adopted in accordance with widely used sustainability reporting frameworks, such as the Global Reporting Initiative (GRI). The growing influence of European sustainability regulation, like the Corporate Sustainability Reporting Directive (CSRD), can also be seen in the increasing focus on disclosure consistency, transparency and governance accountability in firms (Christensen et al., 2021).

In general, sustainability disclosures are structured in a similar way for the sample with the focus on the ESG aspects. The environmental disclosures tend to be the most extensive and quantitative, especially with firms in the energy, manufacturing and logistics sectors. Companies like Neste, Ørsted and Volvo Group have a wealth of information about their emissions reduction targets, renewable energy transitions and governance structures in relation to climate change. Both Ørsted and Neste also include decarbonisation strategies and the transformation to renewable energy as key elements in their sustainability reporting, and initiatives for the circular economy and the production of renewable fuels in their sustainability strategies, respectively.

Supply chain transparency and ethical sourcing and supplier responsibility are more important for retail and consumer oriented companies like H&M and IKEA (Ingka Group). Increasingly, there is stakeholder pressure for companies to be responsible about sourcing and labour governance, as this is repeatedly highlighted in H&M's sourcing disclosures, including traceability and supplier transparency. Likewise, IKEA uses sustainability reporting as a tool to tie-in supplier governance and the circular sourcing goals in its value chain operations.

Logistics companies are good examples in that they have integrated environmental reporting into operational risks in their supply chain, with Maersk and DSV being good examples of this. These companies report climate-related goals linked to shipping emissions, logistics efficiency and supply chain decarbonisation. Maersk, for instance, is very focused on low-emission logistics solutions and Scope 3 emissions management in the supplier and transportation networks.

ESG reporting frameworks are broadly similar from firm to firm, but there are variations in the depth, specificity and operational detail of reporting. In some organisations there are very

detailed governance processes, monitoring systems and processes for implementation, while in others there is a greater emphasis on strategic narratives and sustainability commitments. This means that ESG reporting is becoming more and more institutionalized, but the implementation of sustainability practices is not uniform from company to company.

#### **4.2.2 Supply Chain Disclosure Patterns**

Disclosures related to the sustainability of the supply chain are found in the vast majority of the companies studied, but are significantly less detailed in some sectors or among some companies. The majority of companies publish information on their sustainability expectations when it comes to their suppliers in the form of supplier codes of conduct or responsible sourcing policies and governance frameworks that discuss environmental, labour and ethical issues.

Environmental supply chain disclosures stand out in the context of Scope 3 emissions disclosure, emissions expectations of suppliers and sourcing governance. The energy and manufacturing companies, Neste, Fortum and Volvo Group, disclose more in-depth information about their upstream emissions and environmental performance of their suppliers, in line with the high environmental footprint of their supply chain activities. Other retail and consumer-based companies are more interested in supplier compliance, traceability and sourcing transparency than in quantitative environmental measures.

Social sustainability disclosures are well in evidence, with codes of conduct in place with suppliers and a human rights policy. The majority of companies in the sample have a formal statement of expectations on labour standards, sourcing ethics and suppliers' conduct. Information about supplier monitoring, enforcement and corrective actions is typically not as specific. Organisations often share their expectations for sustainability, but fewer organisations offer detailed information on the methods used to ensure suppliers achieve these expectations throughout their supply chain networks.

Governance related disclosures show that the formalisation of supplier sustainability management is increasing. The majority of organisations report on the governance arrangements including supplier risk assessments, compliance, and sustainability governance and auditing. However, how governance is implemented differs markedly between firms. Some organisations have a more detailed governance system that is supported by monitoring

and accountability systems whilst others have more general sustainability principles and high level governance commitments.

Overall, the results indicate that ESG disclosures are increasingly becoming governance tools that express expectations of sustainability throughout supply chains. There is significant variation, however, in the extent to which these governance structures are put into practice and back them up with disclosure.

#### **4.2.3 Variations Across Firms**

The Nordic firms' reporting practices in ESG are structurally very similar, but there are substantial differences when it comes to depth of disclosure, specificity of the governance and transparency of how the operations are conducted. These differences are starkest between industries with different asset bases and diversity in their exposure to and reliance on sustainable supply chains.

Energy and industrial sector firms tend to make more comprehensive environmental disclosures, especially on emissions reduction plans, governance mechanisms and sustainability goals. Companies like the Danish renewable energy firm Ørsted, the Finnish energy firm Neste and the Norwegian energy firm Equinor share detailed information about decarbonisation strategies, renewable energy projects and governance institutions addressing climate change. Companies working in the retail and consumer goods industry, on the other hand, are more focussed on ethical sourcing, supplier transparency, labour rights, and social responsibility in the supply chain.

There are also some variances in the specificity of governance disclosures. Some companies offer detailed information on supplier audit systems, risk assessment processes and corrective measures, others make general statements regarding sustainability and have no operational details to offer. This separation indicates that there is a different level of governance maturity and visibility of implementation within organisations.

Furthermore, there are some differences between firms that are more inclined to value quantitative sustainability metrics and those that are more inclined to value narrative sustainability commitments. Typically, manufacturing, logistics and energy companies tend to

report more measurable environmental performance indicators while some retail and service-based organisations report more extensively at a policy level.

The results suggest that the institutionalisation of the ESG reporting frameworks is continuing to grow in Nordic companies but the practices of SSCM are not fully operationalised. It is evident that there are differences in disclosure across industries and organisations, so that the disclosure on sustainability is driven not only by regulatory expectations but also by variations in organisational sustainability priorities, the complexity of their supply chain and governance structure.

*Table 4 Overall ESG Disclosure Patterns*

<b>Dimension</b>	<b>General Pattern</b>	<b>Cross-Firm Variation</b>
<b>Environmental</b>	Strong quantitative reporting	Scope 3 disclosure depth varies across industries
<b>Social</b>	Policy-oriented sustainability disclosures	Enforcement and supplier monitoring differ significantly
<b>Governance</b>	Structured governance frameworks widely present	Monitoring specificity and accountability mechanisms inconsistent across firms

### 4.3 Environmental Dimension Analysis

The most widely disclosed sustainability category among the sampled Nordic companies was the environmental dimension. The emissions reduction goals, climate governance frameworks, transitions to renewables, circular economy programs, and environmental expectations of suppliers were the main dimensions of environmental sustainability implemented. From an environmental sustainability point of view, there was a strong linkage of environmental disclosures in broader ESG reporting and governance processes among companies (Elkington, 1997; Carter and Rogers, 2008).

#### 4.3.1 Climate and Emissions Reporting

The sample indicated that most developed quantitative ESG disclosure is within the climate and emissions category. The majority of companies reported quantifiable climate goals,

emissions reduction strategies and sustainability metrics in line with international climate frameworks and regulatory requirements. Substantial variation did however appear in the depth of the disclosures and in the level of specificity of the operation in different industries.

Companies in the energy sector—like Ørsted, Neste, Fortum and Equinor—showed the highest level of reporting on climate governance. These groups shared detailed reporting on decarbonisation initiatives, renewable energy investments, medium- and long-term commitments to net-zero and other topics. Ørsted, for instance, firmly connected its climate targets to operational and supply chain decarbonisation efforts, while Neste highlighted renewable fuel production and lifecycle emissions reduction as key sustainability priorities. These disclosures indicated good integration of environmental commitments and governance.

Other companies, such as industrial and manufacturing companies as Volvo Group, Scania and Atlas Copco, also reported on their emissions strategies, and especially Scope 1 and Scope 2 emissions. Through vehicle electrification, low-emission transportation technologies and climate performance metrics throughout production systems, the Volvo Group actively promoted the electrification of its vehicles. While manufacturers often reported environmental goals and operational efficiencies, however, there was a wide range in the level of reporting of emissions for supply chains (Scope 3) and governance for them between organisations.

Logistics companies like Maersk and DSV were particularly active in transportation emissions and logistics efficiency and decarbonisation of shipping. Pressure in the logistics industry to take action on supply chain emissions is driving Maersk to reveal long-term targets for carbon-neutral logistics and sustainable shipping fuels. However, although overall emissions reporting was reasonably high, less information was available about supplier climate enforcement mechanisms than for other energy sector companies.

The variation was the highest in Scope 3 reporting, across the sample. Some organisations shared detailed examples of how they manage emissions upstream and downstream, while others focused more on the high-level climate commitments without a lot of detail regarding the operational aspects. This indicates that while supplier environmental governance is institutionalised in ESG disclosure, patchiness exists at the firm level regarding operationalisation of supplier governance.

### 4.3.2 Environmental governance along the supply chain

The concept of environmental sustainability was progressively spread beyond organisations and was embedded in supplier governance, sourcing standards and in requirements for sustainability in the procurement process. Most companies incorporated environmental issues into codes of conduct for suppliers and responsible sourcing policies, which reflects the increasing inclusion of sustainability governance into the supply chain management practices (Gimenez and Tachizawa, 2012).

Good governance-based companies (e.g. Ørsted and Neste) reported relatively clear sustainability requirements from suppliers regarding climate performance and environmental compliance and responsible sourcing criteria. These companies had a higher degree of sustainability reporting and supply chain governance integration, encompassing that integration into supplier evaluation and procurement governance systems.

Likewise, IKEA and H&M integrated environmental sustainability criteria into supplier governance mechanisms, in the following categories: raw material sourcing, circular sourcing and supplier environmental compliance. The supply chain traceability and sustainable sourcing goals were repeatedly highlighted in supplier relationships, demonstrating a growing demand for environment responsibility from all stakeholders along global supply chains.

Weaker operational disclosure, however, was seen in some companies where their environmental sustainability statements were predominantly policy in nature. In these instances, organisations made general statements about their environmental goals but offered little detail regarding systems for monitoring suppliers, enforcement, or accountability for operations. Environmental governance structures were often disclosed but in reality, there was limited visibility of implementation.

The results indicate that there is increasing institutionalisation of environmental sustainability governance, but the level of operationalisation of environmental expectations via supplier management systems and governance mechanisms are widely different.

The importance of Circular Economy and Resource Efficiency.

Across the sample, there was a strong representation of initiatives active for a circular economy and resource efficiency measures, especially for manufacturing companies, energy

companies and retail companies. There was emerging a trend towards drawing on ideas that emphasised the use of recycled materials, renewable materials, waste minimisation and resource efficiency, mirroring the wider move towards circular supply chain models.

Neste and UPM-Kymmene fully embedded the principles of circular economy in their sustainability disclosures via renewable resource use and low carbon production methods. Likewise, IKEA announced plans to source its materials and production systems in a circular fashion, with a focus on sustainable materials. Volvo Group and Wärtsilä also highlighted the optimisation of energy use and optimisation of resources in production and operation systems.

Retail companies focused more on the material sourcing and product life cycle sustainability. In response to the growing pressure in a retail supply chain on environmental responsibility and sustainable sourcing practices, H&M revealed projects focusing on recycled materials, sustainable textiles and circular product strategies.

Although the terms of the circular economy became more popular in the ESG disclosures, the extent to which they were operationalised was significantly different among companies. Some organisations had measurable targets and structures for their implementation; others adopted more of a strategic sustainability narrative, with mostly abstract governance and implementation evidence.

In general, circular economy disclosures showed that environmental sustainability is becoming a part of organizational sustainability stories. The use of systematic application of circularity principles in supply chain governance structures is however not consistent.

#### **4.3.4 Environmental Integration Patterns**

The cross-firm analysis showed significant differences in the incorporation of environmental sustainability in the governance systems and in the operational practices of supply chains. Some companies showed evidence of developing integration of environmental commitments, of governance frameworks and of supplier management systems, while others emphasized more symbolic sustainability reporting and general environmental stories.

The best integration of environmental governance was found in energy companies like Ørsted and Neste. These organisations integrated quantitative climate targets, supplier governance

mechanisms, sustainability expectations in procurement and sustainability frameworks into their operations. Environmental sustainability was already integrated into ESG reporting, but also into the overall governance mechanisms of the organisations.

Others, however, showed a more metrics-driven strategy with a focus on emissions disclosure and climate actions, with limited attention to mechanisms of operationalisation for suppliers. For example, while the climate metrics and sustainability indicators were fairly comprehensive in Volvo Group, supplier governance disclosures were comparatively less detailed.

A smaller number of companies reported a relatively low level of environmental operationalisation of their supply chains. Governance mechanisms relating to supplier engagement, monitoring and implementation plans were less prominent within disclosures, though these organisations had committed to sustainability and/or environmental goals.

The results show that there has been an increasing institutionalisation of environmental sustainability reporting among Nordic companies. However, there are significant variations in operational integration between organisations and industries. This is in line with the literature on integration for sustainability, which suggests that there is greater commitment to environmental issues when governance systems, supplier expectations, and operational accountability are clearly linked to ESG reporting frameworks (Carter and Rogers, 2008).

*Table 5 Environmental Governance Patterns*

Pattern	Example Firms	Observation
Advanced Integration	Neste, Ørsted	Strong integration between climate governance, supplier sustainability expectations and operational frameworks
Metric-Focused	Volvo Group, Scania	Detailed emissions reporting and climate targets with comparatively lower supplier governance visibility
Limited Supply Chain Detail	Selected retail and industrial firms	Broad environmental commitments with weaker operational supplier disclosure

## 4.4 Social Dimension Analysis

Social aspect of SSCM was mainly implemented in supplier responsibility schemes, labour standards, ethical sourcing policies and human rights governance disclosures. The level of commitment reported at the policy level to responsible sourcing and supplier accountability was high in disclosures of social sustainability across the sampled firms. But there was a significant variation in operational specificity and in the visibility of the monitoring and enforcement. The results are in line with the stakeholder theory that proposes that organisations are more likely to make social sustainability commitments as their stakeholders start to expect higher standards in the use of their labor, ethical sourcing and supply chain responsibility (Freeman, 1984).

### 4.4.1. Supplier Responsibility and Ethical Sourcing.

One of the social sustainability themes that was the most frequently shared throughout the sample was supplier responsibility and ethical sourcing. Almost all companies had published codes of conduct or responsible sourcing policies setting out expectations of their suppliers on labour practices, occupational health and safety, non-discrimination, human rights and ethical business practices. The disclosures themselves served as governance tools that allowed organisations to send sustainability expectations down the supplier chain, which aligns with the literature of supply chain governance, which argues that formal governance mechanisms play a key role in coordinating the behaviour of suppliers (Gereffi, Humphrey and Sturgeon, 2005).

Retail and consumer companies like H&M and IKEA Group (IKEA) were especially comprehensive in their supplier responsibility and ethical sourcing disclosures. H&M consistently emphasised the value of “supplier transparency” and “traceability” in sourcing activities and shared the expectations for suppliers regarding labour rights and compliance to sustainability standards. Likewise, IKEA implemented supplier sustainability requirements in sourcing and procurement processes by embedding formal supplier governance standards and incorporating sustainability-based sourcing frameworks.

The results suggest that there is a relatively high level of stakeholder and reputational pressure on retail companies on transparency in their supply chains and on labour governance, specifically because their sourcing networks are highly visible and the sustainability risks are

linked to their retail companies' supply chains (Freeman, 1984). Ethical sourcing disclosures were therefore more operationally embedded and communicated externally in the retail sectors compared to some industrial sectors.

Other companies, such as manufacturing and industrial companies, also expressed expectations for suppliers via supplier governance frameworks and codes of conduct, such as Volvo Group, Atlas Copco and Scania. These disclosures, by comparison with retail companies, were however overall more compliance driven and less traceability and sourcing transparent. Supplier sustainability expectations were often related to operational governance and contractual compliance, rather than sustainability stories related to stakeholders.

Energy companies like Ørsted and Equinor included supplier responsibility requirements in their overall ESG governance and procurement processes, and Ørsted also published supplier expectations related to human rights and responsible sourcing and sustainability-related contractual provisions, which is notable for the better linkage between social sustainability requirements and governance systems.

Though there is a diffusion of supplier responsibility frameworks, there was little consistency in how firms were showing visibility in implementation. Organisations provided formal statements of sustainability expectations, but fewer provided detailed information on their operational sustainability information related to supplier remediation processes, enforcement or governance escalation procedures. This indicates that the institutionalisation of governance for social sustainability is growing in formality, but there is a wide variation among organisations in how the social sustainability expectations of suppliers are implemented on the ground (Christensen et al., 2021).

#### **4.4.3 Supplier Monitoring and Enforcement**

The sample was rich in disclosures related to human rights and labour governance and generally consistent with internationally recognised human rights and labour standards. Major companies communicated their pledges on fair labour conditions, occupational safety, non-discrimination and supplier compliance with international human rights principles, in a formal manner.

Compared to other retail companies, the governance arrangements regarding labour standards and human rights risks in sourcing were more detailed in the disclosure statements of companies. Both H&M and IKEA cited in detail their reference to supplier due diligence processes, labour assessments and sourcing governance mechanisms on supplier working conditions. The revelations arose because of growing stakeholder demands for transparency of labour practices in global supply chains, especially those that are at risk to reputational damage from outsourced production systems (Freeman, 1984).

Likewise, logistics and manufacturing companies like Maersk, Volvo Group and Scania announced pledges regarding employee wellbeing, occupational safety and worker standards in their supply chains. Similarly, logistics and manufacturing companies, such as Maersk, Volvo Group and Scania, announced pledges concerning employee wellbeing, occupational safety and worker standards in their supply chains. Operational information on supplier labour governance, however, was very different among organisations. Some companies were more specific about their supplier assessment or due diligence practices, while others made more general policy statements and sustainability commitments.

Energy companies such as Ørsted and Equinor integrated human rights governance into larger ESG governance and systems of supplier responsibilities. The companies shared their expectations of suppliers with regard to responsible business practice and sustainability compliance, but the disclosures on implementation of enforcement mechanisms at suppliers' level were limited compared to other aspects

Human rights governance seemed to be highly institutionalised at the policy level, with a greater degree of convergence in the ESG reporting structures and sustainability language used across organisations (DiMaggio and Powell, 1983) evident across the sample. However, there were still important variations in terms of transparency of operations and visibility of implementation. The results indicate that although there has been an increasing trend of firms embracing standardised human rights disclosures, there is still a considerable variation in the implementation of human rights labour governance in supply chains by industry and type of human rights system.

#### 4.4.3 Supplier Monitoring and Enforcement

Across the sample, supplier monitoring and enforcement mechanisms were the least frequently disclosed and most weak aspect of social sustainability governance. While most companies expressed supplier expectations in codes of conduct and sourcing policies, less organisations were able to provide detailed information about supplier auditing systems, enforcement of compliance and corrective actions.

In several companies, such as the companies listed by H&M, IKEA and Ørsted, supplier monitoring is more structured, including supplier assessments, sustainability audits and risk-based due diligence procedures. H&M reported on supplier monitoring with regards to labour standards and sourcing compliance in production networks, and IKEA revealed supplier evaluation systems related to sustainability performance and responsible sourcing governance.

The results of this study are in line with literature on governance that describes the growing prevalence of formal mechanisms of supplier governance and monitoring in the scope of sustainability-oriented supply chain management (Gereffi, Humphrey and Sturgeon, 2005). But there were significant variations on the level of enforcement visibility and governance depth within organisations.

The disclosure of supplier enforcement systems were more varied across the manufacturing and industrial companies. Volvo Group and Atlas Copco provided information on their supplier sustainability expectations and governance, but did not provide detailed information about procedures for the resolution of negative outcomes, supplier sanctions or escalation systems in supplier governance.

There were also instances of supplier monitoring disclosures being more procedural and symbolic than operational. Organisations often mentioned supplier audits and compliance systems, but less often did they indicate the frequency of audits, the consequences of non-compliance or how they would deal with supplier non-compliance. The lack of operational clarity reinforces the discussion in sustainability literature about the disconnect between formal sustainability commitments and actions (Hahn and Kühnen, 2013).

The results also corroborate the arguments that ESG disclosures can serve as legitimacy-seeking narratives of governance that portray companies as meeting their stakeholders' expectations without providing detailed disclosure of the processes of governance implementation (Cho et al. 2015; Michelon et al. 2015).

#### **4.4.4 Social Governance Integration**

The cross-firm analysis showed significant differences in the integration of social sustainability in governance systems and practices in the operational supply chain. Some companies showed high-level integration between their supplier responsibility policies, governance and monitoring mechanisms, while others were more policy oriented in their communication about sustainability

Retail companies typically had better awareness on how to integrate supplier governance into their businesses, as they had more pressure from stakeholders related to global sourcing networks and labour-related sustainability issues. H&M and IKEA put in place governance system for sustainability, including labour standards, ethical sourcing expectations and monitoring systems of suppliers, reflecting a stronger linkage between disclosure and supplier governance.

Likewise, Ørsted's performance was rather good on integration of social sustainability commitments in governance arrangements, namely with the implementation of supplier responsibility systems and implementation of sustainability-oriented procurement. The companies reported stronger linkages between sustainability expectations and governance systems and supplier management systems than several companies in the manufacturing and industrial industries.

Other manufacturing and industrial companies, by contrast, had more stringent formal supplier standards and governance practices but little detail about how they were implemented or how they were enforced. This indicates that governance of social sustainability has become more institutionalised in ESG reporting frameworks, but the extent to which it is integrated into firms' and industries' operational efforts varies. (Christensen et al., 2021)

In general, the results show that operational transparency in Nordic companies is less formalised than social sustainability governance. Supplier responsibility frameworks and human rights commitments are well-integrated into corporate disclosures, though implementation visibility and specificity of enforcement vary significantly across organizational settings, as do the operationalisation of governance. The results of this study align with stakeholder theory views that organisations are establishing sustainability governance structures to respond to the demands of their stakeholders, and that these structures are implemented differently across organisations based on how they are operated (Freeman, 1984).

#### 4.5 Governance Dimension Analysis

The governance dimension was the one that was the main channel used to implement sustainability commitments in the organisation and supply chain in the sampled firms. Governance disclosures were primarily on the supplier governance systems, the sustainability governance structures, monitoring and accountability systems. Nordic companies had an extensive institutionalisation of governance structures, but there were significant variations in implementation depth, enforcement visibility and transparency in operation. The results show that firms are becoming more alike in terms of governance structure, and that the implementation of SSCM is not uniform across firms.

Governance structures and policies.

The majority of firms reported having formal sustainability governance frameworks, incorporating ESG oversight, as part of their supply chain governance and organisational accountability frameworks. They typically contained supplier codes of conduct, sustainability committees, responsible sourcing policies and/ or governance policies related to ESG goals

Energy companies like Ørsted, Neste and Equinor showed relatively high levels of governance integration, with a disclosure of governance mechanisms linking sustainability goals to procurement processes, supplier guidelines and risk management procedures. Likewise, Neste embedded supplier sustainability expectations in sourcing and governance processes, which shows a higher level of internal linkage between commitments to sustainability and supply chain management processes.

Other companies such as H&M and IKEA also announced comprehensive governance structures concerning their suppliers' responsibilities and ethical sourcing. H&M described governance arrangements that are connected to its supplier traceability, outsourcing, and ensuring compliance to sustainability requirements, whereas IKEA connected supplier governance to its procurement and sourcing systems. These disclosures were more consistent with higher levels of integration of sustainability commitments and supplier governance mechanisms in industries with end-user products.

Manufacturing and industrial companies like Volvo Group, Scania and Atlas Copco reported a stronger emphasis on governance frameworks that emphasized more on operational compliance and supplier requirements. Industrial sector governance disclosures were less detailed, however, when compared to some energy and retail companies, about supplier accountability procedures and governance escalation systems.

Governance structures showed increasing “standardisation” on both the sample and institutional level, which suggests a growing convergence of ESG reporting and governance practices (DiMaggio and Powell, 1983). However, there was a wide variation in how visible the governance systems were in the businesses

### **Monitoring and Compliance Mechanisms**

Governance disclosures contained a key element of monitoring and compliance systems in the sampled firms. A majority of organisations reported supplier audits, sustainability assessment, compliance checks and risk management mechanisms to monitor supplier ESG-related governance and performance.

In the case of suppliers' monitoring procedures, Ørsted and IKEA disclosed information in a more detailed way than H&M, while disclosure for sustainability mechanisms was comparatively detailed in all three cases. These companies reported on supplier audit systems, risk-based due diligence processes and sustainability performance reporting on labour standards, sourcing practices and environmental compliance.

Likewise, logistics companies like Maersk, energy companies like Neste and Equinor shared supplier monitoring processes as part of their procurement governance and operational risk

management processes. For instance, Maersk integrated sustainability governance of their suppliers into their overall logistics risk assessment and management processes.

But there was a wide range of compliance disclosure depth across firms. Some organisations offered a relatively detailed governance process and supplier evaluation system, whereas others only offered general references to supplier audits and monitoring of sustainability without much detail on how this was conducted.

The results indicate that monitoring systems are becoming more institutionalized in ESG governance mechanisms as companies face greater institutional and regulatory pressure on sustainability accountability (Christensen et al., 2021). However, there is a lack of consistency in implementation visibility across the industries and organisational contexts.

The enforcement and accountability mechanisms include:

The least transparent element of governance disclosure in the sample was in relation to enforcement and accountability. While the majority of firms provided an informal and formal communication to suppliers of expectations and sustainability requirements, fewer companies shared information about corrective actions, sanctions on suppliers, and governance escalation procedures.

The more governance-focused companies, like Ørsted and Neste, showed comparatively more transparent information on how they hold their people accountable and how they enforce sustainability. These companies also saw good integration between their supplier governance processes and their procurement controls and corrective action requirements and their sustainability compliance processes, suggesting higher levels of operational integration.

H&M and IKEA also shared their expectations for supplier accountability with regards to ethical sourcing and sustainability compliance. Although there was a reasonable level of governance visibility, there were still areas where information was relatively limited on how supplier sanctions were applied, the remediation achieved and escalation systems implemented.

Manufacturing and industrial companies had a lower level of visibility of enforcement than governance companies such as energy and retail companies. Supplier sustainability principles

and governance expectations were described by organisations like, for example, Volvo Group and Atlas Copco, but discussion on supplier consequences or escalation/remediation processes for them was limited.

These results suggest that the communication of sustainability commitments is seen as more important than disclosure of operational enforcement mechanisms by many firms. In a few instances, governance disclosures had more of an orientation toward policy rather than implementation, indicating some degree of decoupling between formal sustainability governance and operational accountability systems. This is consistent with previous arguments on the decoupling of sustainability reporting from implementation practices (Hahn and Kühnen, 2013).

Moreover, the results indicate that governance disclosure can also act as legitimacy-oriented mechanisms, in which organisations show their compliance with institutional expectations and ESG standards (Suchman, 1995). A majority of firms disclose sustainability governance systems; however, there is a mixed picture in terms of transparency on how these are being enforced and how suppliers are being held accountable.

### **Governance Strength Comparison**

The cross-firm analysis showed that there was a significant difference in the level of governance integration, the depth of monitoring and the implementation of the operationalisation of governance across organisations. Some companies exhibited relatively sophisticated governance frameworks with supplier monitoring and enforcement visibility and integration of operational sustainability. Other companies tended to make more sustainable disclosures using narratives and policy-focused approaches in governance.

The best governance integration was seen within the sample in the case of Ørsted and Neste. These companies integrated supplier governance systems, sustainability oversight processes and operational performance monitoring systems into the wider procurement and sourcing processes. The material disclosures made in these firms also showed a relatively high level of alignment between ESG reporting and governance for operational sustainability.

Volvo Group was a more moderate governance model with good sustainability metrics, and supplier governance expectations, but with relatively low enforcement visibility. Governance

systems were evident, but the procedures for holding suppliers accountable and remedial measures were less formally specified than in the most governance-oriented firms.

A smaller number of companies exhibited greater symbolic aspects of governance in that sustainability disclosures were clearly focused on ESG commitments and governance principles, with less detail in terms of operational aspects related to enforcement and supplier accountability systems. Often, these companies would have sustainability statements with fairly high-level goals that did not have significant governance visibility.

In general, the results indicate that the governance structures of Nordic companies are getting more influenced by institutional expectations of sustainability reporting and accountability (DiMaggio and Powell, 1983). But there is still a wide disparity on how governance systems are implemented and how sustainability promises are followed up in supply chains.

## 4.6 Cross-Dimensional Integration Analysis

The cross-dimensional analysis focused on how the environmental, social and governance dimensions were embedded in organisational sustainability and supply chain governance systems to the extent that they were. On a company-by-company basis, the integration of the ESG dimensions in a single reporting format was becoming more common in the sampled companies. There were however differences as to how operational linkages will be created between sustainability commitments and governance systems and implementation practices.

### 4.6.1 ESG Alignment across Firms

A high structural alignment was observed across most companies between ESG reporting categories. Sustainability disclosures were typically included in integrated ESG reporting frameworks, which include climate action goals, supplier responsibility, and governance reporting.

Within the sample, energy companies like Ørsted, Neste and Equinor had the highest degree of ESG integration. Earlier these organisations integrated environmental goals into broader operational sustainability practices and tied environmental expectations and governance mechanisms to suppliers. The linkages to the procurement process, supplier compliance and sustainability oversight system were visible in relation to climate commitments.

Other retailers such as H&M and IKEA showed fairly high levels of ESG alignment, specifically the connection between social sustainability and governance. Supplier responsibility, ethical sourcing and traceability systems were embedded in wider governance and procurement processes and showed greater operational linkages between the disclosure of sustainability information and supplier governance practices.

Several manufacturing and industrial companies, on the other hand, showed more disjointed ESG integration. Governance and operationalisation mechanisms within the supplier were less visible, and environmental reporting tended to be quantitative in nature and focus on emissions and climate objectives. Sustainability reporting seemed more performance-based than governance-integrated in these companies.

The results suggest that the reporting structures for ESG information are becoming more standardised at the institutional level but the embedding of sustainability aspects into the firms' governance structures varies considerably between companies and sectors.

#### **4.6.2 Governance and Operationalisation**

The analysis also showed that governance systems were a key driver in the realization of sustainability commitments in supply chains. Companies with better governance integration tended to offer more transparency regarding their supplier monitoring systems, accountability mechanisms and sustainability oversight processes.

Integration of supplier sustainability expectations, procurement governance and systems of monitoring supplier performance into the activities of the operational supply chain were comparatively advanced forms of operationalisation by Ørsted and Neste. Sustainability commitments were clearly linked to operational governance processes and not just to policy.

Likewise, IKEA and H&M achieved relatively high scores of linkage between social sustainability commitments and supplier governance systems with respect to traceability structures and supplier evaluation and sourcing governance mechanisms. These companies reported more transparent processes of operational governance related to supplier responsibility than some companies in the industrial sectors.

However, a number of firms showed an improvement in the visibility of their sustainability reporting over that of governance operationalisation. There was a tendency to describe ESG commitments in general policy statements and strategy-level sustainability stories, and to have fairly low-level governance processes in place for the implementation. It indicates that governance integration is an important dimension that sets apart firms that have better SSCM operationalisation from firms that make greater use of symbolic sustainability communication.

#### 4.6.3 Implementation Gaps and Decoupling

While there is a lot of sustainability reporting in the sample, there were major implementation gaps between reporting ESG and the detail of governance in practice. While most companies shared general sustainability principles and expectations of suppliers and governance practices, fewer organisations shared significant visibility about enforcement systems, supplier accountability results, and corrective action processes.

These differences were more evident in supplier monitoring and enforcement disclosures. While supplier codes of conduct and sustainability standards were prominently published, the operational details of explanations for audit results, sanctions applied to suppliers and governance escalation systems stayed limited in numerous companies.

Based on the findings, therefore, it may be said that there is some evidence of decoupling between sustainability reporting and implementation of operations. The organisations provided relatively little detail about their systems and processes for supplier governance and accountability, although several had well-developed ESG reporting systems. This reinforces the idea that sustainability disclosures can serve as legitimacy seeking governance stories and not as a true reflection of operations (Michelon et al., 2015; Cho et al., 2015).

Meanwhile, the level of decoupling varied between companies. Governance-oriented organisations (such as the Ørsted or Neste) showed comparatively high levels of integration between sustainability commitment and operational governance, while more symbolic organisations (such as KPMG) had a greater focus on sustainability communications, with less visibility of the implementation.

In general, the results indicate that the operationalisation of SSCM is not even among Nordic companies. The structuralisation of ESG reporting is very well established, but there are still variations in the depth of the governance, the visibility of the implementation and the integration of the operations of different companies and sectors.

## 4.7 Cross-Firm Comparison

The cross-firm analysis focused on industry, governance and the organisational sustainability structures for SSCM operationalisation. While there was growing similarity in the structure of sustainability reporting in the sample, significant variation was found in the depth of governance reporting and monitoring visibility and specificity of implementation.

### 4.7.1 Industry-Based Comparison

There is the clearest link between sustainability reporting and operational governance from energy sector companies. Institutions like Ørsted, Neste and Equinor linked environmental sustainability goals to procurement processes, supplier control systems and systems of accountability. Within these companies, sustainability disclosures reflected relatively high level visibility of governance integration and implementation.

Some retailers like H&M and IKEA showed relatively high social sustainability governance with respect to ethical sourcing, supplier responsibility and traceability measures. These companies reported more comprehensive governance systems of suppliers than some industrial companies, which indicates that there is greater pressure on the firms to address labour governance and sourcing transparency.

Logistics companies like Maersk and DSV focused more on emissions reduction, transportation sustainability and operational efficiency in their supply chain. The disclosures of sustainability governance within the logistics sector were mainly about climate-related operating risks and sustainability expectations of suppliers.

Manufacturing and industrial companies such as Volvo Group, Scania and Atlas Copco reported relatively good environmental performance disclosures but information on the governance and enforcement systems of suppliers was far from uniform.

#### 4.7.2 Variation in governance structures among firms

The intensity of the supplier monitoring and the transparency and visibility of governance and enforcement efforts showed also significant differences when compared across different firms. Firms with governance orientation reported a more detailed description of the procedures for monitoring suppliers, sustainability oversight systems and supplier accountability mechanisms related to procurement.

On the other hand, some companies were more policy-oriented in their sustainability communication, providing comparatively less information about the enforcement systems of their suppliers and implementation of governance. Typically, these organisations reported on general ESG statements with little detail on how to correct, or mechanisms to hold suppliers to account.

The results show that there are also significant variations in the degree of operationalisation of sustainability governance structures in supply chain systems across the various companies. Governance frameworks are structurally well institutionalised, but their implementation is less visible in organisations.

The following typologies of SSCM Operationalisation were identified:

On the basis of the comparative analysis, the firms in the sample were allocated to one of three general categories with respect to governance integration, depth of reporting and strength of operationalisation.

Relatively advanced integration of ESG reporting, supplier governance systems and operational sustainability practices was shown by governance-driven firms. These organisations integrated sustainability oversight processes with monitoring processes for suppliers and operational governance processes.

Service-oriented companies were more likely to have a strong emphasis on reporting on sustainability issues and on measurable sustainability metrics, with comparatively lower levels of visibility of their operational practices in terms of supplier governance and enforcement systems.

The symbolic firms reported on sustainability and communicated on ESG at a high level, while at the same time they provided relatively limited information on their operational measures for implementing governance and on their supply chain accountability mechanisms.

#### 4.8 key patterns discussion

The results show that ESG reporting and sustainability governance is now well-established in Nordic companies. There was a relative uniformity in the institutional ESG reporting structure across environmental, social and governance areas with most adapting similar reporting structures, highlighting a growing convergence in institutional sustainability reporting practices and governance expectations. This will facilitate arguments from institutional theory that institutional pressures and regulations will lead organisations to adopt similar governance structures (DiMaggio and Powell, 1983).

Meanwhile, there was significant variation in terms of governance integration, depth of monitoring and visibility of implementation. Some companies exhibited more mature sustainability implementation – such as sustainability procurement structures, supplier governance systems and sustainability accountability systems. Others were more inclined to the use of general narratives on ESG and sustainability communication oriented towards policies.

The results also show that sustainability reporting does not necessarily go hand in hand with operational implementation. While the majority of companies reported supplier responsibility frameworks, sustainability policies and governance commitments, fewer companies reported in detail about the mechanism to enforce them, sanctions imposed on suppliers and systems to take corrective actions. This implies that the disclosure of sustainability information is less tightly coupled with the organizational governance of sustainability, which is in line with previous sustainability reporting studies (Hahn and Kühnen, 2013).

Even differences between firms suggest that ESG disclosures can serve as legitimacy-oriented governance devices through which organisations signal that they meet the expectations of investors and other stakeholders, and that they are institutionally sustainable (Cho et al., 2015). Nordic companies' sustainability reporting frameworks are becoming more uniform, but the implementation of SSCM varies in the organizational and industry settings.

Overall results show that the reporting and governance of ESG issues are becoming more formalized in Nordic companies' SSCM. There is still a significant variance in organisations, however, on the operationalisation of governance, transparency of implementation and accountability of suppliers.

## CHAPTER 5 DISCUSSION AND CONCLUSION

### 5. DISCUSSION AND CONCLUSION

#### 5.1 Overview of Finding

This chapter elaborates on the results of the study and addresses the research goal of the study: to explore the concept and implementation of Sustainable Supply Chain Management (SSCM) in the Corporate Disclosures of Nordic companies. The discussion expands the empirical results found in Chapter 4 based on the theoretical perspectives of the Triple Bottom Line framework, the stakeholder theory, institutional theory and the literature on supply chain governance

The analysis, which draws out key themes, is then discussed. It first looks at the presence of SSCM in ESG reporting and sustainability disclosures. Second, it examines how commitments to sustainability are being put into practice in governance processes, supplier management systems and monitoring practices in supply chains. Thirdly, it examines the potential disconnect and anomalies between sustainability reporting and organisational practices of companies and sectors.

The study's theoretical, practical, and methodological contributions are also discussed, followed by discussions of the limitations of the study and suggestions for future research. Lastly, the chapter offers a direct answer to the research question and a brief summary of the overall conclusions of the research for governance and sustainability reporting in the field of SSCM.

#### 5.2 Interpretation of Findings

##### 5.2.1 SSCM as Conceptualised in Corporate Disclosures.

The results show that Sustainable Supply Chain Management (SSCM) is mainly conceptualised in the context of corporate disclosure structured in Environmental, Social and Governance (ESG) reports. It was consistent across the sampled Nordic firms, with sustainability disclosures being structured into three categories: environmental, social and governance. This

indicates a growing standardisation of sustainability reporting structures and governance expectations.

The dimension of environmental sustainability was the most matured disclosure in the sample. Most companies provided measurable climate targets and emissions indicators as well as energy transition strategies, notably in the energy, logistics and manufacturing sectors. The importance of sustainability was clearly marked by the companies' clearer way of talking about sustainability as renewable energy transition and circular economy, for example, Ørsted's ambition being "a world that runs entirely on green energy" and Neste's as "renewable and circular solutions". The disclosures illustrate that sustainability is being thought of in terms of measurable ESG indicators and governance categories rather than as a transformation of the wider system of supply chain.

The same goes for the retail companies, like H&M and IKEA, that envisioned sustainability in terms of supplier accountability, transparency in sourcing or ethical management. "supplier transparency" and "traceability" were mentioned multiple times in the disclosures with respect to sourcing, showing how sustainability is being put into the governance and accountability framework of sourcing chains.

The results thus indicate that SSCM is seen as a structured ESG governance mechanism that structures, communicates and monitors sustainability commitments. This is consistent with the concept of sustainability as defined in a Triple Bottom Line (Elkington, 1997) where environmental, social and economic is seen as the three key pillars of sustainability. The results, however, show that these sustainability aspects are often defined as individual reporting portfolios and not as comprehensive chains of transformation processes.

The results also reveal greater institutionalisation of ESG reporting practices within firms and industries. The reporting structure for sustainability disclosures was relatively consistent across the different sectors, with a general trend towards convergence in sustainability reporting expectations. This aligns with the idea of Kolk (2010) that sustainability reporting has evolved as a formal organisational process through which companies communicate their governance priorities, accountability and legitimacy.

Overall, the results indicate that Nordic companies' conceptions of SSCM are defined in a very formalised and governance-oriented way in the form of ESG reporting systems. However, the

sustainability disclosure is more often focused on systems of measurable structures and governance visibility than on integration throughout the supply chain systems.

### 5.2.2 SSCM as Operationalised through Governance

Although the operationalisation of SSCM is conceptually considered through the process of ESG reporting, the results show that it actually takes place predominantly in the governance and supplier management systems. Across the sampled firms sustainability commitments were translated in the form of codes of conduct for suppliers, governing the procurement process, monitoring and compliance processes.

One of the most institutionalised operational structures in the sample was supplier governance. Many companies reported that they have explicit supplier expectations with respect to labour standards, environmental issues and ethical sourcing. H&M related sustainability governance to “supplier transparency” and sourcing traceability systems and IKEA included sustainability expectations into supplier governance and procurement systems. These governance systems brought organisational sustainability expectations beyond the boundaries of the firm to sourcing and supplier networks.

Companies with a governance focus, like Neste and Ørsted, had a relatively high level of alignment between sustainability commitments and governance processes. Neste said the sustainability criteria were “integrated into supplier evaluation processes”, which marks a greater operational link between ESG commitments and procurement governance structures. Likewise, Ørsted revealed sustainability governance measures related to supplier monitoring, risk management and operational reporting.

There was also significant disclosure of monitoring systems including supplier audits, risk assessment and sustainability evaluations. But there was considerable difference on the issues of governance depth and the transparency of operations. Some organisations reported relatively detailed monitoring systems and governance processes, while some had a greater emphasis on sustainability principles and policy based commitments with less detail about implementation.

These results suggest that SSCM is in practice rather than the practice of collaborative or system-wide sustainability transformation in supply chains, being mainly formal governance and compliance systems. Governance mechanisms are thus the operating framework on

which sustainability expectations are communicated, monitored and managed throughout supplier networks.

The results are consistent with the governance views that hold that over time, governments and standard-setting processes and audits are becoming more effective at shaping supplier practices as lead firms gain control over them (Gereffi et al., 2005). Meanwhile, the ubiquity of similar governance arrangements also suggests institutional pressures to normalise the nature of governance arrangements and meet known expectations for sustainability and reporting in order to secure legitimacy (DiMaggio and Powell, 1983).

Overall, the results indicate that the operationalization of SSCM in Nordic companies is very governance driven. The depth and visibility of sustainability governance mechanisms in the operation of organisations and industries are also significantly different, with more embedded in organisational governance systems than is currently the case.

### **5.2.3 Difference between Reporting and Practice**

One of the remarkable findings of this study is that sustainability reporting was not related to the implementation of sustainability in the disclosures of SSCM. Organisations tended to be consistent with regards to communicating their commitments to sustainability; there was consistency in relation to supplier expectations; and there were variations in the detail provided about how governance arrangements are implemented and enforced.

This gap was more evident in governance and social sustainability-related disclosures. While the majority of companies had supplier codes of conduct or human rights principles and sustainability governance frameworks, a smaller number provided information on corrective actions, sanctions on suppliers or outcomes of enforcement. In a lot of instances, businesses were clearer on their sustainability expectations than on their procedures to take accountability for operations.

For example, organisations were frequently said to have supplier audits, monitoring systems and governance oversight mechanisms, but what were the steps to escalation, the consequences of non-compliance, and what would be done to rectify a non-compliant supplier if any, were often limited or not known. In supply chain systems, this could be the case where disclosure on sustainability is more formative in illustrating governance intentions and organisational commitments than outcomes of implementation.

There are therefore some indications that there is a disconnect between words and deeds in relation to sustainability. The firms appear to have quite formal ESG reporting and reporting processes, but there's a wide range of differences around the practice of ESG and reporting on it. This confirms previous studies that show that there are no direct links between statements of sustainability commitments and actual practices (Hahn and Kühnen, 2013).

The results also confirm the organised hypocrisy theory, which suggests that organisations use sustainability terms and structures of governance to meet external demands whilst practices in everyday operations are less radically changed (Cho et al., 2015). The disclosures on ESG thus appear to fulfill the dual function of governance instruments and devices for gaining legitimacy.

Furthermore, the disclosure specificity and governance visibility suggest that the disclosure of ESG is, in part, shaped by the reputation motive and institution pressures and expectations of stakeholders. Companies with higher governance integration scores were more likely to provide detailed information and transparency on their operating disclosures in monitoring systems and accountability mechanisms, whereas those with lower scores were more likely to be depending on generic sustainability stories and strategic ESG communication. This is corroborated by Michelin et al. (2015) who propose that sustainability disclosures are “selective organizational representations” that have “legitimacy” and “reputational” aspects.

The results indicate that, although SSCM is well embedded in the ESG reporting frameworks, its implementation in practice is uneven across companies and sectors. Sustainability disclosures are, thus, not a reflection of the practice of a company's business, but rather structured organisational expressions of sustainability governance and institutional legitimacy.

### 5.3 Theoretical Implications

The study contributes to the Sustainable Supply Chain Management (SSCM) literature as it provides a disclosure view and a cross-firm view of the conceptualisation and operationalisation of sustainability in Nordic firms. Previous research on SSCM has largely relied on case studies or industry specific analyses that offer contextual understanding, but have not been very comparable across firms (Seuring and Müller, 2008; Pagell and Wu, 2009).

The study also shows that the implementation of SSCM is different between companies and industries and not all of the information that the company reports is systematic.

The results also contribute to the ESG reporting literature by showing that sustainability reporting can be considered a communication tool and a governance tool to impact the behavior of organizations and their suppliers. Suppliers' expectations, monitoring and accountability frameworks are now impacted by ESG disclosures in their supply chains. This aligns with Christensen et al. (2021) who claim that sustainability reporting is a process of organisational governance and sustainability management and a constitutive process.

The study also helps to understand the convergence and variation of sustainability governance systems by adding to the institutional theory. Companies' ESG reporting frameworks are also structurally similar, following institutional pressures that push companies in the same direction of isomorphism – companies' acquisition of similar governance structures and reporting systems (DiMaggio and Powell, 1983). Meanwhile, there are also important differences in the depth of governance, its transparency of implementation and organisational responsibility for it, reflecting the different ways companies implement sustainability governance, according to their organisational priorities and the industry-related sustainability threats they face.

Moreover, the outcomes clearly emphasize the importance of organizational legitimacy for sustainability reporting. There is some indication that establishments are developing formal ESG governance in part due to the need to signal to stakeholders and broader institutional expectations. However, the implementation of the operations is not equally successful in organisations, in that organisations tend to maintain their legitimacy within the institutional context as suggested by Suchman (1995).

The overall contribution of this study is considered a theoretical one since it demonstrates that the institutionalisation of SSCM in governance and reporting processes is on the rise, and on the organisational and supply chain level, implementation of SSCM is not equal.

#### 5.4 Practical Implications

The results of this research have the following implications for practice in organisations, regulators and supply chain management practitioners.

The findings highlight the need for improving governance at operational level, alongside of keeping formal sustainability commitments at policy level. Whilst supplier codes of conduct and sustainability governance frameworks are increasingly institutionalised, the ability to implement the standards finally rests with the visibility of implementation processes, monitoring systems and enforcement mechanisms across supply chains. Organisations should therefore strengthen their supplier auditing mechanisms, increase governance transparency, and increase transparency in terms of corrective actions, compliance measures and systems of supplier accountability.

The results also highlight the importance of increased transparency on the experience of governance implementation. A large number of organisations publish general sustainability goals, but not many make specific disclosure about supplier remediation programmes, enforcement or governance effectiveness. More transparency in the reporting of governance-related data would boost the credibility of sustainability reporting and contribute to bridging the reporting–implementation gap.

The results underscore the need for better verification processes and more standardization in sustainability reporting from a regulatory point of view. While the reporting of ESG is becoming more institutionalised, there is still great variation amongst organisations in the level of detail of their governance, in the consistency of their reporting and the transparency of how they implement. The Corporate Sustainability Reporting Directive (CSRD) is a key regulatory measure to enhance the consistency and comparability of sustainability reporting and organisational accountability in sustainability governance (European Commission, 2021).

It also shows that direct linkages of sustainability governance to procurement and supplier management are important. Organisations need to reinforce supplier accountability systems, increase transparency of audits of suppliers, and increase consistency of governance processes across supplier networks, from a supply chain management perspective.

Overall, the results indicate that formal ESG reporting is not enough to achieve an effective operationalisation of Sustainable Supply Chain Management (SSCM). Implementing sustainability meaningfully depends on improved governance integration, operational transparency and robust mechanisms of supplier accountability that can drive substantive practices in the supply chain from sustainability commitments.

## 5.5 Limitations of the Study

Several limitations of the study should be noted, however, in relation to the contributions.

Firstly, the research is wholly based on secondary source data, such as corporate disclosures, sustainability reporting documents and governance-related documents. These materials can be used to gain insight into existing formal agreements and governing bodies on sustainability, but they don't enable direct observation of the actual processes in the supply chain. The study is therefore not able to confirm that the sustainability pledges made are consistent across supplier networks and practice.

Secondly, sustainability reporting practices can be selective and are subject to credibility concerns due to reputational factors. Organisations tend to focus on their positive sustainability achievements and have few points to say about governance weaknesses, challenges in implementation or operational shortcomings. This is a common area of concern in sustainability reporting literature (Michelon et al., 2015) and is an important constraint to consider when assessing sustainability performance in terms of what is reported by companies.

Third, the study is a specific one because it targets Nordic organisations that are working within relatively advanced institutional and regulatory fields that are oriented towards sustainability. This context may be suitable for the analysis of formalised ESG governance structures and reporting systems, but the results cannot be readily extrapolated to other contexts of institutions, cultures or regulations.

These are just some of the restrictions that should be taken into account when considering sustainability disclosures, and not as a direct reflection on how the business is being conducted. They also point out the need of further studies implementing wider multi-methods and multi-empirical perspectives to achieve a more holistic grasp of sustainability implementation in the supply chain.

## 5.6 Future Research Directions

Further studies could be done by combining the document analysis with interviews and supplier level research or field research to get a better understanding of the correlation between sustainability reporting and implementation of the operations more directly. These

solutions would build upon knowledge of working in sustainability governance in their value chains.

A longitudinal study could also examine the development of ESG reporting structures and sustainability governance mechanisms over time and how these changes over time are brought by regulatory changes, stakeholder expectations and sustainability-related institutional pressures.

In addition, comparative cross-regional studies might explore the impact of the institutional context on the operationalisation of SSCM in different regulatory and governance contexts. A greater number of Nordic companies could enrich the overall knowledge about the variance in sustainability governance in the global supply chains..

## 5.7 Conclusion

This study aimed to explore the conceptualisation and operationalisation of Sustainable Supply Chain Management (SSCM) in the corporate disclosures of Nordic companies. The results show that sustainability is increasingly formalised in structured reporting systems, and that the synergy of environmental, social and governance dimensions influence sustainability communication, governance processes and supplier expectations.

The findings also indicate that the operationalization of SSCM can be largely achieved through governance arrangements, such as supplier codes of conduct, monitoring mechanisms, procurement governance arrangements, and sustainability oversight arrangements. They represent the key governance tools that help to convey, align and create the mechanisms for delivering the sustainability expectations throughout supply chain networks.

The results, however, indicate significant differences between firms and industries for the depth of governance, its visibility and the accountability of the supplier. Sustainability commitments are well embedded in the ESG reporting system, but there are still inconsistencies in how it is being implemented. There is a wide assumption that many organisations communicate their sustainability objectives and governance in general, but less so with regards to enforcement systems, corrective actions, and supplier accountability systems.

The results therefore reveal some signs of gap between sustainability reporting and implementation. ESG disclosures are increasingly emerging as a framework and a governance process to help organisations meet expectations and norms on sustainability.

The study reveals that Nordic companies generally have high degree of institutionalisation with regard to their reporting and governance, but low degree of institutionalisation with regard to practices in their supply chains with regard to consistency and enforcement of practices. This further underscores the continued significance of better governance integration, transparency of implementation and supplier accountability in the SCM process in relation to sustainability.

## REFERENCE

- Ahi, P. and Searcy, C. (2013) 'A comparative literature analysis of definitions for green and sustainable supply chain management', *Journal of Cleaner Production*, 52, pp. 329–341. Available at: <https://doi.org/10.1016/j.jclepro.2013.02.018>
- Beske-Janssen, P., Johnson, M.P. and Schaltegger, S. (2015) '20 years of performance measurement in sustainable supply chain management – What has been achieved?', *Supply Chain Management: An International Journal*, 20(6), pp. 664–680. Available at: <https://doi.org/10.1108/SCM-06-2015-0216>
- Bowen, G.A. (2009) 'Document analysis as a qualitative research method', *Qualitative Research Journal*, 9(2), pp. 27–40. Available at: <https://doi.org/10.3316/QRJ0902027>
- Brandenburg, M., Govindan, K., Sarkis, J. and Seuring, S. (2014) 'Quantitative models for sustainable supply chain management: Developments and directions', *European Journal of Operational Research*, 233(2), pp. 299–312. Available at: <https://doi.org/10.1016/j.ejor.2013.09.032>
- Bryman, A. (2016) *Social research methods*. 5th edn. Oxford: Oxford University Press.
- Busse, C., Schleper, M.C., Weilenmann, J. and Wagner, S.M. (2017) 'Extending the supply chain visibility boundary: Utilizing stakeholders for identifying supply chain sustainability risks', *International Journal of Physical Distribution & Logistics Management*, 47(1), pp. 18–40. Available at: <https://doi.org/10.1108/IJPDLM-02-2016-0030>
- Campbell, J.L. (2007). Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility. *The Academy of Management Review*, [online] 32(3), pp.946–967. doi:<https://doi.org/10.2307/20159343>.
- Carter, C.R. and Rogers, D.S. (2008) 'A framework of sustainable supply chain management', *International Journal of Physical Distribution & Logistics Management*, 38(5), pp. 360–387. Available at: <https://doi.org/10.1108/09600030810882816>
- Cho, C.H., Laine, M., Roberts, R.W. and Rodrigue, M. (2015) 'Organized hypocrisy, organizational façades, and sustainability reporting', *Accounting, Organizations and Society*, 40, pp. 78–94. Available at: <https://doi.org/10.1016/j.aos.2014.12.003>

- Christensen, D.M., Hail, L. and Leuz, C. (2021) 'Mandatory CSR and sustainability reporting: Economic analysis and literature review', *Review of Accounting Studies*, 26, pp. 1176–1248. Available at: <https://doi.org/10.1007/s11142-021-09609-5>
- DiMaggio, P.J. and Powell, W.W. (1983) 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, 48(2), pp. 147–160. Available at: <https://doi.org/10.2307/2095101>
- Elkington, J. (1997) *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- Elo, S. and Kyngäs, H. (2008) 'The qualitative content analysis process', *Journal of Advanced Nursing*, 62(1), pp. 107–115. Available at: <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- European Commission (2021)  
*Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting (Corporate Sustainability Reporting Directive – CSRD)*.  
Brussels: European Commission.  
Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0189> (Accessed: 5 April 2026).
- Freeman, R.E. (1984) *Strategic management: A stakeholder approach*. Boston: Pitman.
- Geissdoerfer, M., Savaget, P., Bocken, N.M.P. and Hultink, E.J. (2017) 'The circular economy – A new sustainability paradigm?', *Journal of Cleaner Production*, 143, pp. 757–768. Available at: <https://doi.org/10.1016/j.jclepro.2016.12.048>
- Gereffi, G., Humphrey, J. and Sturgeon, T. (2005) 'The governance of global value chains', *Review of International Political Economy*, 12(1), pp. 78–104.
- Gimenez, C. and Tachizawa, E.M. (2012) 'Extending sustainability to suppliers: A systematic literature review', *Supply Chain Management: An International Journal*, 17(5), pp. 531–543. Available at: <https://doi.org/10.1108/13598541211258591>

- Gold, S. and Schleper, M.C. (2017) 'A pathway towards true sustainability', *Journal of Supply Chain Management*, 53(2), pp. 1–15.
- Grewal, J., Riedl, E.J. and Serafeim, G. (2019). Market Reaction to Mandatory Nonfinancial Disclosure. *Management Science*, 65(7).  
doi:<https://doi.org/10.1287/mnsc.2018.3099>.
- Gualandris, J. and Kalchschmidt, M. (2016) 'Developing environmental and social performance: The role of suppliers' sustainability and buyer–supplier relationships', *International Journal of Production Economics*, 182, pp. 383–393. Available at: <https://doi.org/10.1016/j.ijpe.2016.09.011>
- Hahn, R. and Kühnen, M. (2013) 'Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research', *Journal of Cleaner Production*, 59, pp. 5–21. Available at: <https://doi.org/10.1016/j.jclepro.2013.07.005>
- Ioannou, I. and Serafeim, G. (2017) 'The consequences of mandatory corporate sustainability reporting', *Harvard Business School Research Working Paper*, No. 11-100. Available at: <https://doi.org/10.2139/ssrn.1799589>
- Kolk, A. (2010) 'Trajectories of sustainability reporting by MNCs', *Journal of World Business*, 45(4), pp. 367–374. Available at: <https://doi.org/10.1016/j.jwb.2009.08.001>
- KPMG (2022) *Survey of sustainability reporting 2022: Big shifts, small steps*. Available at: <https://assets.kpmg.com/content/dam/kpmgsites/ch/pdf/survey-of-sustainability-reporting-2022.pdf> (Accessed: 5 April 2026).
- Locke, R.M., Amengual, M. and Mangla, A. (2009) 'Virtue out of necessity? Compliance, commitment, and the improvement of labor conditions in global supply chains', *Politics & Society*, 37(3), pp. 319–351. Available at: <https://doi.org/10.1177/0032329209338922>
- Masi, D., Day, S. and Godsell, J. (2017) 'Supply chain configurations in the circular economy: A systematic literature review', *Sustainability*, 9(9), p. 1602. Available at: <https://doi.org/10.3390/su9091602>

- Mena, C., Humphries, A. and Choi, T.Y. (2013) 'Toward a theory of multi-tier supply chain management', *Journal of Business Ethics*, 112(1), pp. 59–72.
- Michelon, G., Pilonato, S. and Ricceri, F. (2015) 'CSR reporting practices and the quality of disclosure', *Critical Perspectives on Accounting*, 33, pp. 59–78. Available at: <https://doi.org/10.1016/j.cpa.2014.10.003>
- Midttun, A., Gjørberg, M. and Granda, G. (2013) 'Public policies for corporate social responsibility in Europe: Towards a European model?', *Corporate Governance*, 13(4), pp. 399–409. Available at: <https://doi.org/10.1108/CG-05-2013-0061>
- Pagell, M. and Wu, Z. (2009) 'Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars', *Journal of Supply Chain Management*, 45(2), pp. 37–56. Available at: <https://doi.org/10.1111/j.1745-493X.2009.03162.x>
- Patton, M.Q. (2015) *Qualitative research & evaluation methods*. London: SAGE Publications Ltd.
- Prior, L. (2003) *Using documents in social research*. London: Sage.
- Robinson, O.C. (2014) 'Sampling in interview-based qualitative research: A theoretical and practical guide', *Qualitative Research in Psychology*, 11(1), pp. 25–41. Available at: <https://doi.org/10.1080/14780887.2013.801543>
- Sarkis, J., Zhu, Q. and Lai, K.H. (2011) 'An organizational theoretic review of green supply chain management literature', *International Journal of Production Economics*, 130(1), pp. 1–15. Available at: <https://doi.org/10.1016/j.ijpe.2010.11.010>
- Seuring, S. and Müller, M. (2008) 'From a literature review to a conceptual framework for sustainable supply chain management', *Journal of Cleaner Production*, 16(15), pp. 1699–1710. Available at: <https://doi.org/10.1016/j.jclepro.2008.04.020>
- Suchman, M.C. (1995) 'Managing legitimacy: Strategic and institutional approaches', *Academy of Management Review*, 20(3), pp. 571–610. Available at: <https://doi.org/10.2307/258788>

Tachizawa, E.M. and Wong, C.Y. (2014) 'Towards a theory of multi-tier sustainable supply chains', *International Journal of Operations & Production Management*, 34(7), pp. 917–940.

Villena, V.H. and Gioia, D.A. (2020) 'A more sustainable supply chain', *Harvard Business Review*, 98(2), pp. 84–93.

Wilhelm, M., Blome, C., Bhakoo, V. and Paulraj, A. (2016) 'Sustainability in multi-tier supply chains: Understanding the double agency role of the first-tier supplier', *Journal of Operations Management*, 41, pp. 42–60. Available at: <https://doi.org/10.1016/j.jom.2015.11.001>

## APPENDICES

## Appendix A: Final Sample of Companies Analysed

<b>No.</b>	<b>Company</b>	<b>Country</b>	<b>Industry</b>
1	Neste	Finland	Energy
2	Fortum	Finland	Energy
3	UPM-Kymmene	Finland	Manufacturing
4	KONE	Finland	Industrial
5	Kesko	Finland	Retail
6	Wärtsilä	Finland	Marine / Industrial
7	Valmet	Finland	Industrial
8	Volvo Group	Sweden	Automotive
9	Volvo Cars	Sweden	Automotive
10	IKEA (Ingka Group)	Sweden	Retail
11	H&M	Sweden	Retail
12	Ericsson	Sweden	Technology
13	Vattenfall	Sweden	Energy
14	Atlas Copco	Sweden	Industrial
15	Scania	Sweden	Automotive
16	Maersk	Denmark	Logistics
17	Ørsted	Denmark	Energy
18	Novo Nordisk	Denmark	Pharmaceuticals
19	Vestas	Denmark	Energy
20	DSV	Denmark	Logistics
21	Carlsberg	Denmark	Manufacturing
22	Equinor	Norway	Energy
23	Telenor	Norway	Telecommunications
24	Norsk Hydro	Norway	Manufacturing
25	Yara International	Norway	Chemicals
26	DNB	Norway	Financial Services
27	Mowi	Norway	Aquaculture

## Appendix B: Corporate Disclosure Documents Analysed

All documents analysed in this study were published between 2022 and 2024 in order to ensure consistency and comparability across firms.

Document Type	Description	Purpose in Analysis
<b>ESG and Sustainability Reports</b>	Annual sustainability and ESG disclosures published by firms	Identify sustainability priorities, ESG structures and SSCM conceptualisation
<b>Annual and Integrated Reports</b>	Combined financial and sustainability reporting documents	Provide organisational and governance context
<b>Supplier Codes of Conduct</b>	Formal supplier standards and ethical requirements	Analyse supplier governance and sustainability expectations
<b>Responsible Sourcing Policies</b>	Procurement and sourcing-related sustainability guidelines	Assess operationalisation of SSCM within supplier networks
<b>Governance and Ethics Policies</b>	Organisational compliance and accountability frameworks	Evaluate sustainability governance mechanisms and monitoring systems

## Appendix C: Analytical Coding Framework

Dimension	Indicator	Description	Analytical Purpose
<b>Environmental</b>	Scope 1–3 Emissions	Reporting of greenhouse gas emissions and climate targets	Assess environmental sustainability operationalisation
<b>Environmental</b>	Energy Use	Energy consumption, renewable energy and efficiency measures	Analyse environmental performance orientation

<b>Environmental</b>	Resource Use and Circularity	Waste management, materials use and circular economy initiatives	Evaluate sustainability integration within operations
<b>Social</b>	Labour Standards	Working conditions, employee wellbeing and labour rights	Analyse social sustainability governance
<b>Social</b>	Human Rights	Ethical sourcing, due diligence and human rights commitments	Assess supplier-related social responsibility
<b>Social</b>	Supplier Responsibility	Supplier expectations, sourcing transparency and accountability	Evaluate social governance across supply chains
<b>Governance</b>	Policies and Standards	Supplier codes, ESG policies and governance frameworks	Assess formal sustainability governance structures
<b>Governance</b>	Monitoring Mechanisms	Supplier audits, risk assessments and compliance systems	Evaluate governance implementation processes
<b>Governance</b>	Enforcement and Accountability	Corrective actions, escalation procedures and supplier consequences	Analyse operational governance strength and accountability visibility