UNIVERSITY OF TURKU
Turku School of Economics

Supplier Engagement in Ensuring Commitment to Corporate Sustainability Standards

Operations and Supply Chain Management
Master's thesis

Author:
Ellen Mälkönen

Supervisor:
D.Sc. Sini Laari

15.4.2025
Turku

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service.

Master's thesis

Subject: Operations and Supply Chain Management
Author: Ellen Mälkönen
Title: Supplier Engagement in Ensuring Commitment to Corporate Sustainability Standards
Supervisor: D.Sc. Sini Laari
Number of pages: 93 pages + appendices 2 pages
Date: 15.4.2025

Companies face uncertainty in ensuring supplier commitment to corporate sustainability standards (CSS), as non-compliance poses reputational and customer confidence risks. However, simply imposing CSS often leads to ceremonial compliance rather than tangible sustainability performance improvements. Therefore, robust mechanisms for identifying, assessing, incentivizing, and governing supplier sustainability are essential. Deeper supplier collaboration and engagement are increasingly viewed as crucial for achieving sustainability goals, yet studies on effective supplier sustainability engagement remain scarce. Moreover, very limited research examines buyer-supplier relationships influencing CSS diffusion and particularly the dynamics of buyer-supplier relationship in supplier engagement in CSS.

This study addresses this research gap by examining how companies can effectively engage suppliers to ensure commitment to CSS and how the engagement strategies are shaped by the dynamics of buyer-supplier relationships. The Relational View Theory serves as the theoretical background. The study is driven by two research questions: *(1) How can suppliers be engaged to ensure their commitment to corporate sustainability standards? (2) How does the dynamic of buyer-supplier relationship influence supplier sustainability engagement?* To explore these questions, a qualitative multiple-case design was employed, involving six Finnish manufacturing companies. Data were collected through semi-structured interviews and analyzed using thematic analysis.

The findings suggest that most companies rely on basic and transactional approaches, such as code of conducts, certifications, contract clauses, audits, and supplier self-assessments. However, these approaches offer limited effectiveness in ensuring supplier commitment to CSS. While collaborative methods, such as training, incentives, and shared initiatives, are more effective, they are mostly adopted by larger companies. Analyzed through the lens of the Relational View Theory, the research highlight that relationship-specific sustainability investments, reciprocal sustainability knowledge exchange, merging resources and capabilities in joint sustainability initiatives, and strong governance of supplier sustainability significantly enhance supplier commitment to CSS. These findings offer manufacturing companies valuable insights on the strategic value of supplier engagement and support CSS commitment within supply chains.

The study also identifies barriers to sustainability engagement. Buyer dependence on critical suppliers, particularly among smaller buying companies, weakens leverage and limit the ability to engage dominant suppliers. Furthermore, contract manufacturing complicates engagement, as these companies often lack direct control over customer-selected suppliers. Importantly, the research underscores the role of personal relationships in the buyer-supplier interface, suggesting that trust and interpersonal dynamics can, in some cases, outweigh formal power asymmetries in driving supplier sustainability commitment. While this research advances understanding of supplier sustainability engagement and the influence of buyer-supplier relationship dynamics, further studies should explore the supplier's perspective and examine how organizational constraints shape buying companies' capacity to promote supplier sustainability.

Key words: supplier engagement, corporate sustainability standards, buyer-supplier relationship, buyer-supplier dependence, relational view

Pro gradu -tutkielma

Oppiaine: Toimitusketjujen johtaminen
Tekijä: Ellen Mälkönen
Otsikko: Toimittajien sitouttaminen yritysten vastuullisuusstandardeihin
Ohjaaja: KTT Sini Laari
Sivumäärä: 93 sivua + liitteet 2 sivua
Päivämäärä: 15.4.2025

Yritykset kohtaavat epävarmuutta siitä, miten varmistaa toimittajien sitoutumisen vastuullisuusstandardeihin, sillä niiden noudattamatta jättäminen aiheuttaa yritykselle maine- ja luottamusriskejä. Pelkkä standardien asettaminen johtaa kuitenkin usein pikemminkin näennäiseen vaatimustenmukaisuuteen kuin konkreettisiin parannuksiin. Sen vuoksi on olennaisen tärkeää luoda vankat mekanismit toimittajien vastuullisuuden tunnistamiseksi, arvioimiseksi, kannustamiseksi ja ohjaamiseksi. Syvempää yhteistyötä ja toimittajien sitouttamista pidetään yhä ratkaisevampana vastuullisuustavoitteiden saavuttamiselle, mutta tutkimuksia toimittajien tehokkaasta sitouttamisesta vastuullisuuteen on edelleen vähän. Lisäksi vastuullisuusstandardien leviämiseen vaikuttavia ostaja-toimittajasuhteita on tutkittu hyvin vähän erityisesti siitä, miten ostaja-toimittajasuhteiden dynamiikka vaikuttaa toimittajien sitoutumiseen vastuullisuusstandardeihin.

Tutkimus pyrkii täyttämään tämän tutkimusaukon tarkastelemalla, miten yritykset voivat tehokkaasti sitouttaa toimittajiaan vastuullisuusstandardeihin ja miten ostaja-toimittajasuhteiden dynamiikat vaikuttavat sitouttamisstrategioihin. Tutkimuksen teoreettisena taustana toimii relationaalisen näkökulman teoria. Tutkimuksen taustalla on kaksi tutkimuskysymystä: *(1) Miten toimittajia voidaan sitouttaa yritysten vastuullisuusstandardeihin? (2) Miten ostaja-toimittajasuhteen dynamiikka vaikuttaa toimittajien vastuullisuussitouttamiseen?* Näiden kysymysten tutkimiseksi käytettiin kvalitatiivista monitapaustutkimusta, johon osallistui kuusi suomalaista teollisuusyritystä. Tiedot kerättiin puolistrukturoiduilla haastatteluilla ja analysoitiin temaattisen analyysin avulla.

Tulokset osoittavat, että useimmat yritykset luottavat perus- ja transaktionaalisiin menetelmiin, kuten eettisiin ohjeistoihin, sertifikaatteihin, sopimuslausekkeisiin, auditointeihin ja toimittajien itsearviointeihin. Näillä menetelmillä voidaan kuitenkin vain rajoitetusti varmistaa toimittajien sitoutumista vastuullisuusstandardeihin. Yhteistyöhön perustuvat menetelmät, kuten koulutus, kannustimet ja yhteiset aloitteet, ovat tehokkaampia, mutta niitä käyttävät lähinnä suuret yritykset. Tutkimuksessa korostetaan relationaalisen näkökulman teorian avulla, että suhdekohtaiset vastuullisuusinvestoinnit, vastavuoroinen vastuullisuustiedon vaihto, resurssien ja kyvykkyyksien yhdistäminen yhteisissä vastuullisuusaloitteissa ja toimittajien vastuullisuuden hallinnointi lisäävät merkittävästi toimittajien sitoutumista vastuullisuuteen. Nämä tulokset tarjoavat teollisuusyrityksille arvokasta tietoa toimittajien sitouttamisen strategisesta arvosta ja tukevat vastuullisuuteen sitoutumista toimitusketjuissa.

Tutkimuksessa tunnistetaan myös vastuullisuussitouttamisen esteitä. Ostajien riippuvuus kriittisistä toimittajista, erityisesti pienemmillä yrityksillä, heikentää vaikutusvaltaa ja rajoittaa kykyä sitouttaa määräävässä asemassa olevia toimittajia. Myös sopimusvalmistus vaikeuttaa sitouttamista, koska näillä yrityksillä ei usein ole suoraa määräysvaltaa asiakkaan valitsemiin toimittajiin. Lisäksi tutkimuksessa korostetaan henkilökohtaisten suhteiden merkitystä ostaja-toimittaja-vuorovaikutuksessa, mikä viittaa siihen, että luottamus ja ihmissuhdedynamiikka voivat joissakin tapauksissa vastuullisuussitouttamisessa olla tärkeämpiä kuin epäsymmetria suhteen valta-asetelmassa. Vaikka tämä tutkimus edistää ymmärrystä toimittajien sitouttamisesta ja ostaja-toimittaja-suhteiden dynamiikan vaikutuksesta, jatkotutkimuksissa olisi tutkittava toimittajan näkökulmaa, sekä organisaation rajoitteita toimittajien vastuullisuuden edistämisessä.

Avainsanat: toimittajien sitouttaminen, yrityksen vastuullisuusstandardit, ostaja-toimittaja-suhde, ostaja-toimittaja-riippuvuus, relationaalinen näkökulma

TABLE OF CONTENTS

1 Introduction 9

1.1 Research background 9

1.2 Research objective and research questions 11

1.3 Research structure 12

2 Buyer-Supplier Relationship 13

2.1 Relational View as the Theoretical Background 13

2.2 Dynamics of Buyer-Supplier Relationships 14

2.2.1 Types of Buyer-Supplier Relationships 14

2.2.2 Buyer-Supplier Dependence 17

2.3 Supplier Relationship Management 20

3 Ensuring Supplier Commitment to Corporate Sustainability Standards 24

3.1 Imposing Corporate Sustainability Standards on Suppliers 24

3.2 Supplier Sustainability Engagement as a Strategic Approach 26

3.3 Classification of Supplier Engagement Strategies 33

3.3.1 Disengagement Strategy 35

3.3.2 Basic Engagement Strategy 35

3.3.3 Transactional Engagement Strategy 37

3.3.4 Collaborative Engagement Strategy 39

3.4 Buyer-supplier Dynamic in Supplier Sustainability Engagement 42

3.4.1 Engaging Suppliers within Different Types of BSRs 42

3.4.2 Engaging Suppliers in Situations of Supplier Dependence 43

3.4.3 Engaging Suppliers in Situations of Buyer Dependence 44

4 Theoretical Framework for Supplier Sustainability Engagement and The Influence of Buyer-Supplier Relationship Dynamics 46

5 Methods 48

5.1 Case study as the research approach 48

5.2 Case selection and data collection methods 49

5.3 Data analysis 52

5.4 Research quality 53

6 Findings 55

6.1 Background information of the case companies 55

6.2 Key Buyer-Supplier Relationships and their Power Dynamics 58

6.2.1 Preferred BSRs for Engagement 58

6.2.2 Power Dynamics in Preferred BSRs 59

6.3 Imposing Corporate Sustainability Standards 60

6.3.1 Tools for Imposing CSS on Suppliers 60

6.3.2 Communicating CSS to Suppliers 62

6.4 Engaging Suppliers in Commitment to CSS 63

6.4.1 Purpose of Supplier Sustainability Engagement 63

6.4.2 Assessment-Based Approach to Engaging Suppliers in CSS 64

6.4.3 Collaboration-Based Approach to Engaging Suppliers in CSS 67

6.4.4 Processing Supplier Sustainability Information Internally 68

6.4.5 Supplier Engagement Initiatives as a part of SSCM Strategy 70

6.4.6 BSR Dynamics in Supplier Sustainability Engagement 73

7 Discussion and Conclusions 75

7.1 Answering the research questions 75

7.1.1 Engaging Suppliers to Commit to Corporate Sustainability Standards 75

7.1.2 The Influence of the Dynamics of Buyer-Supplier Relationships 81

7.2 Managerial Implications 84

7.3 Limitations and suggestions for further research 85

References 87

Appendices 94

Appendix 1 Interview guideline 94

LIST OF FIGURES

Figure 1. Buyer-supplier relationship continuum 15

Figure 2. Buyer-supplier dependence matrix (adapted from Scott & Westbrook 1991; Cox 2004) 18

Figure 3. Hierarchical relationship of supplier relationship management concepts (adapted from Tidy et al. 2016) 21

Figure 4. Four phases of integrating CSS into procurement processes (adapted from Koplin et al. 2007) 25

Figure 5. Supplier sustainability engagement process (adapted from Butt et al. 2024) 28

Figure 6. The Theoretical Framework for Supplier Sustainability Engagement and The Influence of Buyer-Supplier Relationship Dynamics 47

LIST OF TABLES

Table 1. Supplier sustainability engagement strategies (adapted from Dahlmann & Roehrich 2019; Stocker et al. 2020; Reinartz & Berkmann 2017) 34

Table 2. Case company and interview details 51

1 Introduction

1.1 Research background

Companies encounter the uncertainty of whether their upstream supply chains comply with their formally established corporate sustainability standards (CSS). These standards are a company's own commitments to environmental and social sustainability, reflecting the company's values and goals for sustainable operations in alignment with broader industry standards. (Grimm et al. 2016; 2023). The uncertainty is a significant issue, since if any party in a company's supply chain does not comply with the CSS the company has imposed on them, both corporate reputation and customer confidence are at risk (Grimm et al. 2014). This is due to the pressures regarding CSS that governments, business, people and civil society direct towards companies (Grimm et al. 2016).

Research, however, suggest that the CSS imposed on suppliers often do not convert into suppliers' concrete sustainability performance but rather remain ceremonial. Suppliers address pressure coming from buying companies by complying with their CSS without it necessarily leading to any significant improvements in actual sustainability performance. (Asif 2020.) Additionally, suppliers facing challenges with the expanded role requirements, from purely supplying materials to now also being expected to meet sustainability standards, often exploit asymmetries of information through misrepresenting or hiding sustainably problematic practices to appear compliant (Wohlgezogen et al. 2021; Dahlmann et al. 2023). Thus, it can be concluded that merely imposing CSS on suppliers is not sufficient for companies to effectively manage supplier sustainability risks and thereby achieve their supply chain sustainability goals.

Therefore, researchers argue that supplier sustainability management must extend beyond suppliers merely declaring their compliance with CSS. It should also include robust identification, assessment, and monitoring processes, along with systems that incentivize commitment. (Foerstl et al. 2010.) Consequently, there is a rising interest in research to understand how supplier sustainability can be measured, analyzed, improved and governed by the focal company, i.e. the buyer company (Patil et al. 2022). Alongside, deeper and closer partnerships with suppliers are prevalently considered critical to the realization of supply chain sustainability goals (Tidy et al. 2016; Awan et al. 2018).

Hence, it is crucial for companies' sustainability management efforts to place more emphasis on managing the relationships they have with their suppliers (Ukko et al. 2021).

In the efforts to ensure their suppliers' commitment to their CSS, companies have increasingly implemented sustainable supplier management practices in their sourcing processes. These practices can be generally categorized in *supplier assessment* and *supplier collaboration.* (Chen & Chen 2019; Sancha et al. 2019.) Existing research is largely concentrated on the assessment of supplier sustainability through imposed CSS and conducting audits (Patil et al. 2022). However, particularly supplier collaboration is perceived instrumental in developing the maturity of the supply chain sustainability, and vital in facilitating the sustainability performance of a company (Ukko et al. 2021). This is especially important, as helping suppliers identify sustainability issues and supporting them in implementing sustainability-related initiatives are recognized to have a key role in ensuring the commitment to CSS (Ageron et al. 2012).

Supplier engagement is progressively recognized as a key means of reaching common sustainability goals between focal companies and their suppliers, as well as assessing such operations of suppliers that are executed against the imposed CSS (Tidy et al. 2016). However, it has been stated that while engagement has been widely studied in the context of consumers, attention of research still lacks on engagement in interorganizational partnerships, such as in buyer-supplier relationships (Vivek et al. 2022). Other research supports the conclusion by adding that, although supplier engagement has increased its significance as a means of influencing suppliers to comply company objectives, it has not been sufficiently studied specifically in the field of sustainability (Tidy et al. 2016; Dahlmann & Roehrich 2019; Sharma et al. 2024). Moreover, there is a notable lack of research on the strategies to effectively engage suppliers in sustainability goals (Butt et al. 2024).

In addition to the deficient research on supplier sustainability engagement in ensuring CSS commitment, existing research is very limited regarding the role of buyer-supplier relationships in imposing CSS (see Jajja et al. 2019; Ahmadi-Gh & Bello-Pintado 2024; Naffin et al. 2023). Grimm et al. (2023), as well, raise up the very little research conducted on understanding the capabilities of diffusion of CSS particularly in interdependent relationships. Sancha et al. (2019) also agree by stating that the existing literature neglects

the role of supplier dependence, thereby oversimplifying the diverse dynamics of buyer-supplier relationships and their effects on sustainability performance outcomes.

Accordingly, further research is needed to fill the research gap and to understand the potential of supplier engagement in ensuring commitment to corporate sustainability standards. To provide a structured foundation for this research, the relational view theory of Dyer and Singh (1998) is applied as the theoretical background. The theory considers a company's essential resources to be integrated into the practices and processes of inter-firm relationships (Dyer & Singh 1998), explaining how companies can leverage supplier capabilities, collaboration, and shared processes to enhance supply chain sustainability.

1.2 Research objective and research questions

The main objective of this study is to examine supplier engagement as a means to ensure suppliers' commitment to CSS in the global supply chains of Finnish manufacturing companies. The aim is to identify different strategies to engage suppliers in sustainability, as well as to find various practices that can be utilized in supplier sustainability engagement. The first research question is as follows:

- *RQ1: How can suppliers be engaged to ensure their commitment to corporate sustainability standards?*

To thoroughly comprehend the possibilities of companies to engage their suppliers to their CSS, it is critical to understand how the dynamics of buyer-supplier relationships influence supplier sustainability engagement. Consequently, another objective of this study is to discover the various types of buyer-supplier relationships, recognize the context of dependence between the buyer and the supplier, and assess the synergistic effect they have on supplier engagement that could be applied to ensure the realization of CSS. Thus, the second research question is set with a focus on the buyer-supplier relationship, and is as follows:

- *RQ2: How does the dynamic of buyer-supplier relationship influence supplier sustainability engagement?*

This study aims to provide a comprehensive overview on the contemporary best practices through empirical research and a review of existing literature. From a managerial perspective, this study seeks to contribute to practice by providing procurement

organizations with knowledge on the sustainability engagement strategies and practices to implement in their procurement strategies in various buyer-supplier dynamic contexts. The aim is to present Finnish manufacturing companies with means to develop their current supplier sustainability engagement practices and, consequently, ensure their suppliers' commitment to the CSS they have imposed on them.

1.3 Research structure

The remainder of this study is organized as follows. The existing literature is reviewed in Chapters 2 and 3, first of which provides a comprehensive review of buyer-supplier relationships. First, the relational view theory is discussed, and its function as the theoretical background of this research is explained, followed by an analysis of the dynamics of buyer-supplier relationships. The chapter also introduces the theme of supplier relationship management, including the concept of supplier engagement. Chapter 3 focuses on supplier sustainability engagement. It starts with an overview of Corporate Sustainability Standards (CSS). Following that, supplier sustainability engagement as a strategic approach is reviewed, after which supplier engagement strategies are classified and explained. In addition, the influence of buyer-supplier relationship dynamics in supplier sustainability engagement is assessed. Given the limited research on engaging suppliers in CSS in Finnish manufacturing companies, this literature review extends beyond this geographical scope and considers the entire field of research of supplier engagement with CSS.

Chapter 4 presents the theoretical framework of the study. Chapter 5 outlines the research design and methodology, covering the case study research approach, case selection, and data collection methods. It also details the data analysis process. In addition, evaluation of the research through reliability, validity and generalizability are included in the chapter. Chapter 6 presents the empirical findings of the research, while Chapter 7 interprets these findings in relation to the research questions. The study concludes with a discussion of the research limitations and suggestions for future research.

2 Buyer-Supplier Relationship

2.1 Relational View as the Theoretical Background

The relational view is a theory by Dyer and Singh (1998) developed to explain the relational profitability of business partnerships. The theory is an extension to the resource-based view, which considers the company to be the primary unit of analysis, and that the company itself needs to create resources, assets and capabilities beyond its competition to achieve competitive advantage. Conversely, the relational view perceives that a company's critical resources may cross company boundaries and that they can be embedded in interfirm practises and processes. These partnerships of companies that generate interorganizational competitive advantage are called sources of *relational rents*. (Dyer & Singh 1998.)

Relational rents are defined as profit generated through these sources that neither company in the partnership can generate in isolation but only through the shared contributions of the specific partners in alliance (Dyer & Singh 1998). Dyer and Singh (1998) have identified four categories of sources of relational rents. These are

1) investments in relation-specific assets,
2) extensive knowledge exchange,
3) merging resources or capabilities that are complementary but scarce, and
4) effective governance mechanisms.

Vivek et al. (2022) conclude from the theory that successful relational exchanges between partners rely on cooperation, commitment to the relationship, trust, shared values, integrity in keeping promises, and the nonexistence of opportunistic behavior. Wieland and Wallenburg (2013) complement this by stating the theory to posit that the extent of partners' investment in interfirm knowledge-sharing and relation-specific assets is directly proportional to the potential for generating relational rents.

The relational view recognizes the four sources of relational rents as characteristics that differentiate types of business relationships (Dyer & Singh 1998). Studies that have applied the relational view have distinguished between two fundamental types of relationships: transaction-based 'arm's length' relationships, and collaborative

relationships. The theory has been used in multiple studies to not only distinguish between various relationship types, but also to discern between activities and practices involved in buyer-supplier management. (Lintukangas et al. 2023.)

In the sustainable supply chain context, the relational view has not been often applied to (Lintukangas et al. 2023). Research has, however, recognized that companies can more efficiently realize their sustainable operations when they are including the entire supply chain, instead of focusing only inside organizational boundaries (Patil et al. 2022). In this research, the relational view and its categorization of practices of relational exchange for different relationship types is applied classify the different strategies of supplier sustainability engagement.

2.2 Dynamics of Buyer-Supplier Relationships

The buyer-supplier relationship (BSR), as defined by Achrol et al. (1983, 55), is "the vertical economic arrangements within any given dyad, ranging from market mediated to hierarchical transactions". Inter-organizational relationships emerge in response to limited availability of resources, with a company's external collaborations serving as strategic responses to these limitations. These interactions result in varying relationship dynamics and the formation of diverse strategic alliances with trading partners, contributing significant value to the organization. (Lo et al. 2018.) Consequently, inter-organizational relationships are considered a source of competitive advantage (Jap 1999). Kannan and Tan (2006) further suggest that then nature of BSRs reflects an understanding between buying companies and suppliers that, for certain purchases, collaboration can yield greater mutual benefits than competition.

2.2.1 Types of Buyer-Supplier Relationships

The buyer-supplier relationship continuum, which demonstrates the characteristics of both fundamental types of buyer-supplier relationships, arm's-length and partnership, as distinguished with the relational view theory (Lintukangas et al. 2023), is presented in Figure 1. Some literature also employs the terms transactional and relational BSRs (e.g. Jajja et al. 2019). However, it should be noted, that this typology is a simplified division, and although some literature includes other types of buyer-supplier relationships in between the arm's-length and partnership, they are not explored in this study.

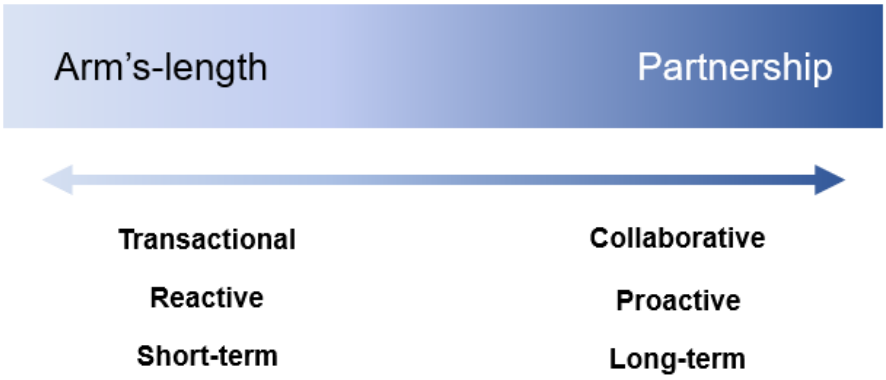

Figure 1. Buyer-supplier relationship continuum

In arm's-length relationships, the buyer maintains a relatively distant, non-collaborative, and reactive relationship with the supplier (Cox et al. 2004). Reactive approach to a relationship refers to a situation where the supplier does not have a strategic plan to address the buying company's requirements, which can result in long-term performance uncertainty (Ageron et al. 2012). In arm's-length relationships, the buyer provides only essential details, such as product or service specifications, volume, and timing, without heavily involving in the supplier's operational decisions or innovation processes. Similarly, the supplier reciprocates by limiting the information they share, such as specifications, timing, and pricing. Both partners make minimal specific investments in their relationship. (Cox 2004.) As suggested by Johnston and Murat Kristal (2008), the fundamental assumption in the arm's-length buyer-supplier relationships is that they are more tactical than strategic.

This transactional approach aims at developing and upholding a contract, with thorough bargaining and negotiations to minimize transaction costs and risks. Long-term partnerships are not prioritized, and relationships remain conditional on contractual performance. (Jajja et al. 2019; Johnston & Murat Kristal 2008.) Consequently, these relationships are neither rare nor difficult to replicate (Dyer & Singh 1998), which leads to the interchangeability of suppliers. To minimize transaction costs and protect against opportunistic behavior, arm's-length relationships rely on formal contracts to ensure supplier compliance. (Jajja et al. 2019; Johnston & Murat Kristal 2008.) Regular short-term market testing further helps to control transaction costs (Cox 2004). Since these relationships lack unique, relation-specific investments that could yield profits above

those of other buyer-supplier interactions, they cannot generate relational rents (Dyer & Singh 1998).

When transitioning from an arm's-length relationship to a partnership approach, the buyer and supplier commit to a collaborative, long-term partnership that fosters joint investments and relationship-specific assets (Cox 2004; Jajja et al. 2019). Partnerships are characterized by the degree to which both parties participate in joint problem-solving and benefit-sharing. This strategic shift reflects the buyer's recognition of the added value in collaborative relationships, incentivizing a move from tactical to strategic engagement. (Johnston & Murat Kristal 2008). Consequently, the buyer is exchanging a long-term relationship for a commitment from the supplier (Cox 2004).

As opposed to the arm's-length relationships, in partnerships specific investments are made. By investing in these relationship-specific assets, buyers and suppliers build a foundation for unique innovations that are challenging to replicate. These specialized, interdependent resources generate relational rents, a key advantage of partnerships that transactional relationships lack. (Cox 2004; Dyer & Singh 1998.) Additionally, the duration of protective agreements and the volume of transactions unique to partnerships are critical to maximizing relational rents (Dyer & Singh 1998). Specific investments not only serve as trust-building mechanisms but also promote long-term mutual benefits and reduce barriers to knowledge transfer, as highlighted by Wu and Li (2020).

Jap (1999) argues that the collaborative efforts and idiosyncratic investments by buyers and suppliers distinguish partnership-based exchange relationships from arm's-length arrangements. Similarly, Johnston and Murat Kristal (2008) emphasize that successful collaborative BSRs require long-term information exchange to sustain the relationship and ensure mutual success. Jajja et al. (2019) argue that unlike in transactional BSRs, which primarily rely on contractual enforcement mechanisms, buying companies in partnerships utilize mutual and self-governance mechanisms in managing suppliers. Johnston and Murat Kristal (2008) agree by stating that in partnerships, the relationship is based on mutual cooperation rather than coercion or compliance. Effective governance mechanisms, as noted by Wu and Li (2020), foster mutual trust and frequent interaction, encouraging exchanges of sustainability knowledge and practices. These mechanisms are also one of the key sources of relational rents (Dyer & Singh 1998).

Partnerships provide operational benefits for both partners. Close relationships with key suppliers offer advantages in quality, cost, and delivery performance. However, without clear signals or behaviors that indicate a commitment to collaboration for mutual value creation, rather than merely redistributing existing value, both buying companies and suppliers may focus on their own interests. In contrast, a commitment to collaboration and risk-sharing fosters mutual benefits not only in cost, quality, delivery, and productivity but also in areas like product development, technology adoption, and joint problem-solving. (Kannan & Tan 2006.)

Beyond these operational benefits, partnerships enhance core competencies, and function as a means to achieving sustainability goals. Strategically, partnerships enhance competitiveness, foster innovation, and increase market share, resulting in better financial performance. Hence, the ability to establish collaborative BSRs is considered a core competency that provides a knowledge-based competitive advantage. (Johnston & Murat Kristal 2008; Kannan & Tan 2006.) From a sustainability perspective, Schniederjans and Khalajhedayati (2021) complement the findings of Johnston and Murat Kristal (2008) and Kannan and Tan (2006) by stating that partnerships foster the development of new knowledge, which in turn promotes downstream sustainability competitiveness when facilitating an upstream partnership. Yen (2018) also agree, as they argue that collaborative relationships are required for implementing sustainability management practices and improving sustainability performance across the supply chain.

2.2.2 Buyer-Supplier Dependence

Dependence asymmetries arise in BSRs when one partner is more dependent on the other to maintain a competitive advantage (Vivek et al. 2022). BSRs naturally involve dependence and power imbalances, making dependence a central element of these relationships (Sancha et al. 2019). Scott and Westbrook (1991) developed a dependence matrix to analyze BSRs based on two fundamental dimensions: the relative importance of the buying company to the supplier, and the relative importance of the supplier to the buying company. Through these dimensions, Scott and Westbrook (1991) identified four central contexts in buyer-supplier exchanges: supplier dependence, buyer dependence, interdependence, and independence. Accordingly, the matrix provides a comprehensive view of the power and leverage dynamics within a supply chain power regime (Cox

2004). This buyer-supplier dependence matrix, adapted from Scott and Westbrook (1991), and Cox (2004), is presented in Figure 2.

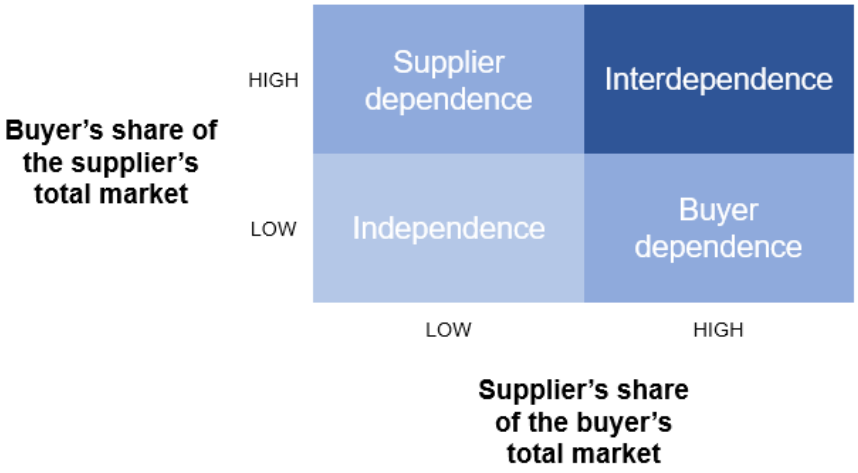

Figure 2. Buyer-supplier dependence matrix (adapted from Scott & Westbrook 1991; Cox 2004)

Supplier dependence describes the extent to which a supplier is depending on a particular buying company for central resources, such as revenue. This dependence can be evaluated by the supplier's ability to sustain business without that key customer. (Grimm et al. 2014; Sancha et al. 2019.) Supplier dependence often arises in markets with few buyers and many suppliers, where the buyer holds a significant share of the supplier's total market. In such cases, the supplier typically offers standardized commodities, making it easy for the buyer to find alternatives, while the supplier lacks informational advantages over buyers. Buyers in these markets usually have high global volume, consistent and standardized demand, and low supplier switching costs. Consequently, the buyer has low threshold for switching to another supplier, making the supplier vulnerable to buyer demands. (Cox 2004.) Only in the context of supplier dependence can buyers achieve a competitive edge in arm's-length relationships (Dyer & Singh 1998).

In contrast, buyer dependence occurs when the supplier has significant power over the buyer, often due to a limited supply in markets with few suppliers and many buyers. In this situation, the buyer represents only a small portion of the supplier's total market, allowing the supplier to dictate terms without reliance on any single buyer. Buyer dependence typically involves high supplier switching costs and low buyer switching costs, making it difficult for buyers to find alternatives. This dynamic is reinforced by the

unique products or services that suppliers offer, as well as their substantial information advantages over buyers. (Cox 2004.)

Independence is associated with a traditional purchasing scenario, where buyers hold suppliers at arm's length (Scott & Westbrook 1991). In the situation of independence, markets are characterized with both many buyers and many suppliers, and neither buyers nor suppliers have dominance over one another. The buyer has a relatively low share of the supplier's total market, and the supplier is not heavily reliant on any single buyer for revenue. Consequently, both buyers and suppliers have low switching costs. Suppliers typically offer standardized commodities, and they have very limited advantages of information asymmetry over the buyer. (Cox 2004.)

Interdependence emerges in committed, long-term relationships fostering collaboration, trust and innovation between partners (Scott & Westbrook 1991). In these cases, only few buyers and suppliers are on the market, and each partner holds a substantial market share for the other. This makes both highly reliant on the relationship for a significant portion of revenue for the supplier, and critical supplies for the buyer. Both parties have high switching costs, creating a strong incentive for stable, long-term relationships. Suppliers often provide unique products or services, which makes switching supplier difficult for buyers. In addition, suppliers hold moderate information asymmetry advantages in the relationship. (Cox 2004.)

The four dependence contexts indicate that the power held by buyers can significantly impact supplier behavior and their willingness to meet buyer requirements. Research by Grimm et al. (2014) support Cox's (2004) analysis of power dynamics, demonstrating that suppliers' compliance with a focal company's requests positively correlates with their perceived dependency on that buyer, due to the buyer's demand volume. This supplier dependency creates a power dynamic where suppliers are more likely to meet buyer requests to maintain the business relationship and secure revenue. Furthermore, previous research suggests that these power dynamics are more influential under institutional pressures, which can further promote the adoption of specific practices. (Grimm et al. 2014).

2.3 Supplier Relationship Management

Supplier relationship management (SRM) is the strategic management of business relationships between supply chain partners, and it is recognized as one of the most critical elements of modern supply chain management (Tidy et al. 2016; Butt et al. 2024; Naffin et al. 2023). This importance stems from the prevalent view that managing BSRs presents companies with significant opportunities for strategic advantages and achieving exceptional financial performance (Jap 1999). In addition to strategic and financial benefits, SRM serves as a tool to facilitate the achievement of sustainability goals, particularly in areas where the focal company needs to exert influence over activities outside its direct control. SRM activities are conducted to collaboratively plan, operate, and implement business decisions, which improve performance and drive the achievement of sustainability goals. (Tidy et al. 2016.) Consequently, SRM is a of cornerstone of the sustainability management of buying companies.

Literature identifies various factors affecting the success of SRM. Both Tidy et al. (2016), and Butt et al. (2024) emphasize that effective and successful SRM depends on trust and communication, whereas mistrust, weak communication, or even sabotage often result in a transactional, power-centered approach to the relationship, hindering long-term success. Nevertheless, Cox (2004) points out that since SRM decisions are embedded within complex and partly hidden interactions with suppliers who have their own objectives and agendas, buying companies cannot solely make decisions on SRM. To mitigate this effect, SRM is most effective when supplier dependence exists or, at the very least, the relationship functions in the context of interdependence (Cox 2004).

Accordingly, both Cox (2004) and Tidy et al. (2016) underline that effective SRM requires understanding the power regime that is taking place in various circumstances, and how that affects the applicable ways to manage those relationships. Since there is no single, universally effective SRM strategy, buying companies must identify what strategies are both ideal and feasible based on their unique circumstances (Cox 2004). Grimm et al. (2014) add to the conclusions of Cox (2004) and Tidy et al. (2016), by stating that the use of power between the partners act as an enabler of SRM. According to Grimm et al. (2014), the contractual relationship, opportunities to place pressure towards a supplier, and the transparency in the suppliers' involvement in the supply chains of the focal company all enable effective SRM.

The evolution of SRM research over the past three decades reflects the progressive integration of theoretical approaches to supply chain management, and the gradual shift in the view of the most appropriate approaches to managing supplier relationships. The view has shunned from short-term, contractual transaction-based relationship management to a long-term, relationship-focused collaboration approach based on transparency and trust. (Cox 2004; Tidy et al. 2016.) Consequently, companies are increasingly recognizing that supply chain efficiencies are optimally realized through long-term partnerships and close engagement with suppliers, encouraging a shift from purely transactional approaches aiming at short-term competitive advantage, toward relational partnerships characterized by mutual trust and interdependence. (Tidy et al. 2016.)

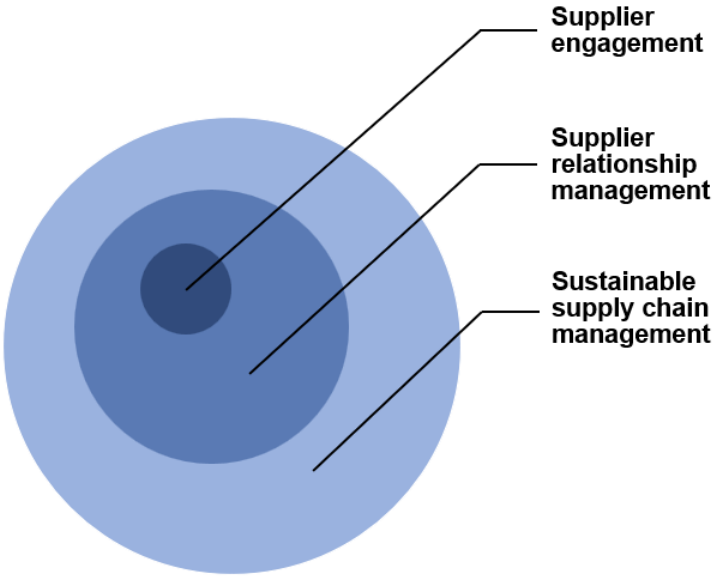

Figure 3. Hierarchical relationship of supplier relationship management concepts (adapted from Tidy et al. 2016)

To illustrate the concepts related to managing supplier relationships, Figure 3 presents the hierarchical relationship of SRM and supplier engagement within the context of sustainable supply chain management (SSCM). Ahi and Searcy (2013) define SSCM as "the creation of coordinated supply chains through the voluntary integration of economic, environmental, and social considerations with key inter-organizational business systems designed to efficiently and effectively manage the material, information, and capital flows associated with the procurement, production, and distribution of products or services in order to meet stakeholder requirements and improve the profitability, competitiveness, and resilience of the organization over the short- and long-term." SRM and supplier

engagement provide buying companies means to achieve sustainable supply chains as described by Ahi and Searcy (2013).

Supplier engagement is a corporate practice aimed at influencing supplier behavior and aligning supply chain performance with broader corporate objectives. In academic terms, supplier engagement operationalizes the theoretical principles of SRM. (Tidy et al. 2016.) Engagement in supply chain can be defined by how actively a focal company pools resources with key stakeholders, such as suppliers, to tackle sustainability issues through information exchange and collaborative efforts (Tidy et al. 2016; Dahlmann & Roehrich 2019). Sharma et al. (2024) suggest that supplier engagement for sustainability purposes entails actively involving suppliers in a company's sustainable strategies and practices. Dahlmann and Roehrich (2019), on the other hand, suggest that supplier engagement is an umbrella term covering various practices both at the company and individual levels, rather than being a precisely defined concept.

Vivek et al. (2022), as well as Dyer and Singh (1998) in their relational view theory, suggest that partner engagement involves exchanging and integrating complementary resources to create idiosyncratic, partnership-specific assets that drive innovation and establish resource interdependencies essential for future collaboration. Yepeng et al. (2022) also argue that supplier engagement facilitates the exchange of supplier knowledge, and that the information provided by suppliers forms the basis for companies to build competitive advantages. Yepeng et al. (2022) highlight that suppliers' specialized and diverse knowledge, particularly tacit knowledge, is a unique and irreplaceable resource for innovation. This view is supported by Dahlmann and Roehrich (2019), who highlight the conceptual significance of encouraging information exchange between focal companies and suppliers as a part of supplier engagement.

The dynamics of BSRs influence both supplier engagement and the benefits the buying company can gain from it. As forming partnerships is a time-consuming and resource-intensive process, partners experiencing dependence asymmetries will engage more to develop the idiosyncratic assets that provide long-term advantages and to govern the partnership's future direction. In particular, dependence asymmetries are found to increase engagement from the partner who is more dependent. Moreover, a shift in the relational dynamics of the BSR, such as in dependence asymmetry, commitment to the partnership, trust, or bounded reliability, can impact positional advantages of the partners in supplier

engagement, thereby influencing the relational value and resource advantage. Therefore, to successfully manage supplier engagement, it is critical for the buying company to recognize dependence asymmetries, shifts in them, and their potential impact on the partnership. (Vivek et al. 2022.)

3 Ensuring Supplier Commitment to Corporate Sustainability Standards

3.1 Imposing Corporate Sustainability Standards on Suppliers

Companies pursue to address the challenge of aligning their suppliers and reducing heterogeneity in their supply chains to realize their commitment to sustainability. To accomplish this, companies set requirements and objectives for their suppliers' performance by establishing and implementing corporate sustainability standards (CSS). (Grimm et al. 2016; 2023.) Grimm et al. (2014; 2016) define CSS as a demonstration of an organization's commitment to social and environmental sustainability, often exceeding legal requirements while aligning with existing cross-industry sustainability standards. CSS generally incorporate statements and policies ensuring the company's compliance with legal regulations, as well as other standards that surpass the regulatory expectations (Grimm et al. 2016; 2018). The CSS focal companies impose on their supplier are often embedded within contractual elements (Grimm et al. 2014). Consequently, CSS expand suppliers' contractual responsibilities to include sustainability considerations, encouraging them to alter their practices for compliance (Wohlgezogen et al. 2021). However, Koplin et al. (2007) emphasize that to ensure suppliers' commitment to CSS, it is necessary to adapt the standards to the diverse structures of companies, including their environmental and social responsibilities.

Literature presents various ways of distinguishing CSS from other standards. Grimm et al. (2023) depict CSS to be equivalent with voluntary sustainability standards, such as labels or certifications. Jajja et al. (2019) refer to these voluntary standards as *public standards* – internationally recognized, independently administrated generic compliance standards available to any organization. However, Grimm et al. (2023) note a key distinction: unlike voluntary sustainability standards, CSS are specifically tailored to align with a company's unique business practices, focusing on company-specific strategies and operations. Jajja et al. (2019) also recognize this distinction by defining CSS as *private standards* – buyer-developed compliance programs managed by the buying company and exclusively adopted by its suppliers.

Jajja et al. (2019) further differentiate public and private standards by asset specificity. Public standards typically involve lower asset-specific investments, making them

valuable to multiple buying companies, whereas private standards often require high asset-specific investments, which are implemented to fulfil a specific buying company's requirements, but hold limited value outside the partnership. Despite their differences in format and processes, both types of standards ultimately aim to promote social and environmental sustainability. (Jajja et al. 2019).

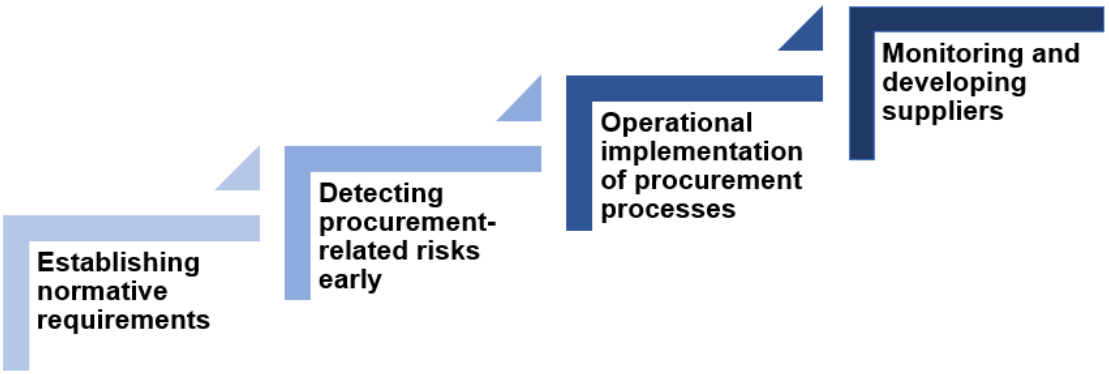

Figure 4. Four phases of integrating CSS into procurement processes (adapted from Koplin et al. 2007)

The four key phases for embedding CSS into a company's procurement processes identified by Koplin et al. (2007) are presented in Figure 4. The integration begins with establishing normative requirements, as embedding sustainability in supply chains relies on adhering to CSS within the company itself. More recent research complements this by showing a strong correlation between the focal company's values and ideological foundations, and the successful management of supplier sustainability (e.g., Jajja et al. 2019; Lintukangas et al. 2023). Ahmadi-Gh and Bello-Pintado (2024) also suggest that a buying company must first adhere to its own CSS before imposing these requirements on its suppliers and promoting sustainable behavior within BSRs. Koplin et al. (2007) highlight that this internal commitment facilitates the imposing of the standards and encourages suppliers to adopt similar practices across their own supply chains. Moreover, Lintukangas et al. (2023) state that investing in sustainable practices does not yield significant benefits for suppliers if their customers do not similarly commit to such practices. In addition, they suggest that incorporating sustainability into a company's own business strategy and actively participating in public policy has a strong positive impact on the level of supplier engagement in sustainability. From another perspective, Ahmadi-Gh and Bello-Pintado (2024) note that although implementing sustainability practices

within the focal company's operations may not directly improve suppliers' sustainability performance, it does create a foundation for encouraging suppliers to commit to sustainable practices. Thus, it is essential for buying companies to invest in internal sustainability practices to foster supplier commitment to CSS.

Koplin et al.'s (2007) second key phase is detecting procurement-related risks early. According to them, frequent gathering of external information supports understanding long-term sustainability conditions, including changes and emerging risks. The third key phase, operational implementation of procurement processes, includes integrating CSS prerequisites in supplier selection, and utilizing these in the assessment of the suppliers' compliance with the company's code of conduct. This operationalizes CSS into the BSR. Finally, the fourth key phase is monitoring and developing suppliers, which refers to ensuring suppliers' commitment to the standards after forming the BSR. However, Naffin et al. (2023) note that to develop suppliers and enhance their sustainability performance, focal companies should adopt various strategies based on each supplier's sustainability exposure, strengths, and weaknesses.

Imposing CSS on suppliers is identified to create competitive advantage for buying companies. Koplin et al. (2007) argue that CSS can create additional competitive advantages in business relationships over the medium and long-term, considering that suppliers who commit to these standards are both economically above average and reliable partners. Koplin et al. (2007) also suggest that improving environmental practices can, for example, lead to efficiency gains by reducing errors and breakdowns. Supporting this, Ahmadi-Gh and Bello-Pintado (2024) find that buying companies can improve supplier sustainability performance by imposing CSS, codes of conduct, and sustainability goals on suppliers, as well as by coordinating sustainability management practices both inter- and intra-organizationally. These findings are in line with research indicating that external pressures and requirements from buying companies positively impact suppliers' willingness to participate in sustainability initiatives and commit to sustainable practices (Yen 2018).

3.2 Supplier Sustainability Engagement as a Strategic Approach

Advancing supply chain sustainability requires companies to build their suppliers' capacity and capability to improve their performance. This can be achieved through active supplier sustainability engagement. (Kashmanian 2018; Butt et al. 2024.) By engaging

with suppliers and setting joint targets, buying companies can secure their suppliers' commitment to the CSS imposed on them and mobilize them effectively (Murfield & Tate 2017). Through supplier engagement, companies can measure, manage, and report on the sustainability performance of their suppliers (Dahlmann et al. 2023; Schniederjans & Khalajhedayati 2021.) Consequently, it promotes transparent disclosure of sustainability information, reducing uncertainty in sustainable decision-making (Lintukangas et al. 2023). Moreover, supplier engagement fosters dialogue with suppliers, enabling a deeper understanding of their sustainability targets and empowering them to control sustainability risks more effectively through improved reporting and collaboration efforts. Aligning procurement strategies with sustainability goals helps both the buying company and the supplier to address sustainability risks and integrate sustainable policies into business practices. (Butt et al. 2024.) In addition, buyer-supplier engagement is a unique and valuable asset for the development of sustainability innovations (Awan et al. 2019).

Incorporating supply chain engagement is essential to a company's strategic sustainability management (Lintukangas et al. 2023). Strategic supplier engagement goes beyond basic collaborating, requiring suppliers to cross organizational boundaries and actively participate in a company's internal innovation efforts, rather than limiting their role to external transactions, such as raw material supply (Yepeng et al. 2022). Such strategic collaboration is crucial for enhancing the competitive advantage of supply chains while driving sustainability engagement (Gold et al. 2010). In particular, engaging strategic business partners is key to successfully conducting supplier assessment and collaboration activities, ensuring their commitment to the focal company's CSS. The relationship and strategic engagement with these partners enable exploiting their knowledge and resources, as explained by the relational view. (Grimm et al. 2016; Dyer and Singh 1998.) However, Foerstl et al. (2010) note that implementing sustainability risk-absorbing practices, such as supplier assessment and collaboration practices, incurs costs as companies seek to protect themselves from the negative impacts of supplier misconduct. Therefore, supplier sustainability engagement should be prioritized for those suppliers most likely to pose sustainability risks and cause significant harm if such risks materialize (Harland et al. 2003).

Companies engage suppliers in sustainability efforts for various reasons, including relational or moral motives aimed at fostering engagement in collaborative efforts, as well as coercive pressures driven by instrumental motives to monitor compliance. Focal

companies that prioritize moral and relational motives tend to achieve significantly better sustainability outcomes by fostering collaboration rather than relying solely on unidirectional monitoring for self-serving interests. Leveraging relational capabilities and incentivizing suppliers through collaborative efforts increases suppliers' willingness to engage in sustainability initiatives. Additionally, relational motives can drive companies to proactively seek legitimacy and align with stakeholder expectations. Ultimately, whether supplier sustainability engagement stems from moral obligations, relational goals, or instrumental objectives, it reflects a company's broader business strategy and the operational environment, which further influence how the company engages with its suppliers to address sustainability management. (Lintukangas et al. 2023.)

Butt et al. (2024) outline six phases for integrating supplier interaction and supplier engagement practices into supplier relationship management within strategic supply chain sustainability management. Figure 5 illustrates these six phases of the supplier sustainability engagement process adapted from Butt et al. (2024). The phases are then further detailed.

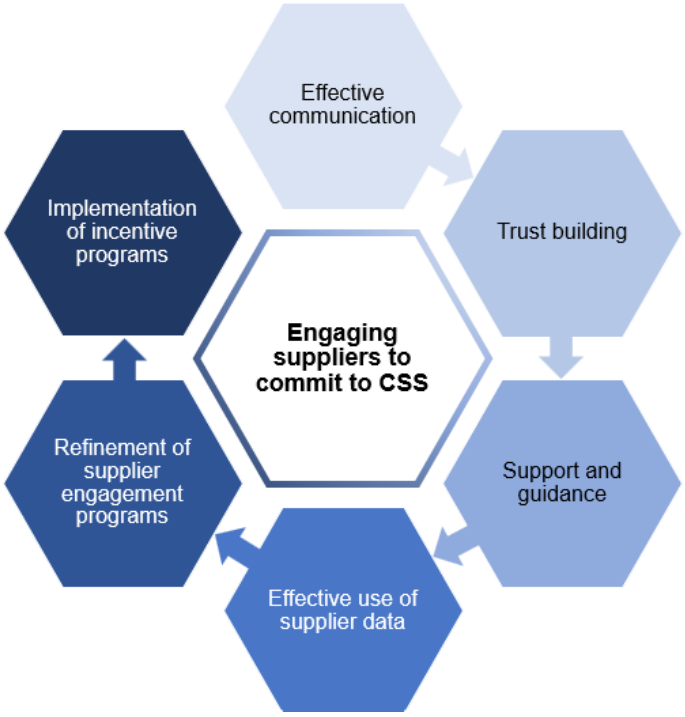

Figure 5. Supplier sustainability engagement process (adapted from Butt et al. 2024)

Effective communication

Effective communication forms the foundation for a successful supplier sustainability engagement strategy. Transparent, open, regular, and personal communication is essential for successfully developing suppliers' sustainability, as it facilitates the alignment of sustainability goals between buying companies and their suppliers. (Butt et al. 2024; Busse et al. 2016) Therefore, effective supplier sustainability engagement requires buying companies to actively communicate with their suppliers to foster innovative ideas and participate in extensive and possibly novel engagement activities. This involves identifying suppliers within the supply chain and acknowledging, acknowledging their actions, or lack thereof, and addressing sustainability risks through collaboration and comprehensive engagement strategies. (Butt et al. 2024.) Busse et al. (2016) complement this by noting that without consistent communication, suppliers may receive limited feedback regarding their sustainability progress, which can diminish the effectiveness of the imposed CSS.

To convey sustainability-related requirements and expectations on their suppliers, buying companies often employ diverse channels and methods for communication, including presentations, industry conferences, personal visits, technical guidance, calls, and emails. These communication efforts help ensure clarity and alignment in sustainability objectives, which suppliers generally appreciate. (Busse et al. 2016.) Furthermore, Dahlmann and Roehrich (2019) argue that the range of communication channels a buying company employs significantly influences the supplier sustainability engagement strategies it can implement. These strategies are discussed in detail in sub-chapter 3.3.

Trust building

Building trust is a critical second phase in the supplier sustainability engagement process. Busse et al. (2016) argue that effective communication as the first phase is particularly crucial to developing suppliers' sustainability as it builds mutual trust. Suppliers are often cautious of sharing detailed information about their sustainability performance and operational management, fearing potential cost increases or the misuse of their data, such as leaks to competitors. To address these concerns and build trust, buying companies are taking initiatives such as sharing their own success stories with suppliers. By illustrating how sustainability improvements have led to cost savings, enhanced competitiveness, and resource development, they aim to encourage similar practices among their suppliers. (Butt et al. 2024.) Naffin et al. (2023) further emphasize that actively managing supplier

relationships can foster trust and motivate suppliers to commit to implementing improvement measures effectively.

Trust-building efforts are considered fundamental to successful supplier sustainability engagement (Bag et al. 2024). Wohlgezogen et al. (2021) highlight that mutual trust in supplier engagement supports collaboration and the exploration of joint opportunities. Trust enables companies to collaborate with partners, even when such collaboration presents challenges. It fosters shared attitudes and behaviors between partners when navigating operational difficulties. This mutual trust, in turn, promotes the open exchange of information and encourages the sharing of resources. (Lo et al. 2018.) However, Harland et al. (2003) caution that trust-building in partner engagement carries risks, as it involves increased vulnerability and the potential for betrayal. Nonetheless, cultivating trust remains essential for achieving long-term sustainability objectives in buyer-supplier relationships.

Support and guidance

The support provided by buying companies through interorganizational collaboration and learning plays a pivotal role in enabling suppliers to successfully adopt sustainability-related practices (Busse et al. 2016). Recognizing this, Butt et al. (2024) identify providing support and guidance as the third phase in the supplier sustainability engagement process. While many suppliers acknowledge the importance of addressing sustainability risks, they often face challenges in taking initial steps. Buying companies can bridge this gap by developing programs that guide suppliers toward practical tools and resources, helping transform sustainability concepts into actionable plans. (Butt et al. 2024.) Moreover, Liu et al. (2019) find that under the guidance and example of a buying company, even suppliers with limited knowledge base can adopt sustainable practices through imitating.

Training and capacity-building initiatives are essential for enabling suppliers to overcome challenges and managing sustainability effectively (Butt et al. 2024). Guiding mechanisms, as described by Najjar and Yasin (2023), establish a shared frame of reference, encouraging suppliers to operate and innovate within predefined sustainability frameworks. This approach promotes homogeneity across the buying company's diverse supply chains and facilitates a shared understanding of sustainability expectations. Such efforts not only align suppliers with the buying company's vision but are also recognized

as critical elements of effective buyer-supplier relationship management (Butt et al. 2024).

Effective use of supplier data

Establishing an efficient and robust system for gathering and managing supplier data, along with facilitating effective information flows, is essential for monitoring and mitigating supplier sustainability risks (Sarkis 2012; Butt et al. 2024). Considering this, the fourth phase of the supplier sustainability engagement process identified by Butt et al. (2024) is the effective use of supplier data. Although limited availability of sustainability data within supply chains can restrict access and hinder progress, efficient information exchange between supply chain partners fosters organizational learning and enhances supplier performance. This, in turn, contributes significantly to the development of overall supply chain sustainability. The management of such information by buying companies is therefore pivotal to the success of sustainability engagement with their suppliers. (Sarkis 2012.)

Leveraging technology further enhances this process, enabling automation, validation, and real-time visibility of data quality (Butt et al. 2024). These advancements streamline data gathering and utilization, allowing buying companies to implement more collaborative sustainability engagement strategies. Dahlmann and Roehrich (2019) emphasize that the degree to which supplier data is utilized directly impacts the sustainability engagement strategies companies can adopt. These strategies are further discussed in detail in sub-chapter 3.3.

Refinement of supplier engagement programs

Refinement of supplier engagement programs (SEPs) is identified as the fifth phase in Butt et al.'s (2024) supplier sustainability engagement process. SEPs are formally organized programs through which buying companies aim to regulate or influence supplier behavior beyond contractual obligations. SEPs entail increased engagement of suppliers, and they are typically facilitated by a reciprocal exchange of information or knowledge between the buying company and the supplier. (Tidy et al. 2016.). These programs can be implemented in various relationship settings, including structured partnerships, formal alliances, or informal membership networks (Tidy et al. 2016; Butt et al. 2024).

SEPs are increasingly recognized as essential for fostering company boundary-spanning shifts towards shared goals and evaluating operations against imposed CSS (Tidy et al. 2016). Furthermore, Butt et al. (2024) argue that engaging suppliers alone is insufficient, and that it is equally important for buying companies to continuously refine and improve their SEPs. Buying companies should collaborate with their suppliers and frequently evaluate the effectiveness of these programs, for example by requesting feedback to identify the suppliers' strengths and weaknesses and working together to address any areas for improvement (Butt et al. 2024).

Implementation of incentive programs

Considering that sustainability efforts might not directly translate to immediate market benefits, suppliers may hesitate to engage in sustainability initiatives. This reluctance places significant responsibility on managers and employees within buying companies to actively encourage supplier participation, even in the absence of short-term rewards. (Sharma et al. 2024.) To address this, Butt et al (2024) identify the final phase in the sustainability engagement process to be developing and implementing supplier incentivization programs. These programs are a highly powerful tool for motivating suppliers to mitigate sustainability risks and are often directly or indirectly tied to sustainability performance management. By encouraging active supplier participation, such programs enhance the performance of buying companies and promote collaboration among internal stakeholders to determine strategies and measures for supplier sustainability management. (Butt et al. 2024.) Incentives also increase the pressure on suppliers to commit to CSS (Busse et al. 2016; Sharma et al. 2024).

Incentive programs allow suppliers to be rewarded for meeting or exceeding sustainability targets and committing to CSS, which motivates suppliers to be more proactive in their efforts to improve their sustainability performance (Butt et al. 2024). Incentives are typically categorized into monetary and non-monetary types, depending on the form of incentivization. Monetary incentives, such as contract extensions or increased purchase volumes, directly benefit suppliers, whereas non-monetary incentives can include awards and recognition at local, national, and international levels; better credit ratings from buying companies, shared missions, or aligned objectives (Busse et al. 2016; Butt et al. 2024). Sharma et al. (2024) find that both types of incentives positively influence supplier sustainability engagement.

3.3 Classification of Supplier Engagement Strategies

Contemporary research highlights the importance of developing and implementing a supplier engagement strategy (Butt et al. 2024). However, the level and type of supplier engagement vary depending on the actions and practices of companies (Lintukangas et al. 2023). Previous literature identifies three models for classifying supplier engagement types. Dahlmann and Roehrich (2019) distinguish three distinct forms of supplier engagement in the context of environmental sustainability: basic, transactional, and collaborative engagement. These categories reflect recurring engagement patterns and broadly similar approaches found in research. While companies generally collect, process, and share sustainability-related information with supply chain partners to address emerging information asymmetries, the degree to which companies execute these stages varies. Ultimately, the approach by which buying companies manage information is crucial to the effectiveness of their supplier engagement. (Dahlmann & Roehrich 2019.)

Stocker et al. (2020) also propose a model of classification of supplier engagement to three strategy levels in their research on stakeholder engagement in sustainability. The classification is like that of Dahlmann and Roehrich (2019); sustainability engagement is classified into three levels based on the communication strategies used to interact with suppliers. These levels are information strategy, response strategy, and involvement strategy, and they can be equated with the types of supplier engagement identified by Dahlmann and Roehrich (2019).

The third classification of supplier engagement types presented in research is Reinartz and Berkmann's (2017) four types of partner engagement. These are disengagement, tactical engagement, assertive engagement, and strategic engagement. Reinartz and Berkmann's (2017) suggest two factors to affect the type of engagement between the partners: assertiveness, which refers to a partner's emphasis on achieving its own objectives, and cooperativeness, which refers to the extent to which a partner strives to address the concerns of the other partner.

The primary difference between the different engagement strategies is the level of the buying company's involvement (Lintukangas et al. 2023; Sancha et al. 2019), supporting the conclusion of Wieland and Wallenburg (2013) that the degree of investment by each partner influences the partnership's capacity to generate relational rents. The different engagement strategies can be simultaneously adopted with different suppliers, although

many companies can be characterized by just one type of sustainability engagement (Dahlmann & Roehrich 2019; Stocker et al. 2020; Reinartz & Berkmann 2017). Dahlmann et al. (2023) complement this by suggesting that while companies display varying engagement patterns with different suppliers, they generally begin with limited engagement activities and gradually increase both the number and types of suppliers to engage with over time.

By combining and adapting from the research of Dahlmann and Roehrich (2019), Stocker et al. (2020), and Reinartz and Berkmann (2017), the classification of four supplier sustainability engagement strategies to ensure suppliers' commitment to CSS is developed and presented in Table 1. The strategies are then individually presented and explained in the sub-chapters from 3.3.2 to 3.3.5.

Table 1. Supplier sustainability engagement strategies (adapted from Dahlmann & Roehrich 2019; Stocker et al. 2020; Reinartz & Berkmann 2017)

Key characteristics	Dis-engagement	Basic engagement	Transactional engagement	Collaborative engagement
Information asymmetry	Information uncertainty	Information uncertainty	Information uncertainty/ diversity	Information diversity
Information gathering	Information is not gathered, or it is very minimal	Formal and structured	Formal and structured	Formal and structured Informal and ad hoc Sustainability events
Information processing	No data processing	Minimal data processing	Operational Diagnostic/analytical	Strategic
Purpose/ desired outcomes	Use of limited resources for other purposes	Information-driven	Cost-driven Performance improvement Efficiencies Risk management	Shared value-driven Innovation Strategic development Precompetitive partnerships
Time frame	N/A	Short-term Reactive	Medium-term Proactive	Long-term Proactive
Engagement actions	No engagement actions, low cooperative-ness	Contracts, precontract screening, reports, briefings, website, newsletters, audits	Code of conducts, supplier selection criteria, forums, surveys, meetings, complaints & suggestions, advisory activities	Initiatives, joint projects (formal and informal), committees, associations, programs, alliances

3.3.1 Disengagement Strategy

In the context of disengagement, both the assertiveness and the cooperativeness of the supplier is low, and the supplier is likely to exhibit minimal to no engagement behavior (Reinartz & Berkmann 2017). In other words, the supplier is unwilling to engage in sustainability efforts, neither to support the focal company to achieve their supply chain sustainability goals, nor to advance their own sustainability initiatives. Gulati et al. (2012) point out that without the engagement of suppliers and their commitment in investing and actively participating in sustainability efforts, it is improbable that those BSRs will be redefined around collaboration instead of command and compliance. In addition, information uncertainty remains in the relationship, as supplier's sustainability performance data is neither gathered nor exchanged.

Disengagement may occur for two main reasons. The most common is the buying company's limited resources, which may be allocated to more critical suppliers based on business priorities or sustainability risks or diverted to entirely other processes. Alternatively, disengagement can result from the deliberate disengagement from the supplier's side, which can occur if the supplier has, for instance, already formed a preferred partnership with the focal company's competitor. (Reinartz & Berkmann 2017.)

In sustainability efforts within supply chains, low levels of engagement are considered especially problematic. Low engagement is linked to low motivation, involvement, commitment, and identification with the sustainability initiatives. This leads the supplier to perform tasks with minimum effort, which makes the buying company's coercive attempts to increase effort ineffective. Due to the complexity of transitioning to sustainable practices, supply chain sustainability demands the initiative, creative problem-solving abilities, and commitment to continuous improvements from both the buying company and the supplier. (Wohlgezogen et al. 2021.)

3.3.2 Basic Engagement Strategy

Basic engagement strategy represents the early, information-focused stage of supplier sustainability engagement, involving companies' primary efforts to reduce information uncertainty through conducting initial or revised supplier sustainability assessments (Dahlmann & Roehrich 2019). Supplier sustainability assessment is a transactional mechanism (Sancha et al. 2019; Lintukangas et al. 2023), through which the buying

companies can establish CSS, impose these standards on suppliers, and gather and analyze data on suppliers' sustainability performance to detect nonconformities and reduce behavioral uncertainty in the BSR (Qiao et al. 2022). Supplier assessment processes aim to ensure suppliers' basic compliance with the focal company's CSS (Ahmadi-Gh & Bello-Pintado 2024) and thereby mitigate supply chain sustainability risks (Qiao et al. 2022). Foerstl et al. (2010) even suggest that without a formal structured supplier assessment process, managing supplier sustainability effectively becomes a matter of chance, which could result in potentially harmful impacts on corporate reputation.

Various engagement actions are linked to basic engagement. Utilizing the contracts conducted with suppliers is recognized as a primary action to engage suppliers in sustainability performance (Stocker et al. 2020; Bag et al. 2024). Before the contract, the screening of precontract information can be conducted (Dahlmann & Roehrich 2019). This precontract screening can include requesting sustainability certifications. Global buying companies often require sustainability certifications in the early phases of supplier selection process. The requirements are placed as a governance mechanism to enhance trust and strengthen relationships, as well as to ensure that the suppliers are fulfilling the focal company's sustainability requirements. (Grimm et al. 2014; Pereira et al. 2023.) External verifications made by an independent organization conduct unbiased assessments of suppliers' sustainability, which the supplier cannot influence. Consequently, sustainability certifications allow for the focal company to efficiently screen and pre-select suppliers (Grimm et al. 2016). Thereby, sustainability certifications foster transparency, accountability, and trust between the focal company and its suppliers.

Other basic engagement actions include requesting reports, briefings, and gathering information from websites and newsletters (Stocker et al. 2020). To assess suppliers, the buying company can also conduct supplier sustainability audits (Stocker et al. 2020; Darnall et al. 2009; Ahmadi-Gh & Bello-Pintado 2024). Conducting supplier audits generates comprehensive assessments of suppliers' sites and processes and can therefore be utilized to assess suppliers' actual sustainability performance in comparison to established CSS, aiming to recognize any potential instances of non-compliance (Grimm et al. 2014; 2016). Supplier sustainability audits can be categorized by the party conducting the audit. First-party audits are self-assessments through internal audits carried out by the supplier (Darnall et al. 2009; Patil et al. 2022). These sustainability

self-reports serve as an accountability mechanism, the accuracy of which are typically verified by the buying company (Wohlgezogen et al. 2021), either by themselves, or through third-party auditors. Second-party audits are conducted by the buying company or an external party with a direct interest in the supplier. These audits may also involve the buying company's customer to ensure compliance with both buying company and end-user requirements. Third-party audits are conducted by independent, accredited auditing organizations, providing an impartial assessment of the supplier's compliance with the buying company's CSS. (Darnall et al. 2009 Patil et al. 2022.)

Basic engagement is the primary communication strategy for focal companies to communicate with their stakeholders (Stocker et al. 2020). The information gathered through supplier assessments is often requested by external stakeholders, such as government entities and regulatory bodies, rather than the focal companies themselves. Consequently, basic engagement is less driven by the information's utility for process improvements and more concerned with establishing baseline data on sustainability. Due to basic engagement's short-term and reactive nature, processing the gathered information is minimal and limited to the collection of basic data and transferring this data in the needed format. (Dahlmann & Roehrich 2019.)

3.3.3 Transactional Engagement Strategy

Transactional engagement builds on basic engagement by actively processing the sustainability data gathered through the supplier sustainability assessments for controlling supplier sustainability through more productive purposes. Unlike the reactive nature of basic engagement, which primarily responds to external stakeholder demands, transactional engagement adopts a proactive, although medium-term, approach to identifying sustainability performance improvement opportunities. These improvements are driven through mechanisms such as setting targets and implementing incentives, as also proposed by Butt et al. (2024) as the final phase of the engagement practice process. (Dahlmann & Roehrich 2019.) Obtaining reliable and representative information from suppliers through supplier sustainability assessment practices form the foundation of transactional engagement (Qiao et al. 2022; Naffin et al. 2023). In addition to the supplier assessment activities of basic engagement, assessment in transactional engagement additionally involves more interactive and voluntary communication activities, such as meetings, forums and surveys (Stocker et al. 2020).

In transactional engagement, the processed information is operationalized into procurement processes to build a knowledge base that guides supplier engagement, increasing awareness of sustainability issues and incentivizing improvements. Internally, the information is often incorporated into revised guidelines for procurement organization or mirrored in updated supplier codes of conducts and stricter contract clauses. (Dahlmann & Roehrich 2019.) Codes of conducts are considered a key tool for monitoring and evaluating suppliers' sustainability performance (Qiao et al. 2022). Naffin et al. (2023) complement this by arguing that specifying and imposing CSS through codes of conducts is a common first step for buying companies to manage supplier sustainability. This contractual approach ensures alignment between suppliers' operations and the buying company's sustainability goals, facilitating both compliance and improved performance.

The processed information is additionally utilized diagnostically for selecting new suppliers using sustainability criteria (Dahlmann & Roehrich 2019). Establishing supplier selection criteria is a key transactional engagement action to ensure suppliers' commitment to CSS. Including sustainability considerations in contract formation is critical for imposing these standards on suppliers. (Koplin et al. 2007; Ahmadi-Gh & Bello-Pintado 2024.) Koplin et al. (2007) emphasize that CSS should have a restrictive impact on the supplier selection decision by excluding potential suppliers who fail to meet required standards. Similarly, Grimm et al. (2014) highlight that evaluating suppliers against defined sustainability criteria during the tendering or contracting minimizes the risk of non-compliance and ensures the selection of qualified partners aligned with the focal company's CSS.

In addition to supplier selection criteria, the processed information can be diagnostically utilized in deciding to continue the current relationship with existing suppliers by assessing their performance against various key performance indicators (KPIs) (Dahlmann & Roehrich 2019). These KPIs integrate various sustainability criteria, including sustainability objectives and policies, into traditional performance indicators, such as price and quality (Ahmadi-Gh & Bello-Pintado 2024). Establishing KPIs is essential for a structured and effective supplier assessment process, as they enable continuous evaluation of suppliers' compliance with standards and requirements (Govindan et al. 2021; Ahmadi-Gh & Bello-Pintado 2024; Sancha et al. 2019)

Transactional engagement addresses initial information uncertainty by using sustainability information to issue improvement notices to underperforming suppliers, suggest more sustainable alternatives and enforce corrective actions (Dahlmann & Roehrich 2019; Qiao et al. 2022). This approach integrates sustainability concerns into supplier engagement, however, relying heavily on transactional tools such as incentives, sanctions, and focusing on improving efficiency, reducing cost, and managing risks (Dahlmann & Roehrich 2019). While supplier assessment practices may not directly improve suppliers' sustainability performance, they offer suppliers valuable feedback on inefficiencies, sustainability risks, and alignment with expectations. Through this feedback, focal companies can diffuse their sustainability values and norms, making supplier assessments a foundational step in promoting greater supplier engagement and commitment to CSS. (Ahmadi-Gh & Bello-Pintado 2024.)

3.3.4 Collaborative Engagement Strategy

Compared to transactional engagement, collaborative engagement is notably more relational and forward-thinking (Dahlmann & Roehrich 2019; Sancha et al. 2019; Lintukangas et al. 2023) and focused on establishing long-term partnerships and sustainability project collaborations with suppliers (Stocker et al. 2020). By fostering trust, commitment, and collaborative practices, suppliers are encouraged to adopt and replicate the buying company’s sustainable processes and CSS (Ahmadi-Gh & Bello-Pintado 2024; Sancha et al. 2019). Unlike the transactional approach focused on strict supplier performance control, collaborative engagement uses the diverse information obtained to establish mutually beneficial relationships aimed at fostering sustainability innovation (Dahlmann & Roehrich 2019). These collaborative BSRs play a pivotal role in leveraging sustainability issues as drivers for process improvements, overcoming precompetitive barriers, and creating competitive advantages (Dahlmann & Roehrich 2019; Qiao et al. 2022). Furthermore, Reinartz and Berkmann (2017) highlight that high cooperativeness and assertiveness are prerequisites for enabling open exchange of strategic information and achieving full potential of collaborative engagement. Thus, collaborative engagement emerges as a critical strategy for aligning sustainability goals across supply chains, fostering innovation, and building partnerships that drive mutual success.

Research highlights the limitations of supplier assessment, noting that these practices often yield only minimal benefits (Sancha et al. 2019). Ahmadi-Gh and Bello-Pintado (2024) also argue that imposing CSS requires moving beyond supplier assessments to actively developing suppliers' sustainability capabilities through supplier collaboration. However, Dahlmann and Roehrich (2019) emphasize that although basic engagement focuses on operational data gathering purposes through supplier assessment, establishing baseline benchmarks allows the partners to form more strategic and innovative relationships. A structured supplier sustainability assessment is even considered a fundamental necessity for identifying issues, which can then be addressed through collaboration between buying companies and suppliers to achieve corporate sustainability goals (Govindan et al. 2021; Sancha et al. 2019). Wohlgezogen et al. (2021) complement this by suggesting that formal assessment processes not only enforce compliance but can also support supplier collaboration, with compliance pressure initiating the transformation of business practices over time.

While supplier assessment practices are unidirectionally gathering and evaluating data on suppliers' compliance with CSS, collaboration relies on interactive exchanges of tacit knowledge and deeper supplier involvement in sustainability initiatives (Klassen & Vachon 2003). Moreover, reciprocal information exchange is recognized as a central activity for leveraging supplier engagement to enhance supplier capability development and foster sustainability-specific knowledge (Awan et al. 2019). Wohlgezogen et al. (2021) also argue that by encouraging suppliers to openly share their perspectives on key sustainability issues, the buying company initiates a shift from a hierarchical, compliance-driven relationship to a more collaborative partnership. Consequently, effective communication channels are essential for fostering collaborative engagement to achieve suppliers' CSS commitment (Bag et al. 2024; Sancha et al. 2019), as they enable frequent, reciprocal knowledge sharing and active addressing of sustainability issues (Wu & Li 2020). The diversity and depth of these communication channels set collaborative engagement apart from other engagement strategies. Collaborative engagement incorporates more informal and spontaneous communication tools, including personal emails, phone calls, meetings, discussion groups, and web-based platforms, and may even extend to hosting sustainability-focused business summits for suppliers. (Dahlmann & Roehrich 2019; Sancha et al. 2019.)

Sustainability collaboration requires significant involvement and investment of various resources from the focal company (Sancha et al. 2019; Ahmadi-Gh & Bello-Pintado 2024). Dahlmann and Roehrich (2019) highlight that some companies recognize the need for collaboration to address numerous inherent risks and opportunities. Information gathered through these collaborations is embedded into more supportive engagement activities like supplier training programs, workshops, seminars, summits, and award ceremonies to promote joint development and innovation (Dahlmann & Roehrich 2019; Koplin et al. 2007; Sancha et al. 2019; Grimm et al 2016), as well as committees, associations, and even alliances (Stocker et al. 2020). Through these activities, collaborative engagement strategy allows suppliers to access sustainability-related knowledge, training, technology, and goals on CSS commitment, helping them to co-develop sustainable ideas with the focal company and improve their operational efficiency (Ahmadi-Gh & Bello-Pintado 2024; Reinartz and Berkmann 2017). Furthermore, Lintukangas et al. (2023) stress that the effectiveness of sustainability investments is dependent on the buying company's recognition and valuation of its suppliers' sustainability efforts. Consequently, these engagement activities play an essential role.

Strategic engagement of suppliers to commit to CSS can be described as the collaborative and active involvement of suppliers and other external stakeholders in strategic alignment and planning, information sharing, and continuous improvement initiatives to operational activities, to achieve sustainability goals (Bag et al. 2024). Furthermore, Foerstl et al. (2010) note that responsiveness to external stakeholders enhances the identification, assessment, and mitigation of sustainability risks, improving both risk management and operational performance. In collaborative engagement, information is not only collected and processed for internal use but also shared as part of a broader information exchange with supply chain partners. After analysis, some information is shared externally, either in its original or processed form. Beyond immediate supply chain partners, companies engage with various stakeholders through industry associations, academic partnerships and research institutions, making collaborative engagement the most comprehensive strategy for managing the sustainability of diverse supply chain partners. (Dahlmann & Roehrich 2019.)

3.4 Buyer-supplier Dynamic in Supplier Sustainability Engagement

3.4.1 Engaging Suppliers within Different Types of BSRs

According to Jajja et al. (2019), transactional, arm's-length BSRs increase the probability of adopting internationally recognized public standards. In such BSRs, buying companies generally do not devote time or effort in assisting suppliers implement CSS on-site. Instead, suppliers face contractual requirements to obtain public standards certification, which provides a clear, widely accepted form of compliance evidence. From the buying company's viewpoint, monitoring sustainability performance is more straightforward when suppliers are certified to a public standard rather than a standard tied to a competitor company, as it provides a more tangible confirmation of compliance. Suppliers, in turn, favor these low asset-specific initiatives, such as public standards certification, as they retain value beyond the initial relationship if the buyer later switches suppliers. Hence, transactional BSRs and public standards are aligned to maximize value from the relationship at minimal cost. (Johnston & Murat Kristal 2008; Jajja et al. 2019.) Supplier sustainability assessment is a typical method for ensuring CSS compliance in these distant, arm's-length relationships, focusing on checking compliance rather than fostering deeper collaboration (Sancha et al. 2019; Lintukangas et al. 2023).

Relational, partnership BSRs, by contrast, are characterized by collaboration, trust, and solidarity between partners, which encourages adoption of private standards. In these deeper relationships, open information exchange gradually fosters relational norms and mutual interests, such as commitment to CSS, which further reinforces supplier engagement. (Jajja et al. 2019; Grimm et al. 2016.) Buying companies often make supplier-specific investments, such as training or system upgrades, to demonstrate commitment and strengthen the supplier's capabilities (Lo et al. 2018). This relational approach gives suppliers the confidence to adapt their processes to meet the buying company's private standards. In turn, suppliers become more committed to addressing the buying company's specific requirements because they see tangible support and a promise of long-term collaboration. (Jajja et al. 2019.)

Some suppliers may simultaneously engage in transactional relationships with certain buying companies and relational relationships with others. Consequently, they might adopt public standards to satisfy their arm's-length BSRs and private standards to meet the demands of their partnership BSRs. Adopting both standards allows suppliers to

signal credibility to a broader range of customers, encompassing both price-focused, transactional buying companies and partnership-oriented, long-term buyers. (Jajja et al. 2019.)

3.4.2 Engaging Suppliers in Situations of Supplier Dependence

Power dynamics in BSRs influence how effectively new sustainability-related knowledge is acquired and applied. Imposing CSS and engaging suppliers in sustainability initiatives are most successful when buying companies hold substantial dominance over their suppliers. Such dominant buying companies can leverage their power to shape suppliers' operational decisions and behaviors, ensuring compliance with their sustainability requirements. (Sancha et al. 2019; Liu et al. 2019.) They can also act as role models by establishing CSS and developing policies, setting goals, and imposing codes of conduct, thereby using their power to pressure or motivate suppliers to adopt sustainability initiatives and engage in corporate sustainability activities (Amaeshi et al. 2008; Ahmadi-Gh & Bello-Pintado 2024). Additionally, buyers with considerable power can require top management support within their suppliers to ensure active engagement in ongoing sustainability-related buyer-supplier collaborations (Yen 2018).

Dependent suppliers, in turn, often respond by adjusting their operational practices and may implement voluntary sustainability instruments, such as certifications, to fulfill requests from a dominant buying company (Grimm et al. 2014). They strive to actively engage in sustainability efforts to secure a long-term relationship and future business opportunities. This dependence fosters a stronger commitment to the CSS, as suppliers seek to benefit from and fully understand those sustainability practices. Close BSRs with dominant buying companies also increase the pressure on suppliers to adopt and maintain sustainable operations, as well as encourage suppliers to invest resources in learning, adopting new technologies, and refining processes to align with imposed CSS. (Sancha et al. 2019; Liu et al. 2019.)

Horizontal collaboration among powerful buyers can also amplify supplier engagement in CSS by establishing consistent sustainability standards and expectations. For instance, multinational companies that coordinate to source exclusively from sustainable suppliers send a unified signal, prompting those suppliers to improve their sustainability performance. (Plambeck 2012.) Incorporating a broader range of stakeholders into the SSCM strategy and leveraging the pressures exerted by these stakeholders, such as

regulatory incentives, pressures from non-governmental organizations, or customer demands, can further strengthen the buying company's ability to influence suppliers' behaviors (Grimm et al. 2014). This multi-stakeholder engagement approach provides a more comprehensive and robust framework for promoting sustainable practices within business partnerships. By offering deeper insights into manufacturing companies' social and environmental concerns, it helps align stakeholder interests and expectations, leading to the creation of effective sustainability policies. (Awan et al. 2017.)

Despite these dynamics, Sancha et al. (2019) find no evidence that supplier dependence moderates the link between supplier assessment and improved supplier sustainability performance, suggesting that even strong buyer dominance does not necessarily guarantee improved sustainability performance through supplier sustainability assessments alone. Instead, it requires supplier collaboration efforts. However, collaborative engagement, which benefits both parties equally, requires high levels of trust, commitment, and mutual dependence, meaning that the buyer, as well as the supplier, must be significantly dependent, resulting in interdependence within the BSR (Reinartz & Berkmann 2017).

3.4.3 Engaging Suppliers in Situations of Buyer Dependence

In a situation of buyer dependence, the buying company does not possess sufficient leverage to ensure supplier commitment to imposed CSS. In such situations, sustainability engagement efforts like audits or training may be less effective, as the buying company lacks the power to enforce or incentivize supplier engagement. (Sancha et al. 2019.) Consequently, many focal companies choose to engage only a limited number of key suppliers, who typically account for 75% to 80% of total spend, when designing engagement programs. This reflects a focus on suppliers over whom the buyer exercises greater influence, thus indicating buyer dependence. (Butt et al. 2024.)

When suppliers are more independent, the buying company's ability to influence their commitment to CSS and positively influence the suppliers' social and environmental practices diminishes. Without sufficient leverage, the buying company struggles to effectively implement auditing and supplier development programs at the suppliers' sites or drive improvements in sustainability performance. (Grimm et al. 2014.) In many cases, less dependent suppliers choose to create their own training programs or hire consultants to maintain control over both the content and the features of their internal improvement

efforts, rather than simply obeying with the buying company's requirements (Helper & Kiehl 2004). A further impediment is the deficiency in commitment and trust between the focal company and its suppliers, which weakens collaboration on sustainability (Grimm et al. 2014; Reinartz & Berkmann 2017). Suppliers without strong relational ties or a long-term business relationship to a buying company are less inclined to engage in the focal company's SSCM activities, as without the mutual trust and commitment, efforts to integrate sustainability into supply chain operations are likely to face resistance or hinder participation of suppliers (Grimm et al. 2014). When both dependence and commitment constantly remain at low levels, suppliers often face disengagement from the buying company (Reinartz & Berkmann 2017).

Forming strategic stakeholder partnerships can help overcome limitations in buyer–supplier power imbalances. By pooling resources with key suppliers, buying companies can enhance sustainability throughout the supply chain. Small and medium-sized enterprises often encounter greater challenges in implementing and sustaining sustainability collaboration practices due to limited resources and weaker bargaining power, yet larger or more influential partners can serve as anchors for shared initiatives. (Grimm et al. 2014.)

BSRs can shift over time as sustainability initiatives are integrated into procurement and operations across companies. Factors contributing to these shifts include the growing complexity of sourcing from a smaller pool of qualified, sustainability-oriented suppliers; the heightened emphasis on managing sustainability risks; and the introduction of new performance metrics specific to social and environmental goals. As these elements evolve, so does the nature of BSRs, potentially fostering stronger collaboration or, conversely, intensifying existing dependencies. (Murfield & Tate 2017.)

4 Theoretical Framework for Supplier Sustainability Engagement and The Influence of Buyer-Supplier Relationship Dynamics

The literature review of this study examines supplier engagement as a strategic approach to ensuring suppliers' commitment to the CSS imposed on them, as well as the dynamics of BSRs and their influence on sustainability engagement. Figure 6 presents the theoretical framework for this study, illustrating the strategies that companies can use to engage their suppliers and the role of the BSR dynamics. Based on existing literature, this study distinguishes four distinct supplier sustainability engagement strategies: disengagement, basic engagement, transactional engagement, and collaborative engagement. Each strategy provides the buying company varying levels of impact over supplier commitment to CSS. (Dahlmann & Roehrich 2019; Stocker et al. 2020; Reinartz & Berkmann 2017.) As promoting sustainable business practices is inherently complex, SSCM requires continuous improvement efforts from both the buying company and the supplier (Wohlgezogen et al. 2021). Therefore, the more unidirectionally assessment-focused and lower in cooperativeness the sustainability engagement strategy, the weaker its impact on supplier commitment to CSS.

Notably, collaborative engagement is the only supplier sustainability engagement strategy through which the buying company and a supplier are able to generate relational exchange. Following the theoretical arguments of the relational view (Dyer & Singh 1998), buying companies can ensure their suppliers' commitment to CSS by leveraging the relational exchange achieved through the integration of key competencies, which is not possible in other forms of engagement. The literature further suggests that rather than through purely transactional approaches focused on short-term competitive advantage, supply chain efficiencies are most optimally achieved through long-term, relational partnerships built on mutual trust and interdependence, and in close engagement with suppliers (Tidy et al. 2016). Thus, collaborative engagement, is the most effective strategy for ensuring supplier commitment to CSS.

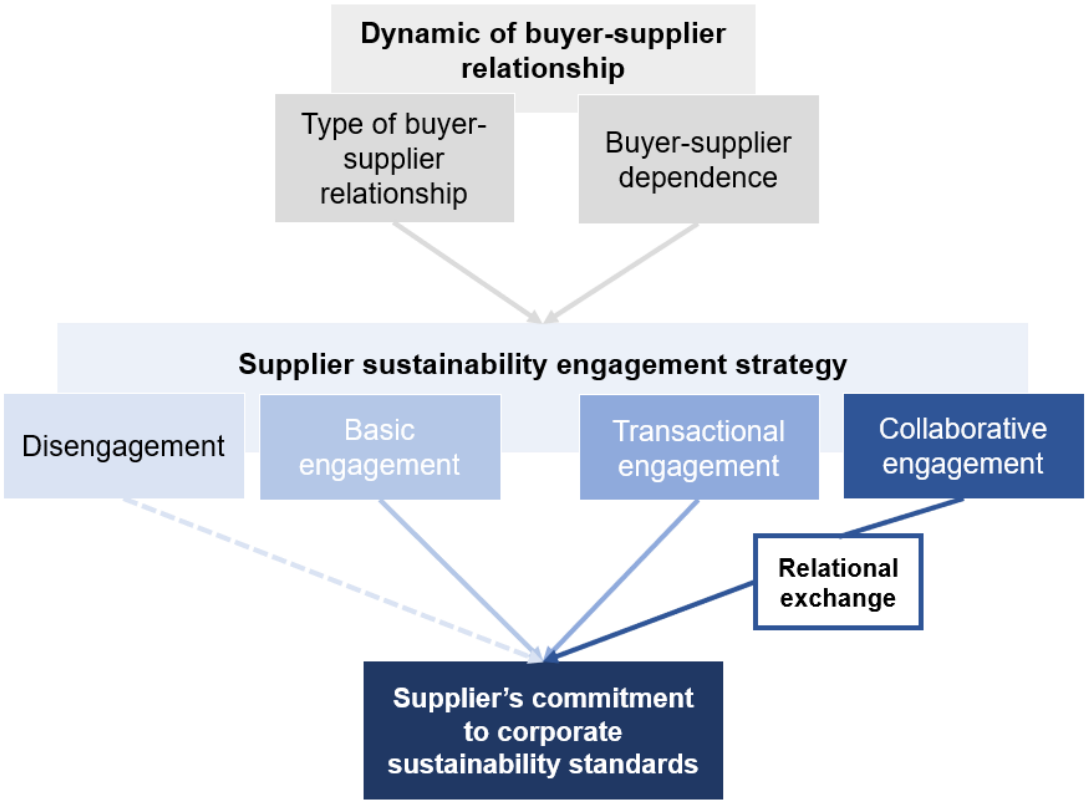

Figure 6. The Theoretical Framework for Supplier Sustainability Engagement and The Influence of Buyer-Supplier Relationship Dynamics

Furthermore, this study identifies that the dynamic of BSRs are shaped by two key elements: the type of relationship and the direction of dependence within it. Together, these elements significantly influence a buying company's ability to select and implement a specific supplier sustainability engagement strategy in a given BSR. The literature suggests that companies experiencing dependence over their partner in a BSR will engage more to develop idiosyncratic assets that provide long-term advantages and shape the partnership's future direction (Vivek et al. 2022). Collaborative engagement, in particular, requires interdependence between the buying company and the supplier (Reinartz & Berkmann 2017). However, in cases where the buying company is dependent on the supplier, collaborative engagement may be less effective, as the company will not have enough power over the supplier to ensure their commitment in CSS-compliant practices (Sancha et al. 2019). Consequently, buying companies must recognize the dynamic of a BSR to effectively implement an appropriate supplier sustainability engagement strategy.

5 Methods

5.1 Case study as the research approach

This research is conducted as qualitative research. Qualitative research can be considered an umbrella term encompassing various approaches for studying social life in its natural context, relying on nonquantitative data to capture human experiences of social action (Saldana 2011). Unlike quantitative research, which focuses on numerical data and their statistical analysis within a logical, reductionist, and objective framework, qualitative research explores nonnumerical information through phenomenological interpretation, inherently connected to human perception and subjectivity (Leung 2015). The nonquantitative data can include textual materials, such as transcripts of interviews, fieldnotes, or documents, and visual sources, such as photographs, videos, or artifacts. The goals of qualitative research vary by project, often focusing on analyzing and synthesizing data to document cultural observations, provide insights into social complexity, evaluate programs or policies, express human meanings artistically, or critique and promote social change. (Saldana 2011.) Qualitative research was chosen for this study as it enables an in-depth exploration of supplier engagement, which involves complex interactions, perceptions, and behaviors. It also allows for a deeper understanding of how social BSR dynamics influence supplier engagement.

A case study approach is chosen for this qualitative research, as it enables a comprehensive investigation of supplier engagement as a means of ensuring suppliers' commitment to CSS. A case study examines a specific phenomenon to address defined research questions by collecting and analyzing multiple forms of evidence within the case setting, which are then abstracted and synthesized to produce thorough and accurate answers to research questions (Gillham 2000). Rather than isolating the phenomenon from its context as in laboratory research, the case study explores how behaviors and processes both influence and are influenced by context. With growing interest in context as a factor in organizational behavior, case studies offer a valuable method for gaining rich, detailed insights into social or organizational processes. (Cassell & Symon 2004.) This makes the approach particularly suitable for analyzing the intricate dynamics of BSRs and their impact on CSS commitment, allowing for a context-specific analysis of real-world interactions, decision-making, and challenges related to supplier engagement.

Case study can be conducted as single or multiple case studies (Gillham 2000). This study adopts a multiple case study approach. The multiple case study is designed to investigate a phenomenon that displays across multiple cases, parts, or members. This method involves examining individual cases, such as people, groups, organizations, policies, or specific activities in detail, acknowledging the unique challenges, relationships, and contextual dynamics of each. While each case contributes valuable insights, the primary focus is on the development of collective understanding of the phenomenon as it emerges across different situations. (Stake 2005.) In organizational research, case studies often focus on one or more organizations and the individuals or groups within or interacting with them (Cassell & Symon 2004). The empirical data in this research is collected from multiple case companies for several reasons. First, the goal is to gain a comprehensive understanding of supplier engagement practices and strategies across organizations, as well as the dynamics of various buyer-supplier relationships. A single case would not sufficiently capture the underlying factors in these diverse contexts. Second, using multiple cases increases the reliability of the research, as further discussed in Sub-Chapter 5.4. Additionally, multiple cases help balance out potential biases and enhance the robustness of the study.

5.2 Case selection and data collection methods

The effectiveness of a multiple case study is constrained if fewer than four cases or more than ten are selected. With only two or three cases, there may be insufficient representation of the interactions between programs and their contexts. Conversely, examining 15 to 30 cases introduces a level of complexity and variation that may exceed the capacity of the research team and readers to fully analyze and comprehend. Additionally, case selection should be guided by three main criteria: relevance to the phenomenon being studied, diversity across contexts, and opportunities provided to gain insights about complexity and context. (Stake 2005.) Accordingly, six case companies were selected for this research, each required to meet the following criteria:

1) **Geographical location**: The selected companies must be Finnish based, as the research is focused on the supply chains of Finnish manufacturing companies.

2) **Industry representation**: The selected companies must be manufacturing companies for the stated reason, but they should have variety in the industries they operate in to give better understanding of different dynamics and challenges.

3) **Size classification**: The selected companies should have variety in their size classification, to give better understanding of different dynamics and challenges.

The data for this research is collected through interviews. Interviews are a key data collection method in most qualitative research studies. This method effectively captures and records individuals' or groups' perspectives, emotions, opinions, attitudes, values, and beliefs in their own words, along with factual details about their lives and social experiences. Conducting interviews with participants can be used as the only data collection method, if the participants' personal experiences and perspectives provide the most relevant answers to the researcher's questions. (Saldana 2011.) For data collection, a total of six semi-structured interviews were undertaken, each of which was conducted with a different company.

Interview formats can vary from highly structured, with predetermined questions asked in a specific order, to unstructured, where only a general list of topics guides the discussion (Saldana 2011). The interviews of this research are conducted as semi-structured interviews. The semi-structured interview is widely utilized for its flexibility in addressing diverse research objectives. It typically varies in its use of questions, prompts, and supplementary tools to engage participants more deeply with the studied phenomenon. Semi-structured interviews combine open-ended questions with theory-driven inquiries, allowing researchers to collect data based on participants' experiences while also aligning with established concepts within the relevant academic discipline. (Galletta 2012.)

Four key themes were derived from theory to guide the interviews: *background and general questions*, *supplier relationships*, *corporate sustainability standards*, and *supplier sustainability management and engagement*. The interview questions were predetermined and designed around the four themes to ensure consistency while allowing for participant-driven insights. The interview guideline is included in Appendix 1, which can be found at the end of the study. Potential participants from companies that met the established criteria were sent interview invitations in October 2024 via e-mail or LinkedIn-platform with a message including basic information of the study and an estimate of the duration of the interview. The selected participants include procurement managers and other employees in positions with responsibilities regarding their

company's sourcing, supplier relationship management, and sustainability to gather diverse organizational insights on the themes of the interview.

Table 2. Case company and interview details

Company and interviewee	Specialization	Company size classification	Role of the interviewee	Duration of the interview
A	Automotive manufacturing	Large	Senior Sourcing & Supply Chain Sustainability Specialist	41 min
B	Manufacturing of diagnostic tests	Medium-sized	Head of Procurement and Customer Service	20 min
C	Manufacturing of injection-molded plastic components	Medium-sized	Sales Manager, responsible for sustainability	32 min
D	Fuel manufacturing	Large	Sustainable Procurement Development Manager	39 min
E	Manufacturing of cargo handling machinery	Large	Procurement Execution Lead	54 min
F	Manufacturing of self-adhesive label materials	Medium-sized	Responsible Sourcing Specialist	33 min

With the calendar invitation, the participants were provided with the interview questions, so that they had the opportunity to familiarize themselves with the questions beforehand. Enabling the participant to prepare to the interview in advance is considered important for both the quality of the information collected and the overall value of the interview (Tuomi & Sarajärvi, 2018). The interviews were conducted in October and November 2024, utilizing Microsoft Teams as the platform for discussion. Company A's interview was held in English, and the rest were in Finnish. At the beginning of each interview, the participants were informed that the interview would be recorded for transcription purposes. They were also reminded of the purpose of the study, as well as the research questions. Additionally, the interviewees were assured of confidentiality and the anonymity of their responses in the final study. The duration of the interviews ranged from 20 to 54 minutes. Table 2 presents a summary of the case company, interviewee, and interview details.

5.3 Data analysis

The interviews were recorded and transcribed using Microsoft Word's transcribing tool already during the interviews. Each preliminary transcription was then carefully proofread and extensively edited to ensure accuracy. To protect the participant privacy, all transcriptions were handled exclusively by the researcher. After completing all interviews and finalizing the transcripts, the data was compiled into a single document and organized according to individual interview questions, resulting in a total of 27 pages of interview data from six interviews. Structuring the data by question is found to be beneficial to effectively identifying meaningful themes within large volumes of text data (Vaughn & Turner 2016). The core of qualitative research lies in the interpretation and recognition of patterns within textual data, enabling the construction of meaningful insights while preserving the dimensionality and richness of the content (Leung 2015; Hilal & Alabri 2013).

For the data analysis of this study, a thematic analysis was conducted to interpret the information gathered from the interviews and to explore how the empirical findings relate to the research questions. Rather than simply counting explicit words or phrases, thematic analysis aims to identify and describe both implicit and explicit ideas, themes, within the data. To support this, codes are often developed to represent these themes and are applied or linked to the raw data as summary indicators for deeper analysis. As such, thematic analysis requires a high level of researcher involvement and interpretive effort. (Guest et al. 2012.) Advancements in qualitative research analysis software have greatly reduced the complexity of this process, making it more manageable. NVivo, a widely used tool specifically designed to support coding procedures, is regarded as one of the most effective solutions in this area. (Hilal & Alabri 2013.) In this research, NVivo was used to support in identifying and developing codes representing the themes emerging from the interview data. Initial high-level codes were created based on previous literature. Under each of these, sub-codes were developed inductively from the interview data. These codes were then analyzed and synthesized. The key findings from this synthesis are presented in Chapter 6. Selected quotations from interviewees are included to highlight key perspectives and to illustrate the core themes.

5.4 Research quality

Reliability, validity, and generalizability constitute a fundamental framework for evaluating research quality in business research (Eriksson & Kovalainen 2008), and these concepts are relevant for evaluating both quantitative and qualitative research (Leung 2015). However, since the quantitative methods for assessing validity and reliability are not directly applicable to qualitative research, researchers continue to debate how suitable these concepts are for qualitative evaluation. Nonetheless, these concepts are widely considered useful in a broader sense. (Noble & Smith 2015; Eriksson & Kovalainen 2008.) Therefore, this research's reliability, validity, and generalizability will be examined further to evaluate its overall quality.

In quantitative research, reliability refers to the exact replication of processes and results. However, this definition of reliability is difficult and conceptually inappropriate for qualitative research due to its diverse paradigms. Therefore, qualitative research typically grounds reliability in the principle of consistency. (Leung 2015.) In other words, reliability in qualitative research reflects how consistently a measure, procedure, or instrument produces similar results when repeated (Eriksson & Kovalainen 2008; Noble & Smith 2015). Nevertheless, reliability is not solely determined by the number of empirical cases collected; instead, it significantly depends on the content of the collected materials, interview quality, and the rationale guiding the data collection process (Eriksson & Kovalainen 2008). In this research, reliability is strengthened by transparent documentation, as the data collection methods are clearly described and openly accessible. Additionally, a predetermined interview guideline was consistently applied across all interviews, ensuring a standardized and systematic data collection procedure.

In qualitative research, validity refers to the integrity and appropriateness of the data, tools, and research processes (Noble & Smith 2015; Leung 2015). It involves assessing whether the research question aligns with the intended outcomes, whether the chosen methodology effectively addresses the question, whether the research design suits the methodology, and whether the case selection and data analysis are appropriate. Ultimately, it examined whether the findings and conclusions are justified within the sample and context. Validity also requires that the chosen methodology enables the identification of relevant findings within the appropriate context, while accounting for cultural and contextual nuances. (Leung 2015.) The overarching goals is to ensure that

the research report or description is accurate (Eriksson & Kovalainen 2008). In this research, validity is supported by appropriate case selection and careful data analysis. Specific criteria were applied to select case companies that not only matched the scope of the research but also added diversity to the interview data, thereby enabling a more comprehensive understanding of the research problem.

Generalizability refers to the extent to which research findings can be applied or adapted to different settings and relevant contexts (Noble & Smith 2015; Eriksson & Kovalainen 2008). In qualitative research, generalizability can be enhanced, for example, by applying a multi-dimensional theoretical framework (Leung 2015). This study focuses exclusively on Finnish manufacturing companies, which inherently limits the applicability of the findings to other industries or countries. These limitations are discussed in more detail in Chapter 7. However, to enhance the potential transferability and analytical generalizability of the findings, the study applies a strong theoretical background, the relational view theory, to guide the data analysis and interpretation.

6 Findings

This chapter presents and synthesizes the findings from the data collected through the six interviews. The structure of the chapter is as follows: Sub-Chapter 6.1 introduces the case companies and interviewees, along with background information on the companies, their procurement organizations, and supplier networks. Sub-Chapter 6.2 then outlines the case companies' views on key buyer-supplier relationships and the power dynamics within them. Sub-Chapter 6.3 focuses on how the companies are imposing CSS on their suppliers. Finally, Sub-Chapter 6.4 provides a comprehensive overview of the case companies' supplier sustainability engagement efforts.

6.1 Background information of the case companies

Company A

Company A is a large automotive manufacturing company based in Finland, however, the contract manufacturing business line of the company functions as the Case Company A in this research. Interviewee A is the Senior Sourcing & Supply Chain Sustainability Specialist on the corporation level and supports all the business lines of the company. The procurement organization of Company A is divided to direct and indirect sourcing. Interviewee A emphasizes that due to the contract manufacturing, customers select most of the direct suppliers, and consequently, the company has only a limited impact on those suppliers. Thus, the indirect side is the larger side of the procurement organization. In total, Company A has approximately 900 to 1000 indirect suppliers and a small group of direct suppliers. Interviewee A notes that they are not tracking the customer selected direct suppliers from sustainability perspective, as they are not handled directly. For that reason, they are also not aware of the possible number of key suppliers.

Company B

Company B is a Finnish, medium-sized company manufacturing diagnostic tests. Interviewee B is the company's Head of Procurement and Customer Service. In addition to the Head of Procurement, the procurement organization of Company B consists of three operative buyers and two that are responsible for the sourcing function. Company B has roughly 700 suppliers on an annual basis, although the suppliers vary a lot particularly on the indirect procurement. The company has defined themselves ten key suppliers.

However, Interviewee B states that when considering the business criticality of suppliers, the real number of key suppliers is probably between 25 and 30.

Company C

Company C is a medium-sized Finnish contract manufacturer of injection molded plastic components. Interviewee C is the Sales Manager of the company. In addition, the interviewee also manages matters concerning the company's sustainability. The procurement organization of Company C is divided across Finland and the Baltics, aligning with the company's operational functions. The procurement manager is based in the Baltics, where is also located a sourcing specialist overseeing sourcing for the company's Baltic factory. Additionally, a sourcing specialist based in Finland is responsible for the sourcing for the company's Finnish factory.

Company C has a total of around 880 suppliers. Company C has not made a division between standard and key suppliers. Interviewee C explains that for them, key suppliers are difficult to define, as the company is a contract manufacturer, and each of their customers have their own key suppliers. However, Interviewee C states that roughly 100 suppliers account for 80% of the value, indicating that these 100 suppliers are considered the most important for the company.

Company D

Company D is a large fuel manufacturing company based in Finland. Interviewee D is the company's Sustainable Procurement Development Manager. The procurement organization in Company D is divided to indirect and direct purchasing, the latter of which the company uses the term supply. The indirect procurement function is further divided to management group and several category sourcing teams. In addition, across the procurement organization operates a development team, which includes development managers for various procurement processes, as well as data and IT professionals aiming to enhance the data management capabilities within the procurement function. In total, Company D has around 7000 to 8000 suppliers. However, Interviewee D explains that this number depends on how a supplier is defined here, as some sub-suppliers are included in the number as well. Company D has around two hundred key suppliers.

Company E

Company E is a large Finnish company manufacturing cargo handling machinery. Interviewee E is the Procurement Execution Lead in the indirect procurement function in the company's procurement organization. In addition, the interviewee is responsible for process development related to both the company's internal sourcing processes, as well as to supplier collaboration and supplier relationship management. The procurement organization in Company E is divided to two sub-organizations: the indirect and direct procurement. Direct procurement is further divided to central sourcing and business sourcing teams. Central sourcing covers six business critical sourcing categories, and business sourcing is divided to several divisions based on certain technologies and their business criticality. Furthermore, a sustainability team was established within the procurement organization two years ago. The team is responsible for defining the scope of sustainability-related matters, which are then implemented by the two sub-organizations.

Company E has a total of around 8000 suppliers, which Interviewee E expresses to be significantly too much. According to the interviewee, the company has a few hundred preferred suppliers in the direct procurement function of the organization, whereas in the indirect procurement, they currently have around 1200. However, Interviewee E explains that they are aiming at gradually reducing this number.

Company F

Company F is a medium-sized company in manufacturing of self-adhesive label materials based in Finland. Interviewee F is a Responsible Sourcing Specialist in the company. The procurement organization of Company F consists of category sourcing teams that are first categorized based on raw materials and then further by geographical regions, a responsible sourcing team, a planning & procurement team for logistics planning, a supplier development & quality team, a sourcing & procurement team, a market intelligence & analytics team, and a procurement manager. However, Interviewee F emphasizes that as Company F is part of a parent company, its procurement organization falls under the procurement structure of the parent company. In total, Company F has around 300 active suppliers and additionally 100 to 200 suppliers that are not actively used. From these, Interviewee F estimates that the company has around 50 suppliers considered most important.

6.2 Key Buyer-Supplier Relationships and their Power Dynamics

6.2.1 Preferred BSRs for Engagement

The case companies have different reasons for prioritizing certain types of suppliers when aiming to establish deeper, more engaged, and long-term relationships. Interviewees from Companies B, C and D consider business criticality to be the main driver for wanting to shift the BSR from arm's-length to partnership. All three interviewees indicate that they are willing to invest in the relationship, only if suppliers must provide critical raw materials and services that, for instance, cannot be sourced elsewhere. Interviewee D also highlights that the nature of certain sourcing categories often necessitates long-term cooperation. While standardized commodities allow for easy supplier replacement, larger projects demand enduring relationships between buying companies and suppliers. Furthermore, Interviewee C notes that the company is motivated to engage and establish partnerships with business-critical suppliers, as these suppliers determine the price level. Interviewee F, as well, emphasizes that price level plays a role in whether a supplier is considered for a long-term relationship.

> "Typically, they are key suppliers or other suppliers that provide us with strategically important material or services. That also usually means that the monetary value in the supplier relationship must then also be considerable." – Interviewee B

Existing long-term buyer-supplier relationships are also prioritized for further engagement, according to Interviewees A and D. Suppliers that have demonstrated consistent reliability over time are seen as worthy of deeper, more engaged partnerships. Similarly, Interviewee E explains that supplier reliability plays a crucial role in determining whether a long-term relationship is pursued. Company E has even implemented a risk analysis process to assess and prioritize suppliers for closer engagement based on various criteria.

> "We conduct this kind of risk analysis primarily based on financial criteria, i.e., we want to work with companies that are financially stable, operationally dependable, reliable in their deliveries, and innovative" – Interviewee E

> "[…] those companies, of course, that are compliant with our code of conduct. […] we have increasingly put requirements on the sustainability section, and this has started with the biggest suppliers who already have

> their own infrastructure in place for these types of requirements." – Interviewee E

Similarly to Company E's emphasis on innovation, Interviewee D highlights that suppliers with unique capabilities that generate added value for the buying company are prioritized for establishing and maintaining long-term partnerships. In addition to innovation, suppliers' current sustainability performance is considered as a key factor in supplier engagement prioritization, as noted by Interviewees E and F. Suppliers that comply with the companies' sustainability policies are more likely to be prioritized for deeper engagement and long-term business relationships.

6.2.2 Power Dynamics in Preferred BSRs

All six case companies experience dependency on their suppliers in at least some sourcing categories. Quality-critical direct material suppliers provide essential materials that often have technical specifications or regulatory quality requirements, making them non-interchangeable and creating high dependence for buying companies. Additionally, supplier dependence was mentioned to have increased significantly when the supplier is a much larger company, as it shifts bargaining power away from the buying company.

> "If we have such a supplier who supplies quality-critical material that is difficult to replace, then the power dynamics are such that, once their product is in use, the supplier holds more power than we do. Or making some kind of changes, for example, if the cooperation does not work in some way, is very laborious." – Interviewee B

Notably, half of the interviewees, from Companies A, C and E, explain that the companies operate as contract manufacturers, which further increases their dependence on direct material suppliers. In these cases, the buying company's customers, rather than the company itself, dictate supplier selection criteria and make final supplier selection decisions. Consequently, the buying company's leverage on the supplier is very restricted.

> "In contract manufacturing, whoever designed the part determines the raw material from which the product is made. We very rarely get to negotiate with the customer about what to buy. Usually, you can only get a specific raw material from one supplier and if it is specified as the raw material, it is bought at the price and under the conditions you can get it. And the background of the supplier is what it is. The power dynamics are such that we take the terms we get. We can't really influence them ourselves." – Interviewee C

In contrast, half of the interviewees, those from large companies, acknowledge that their companies hold power over some of their suppliers. A large spend, accounting for a significant share of the suppliers' total market, enables thee buying companies to dictate terms. The key factors contributing to this power position include sourcing from small suppliers, standardized commodity purchases, and sourcing categories in which nearly all buying companies on the market require certain sustainability standards such as certifications, effectively compelling suppliers to comply.

Within their BSRs, companies can also be in a dependence dynamic of interdependence, as highlighted by Interviewee B. While the company holds substantial power over its supplier as their sole customer, Interviewee B notes that the supplier is also aware of this dynamic, recognizing the buying company's dependence on their products and the significant difficulties associated with switching suppliers. Although interdependence could, in theory, enable Company C to promote supplier sustainability engagement through collaborative actions, practical constraints, such as resource limitations and operational dependencies, prevents them from doing so.

6.3 Imposing Corporate Sustainability Standards

6.3.1 Tools for Imposing CSS on Suppliers

All six companies have established code of conduct for their suppliers, although the terminology varies, appearing as *Supplier Code of Conduct (SCoC)*, *Third-Party Code of Conduct* or *Business Partner Code of Conduct*. These codes outline high-level requirements that suppliers are expected to fulfil and implement, not only in their daily work, but also throughout their own supply chains. The content of each SCoC varies depending on the industry in which company operates. Interviewee C, for instance, notes that due to its industry, the company requires strict compliance from raw material suppliers with the European Union's chemical regulation REACH and the hazardous substances directive RoHS, along with a declaration concerning conflict minerals. Similarly, Interviewee E explaibs that their SCoC cover areas such as decarbonization, hazardous substances, conflict minerals, and transparency within the supply chain. Interviewee D emphasizes that their SCoC includes sustainability-related requirements, including human and labor rights, occupational health and safety, and environmental performance. In contrast, Interviewee B acknowledges that although they have a SCoC,

in terms of sustainability, it only requires suppliers to comply with the local legislation of the country where they operate in.

In addition to the high-level requirements outlined in the SCoCs, Companies A and D have implemented more detailed CSS for selected supplier groups. Interviewee A explains that these additional minimum requirements are tied to their supplier sustainability assessment, which specific supplier groups are required to complete. Furthermore, Company A is currently working internally on implementing additional minimum sustainability requirements in the supply chain, beyond those in their SCoC. These requirements will be based on a supplier sustainability score assigned to each supplier. Interviewees D, E and F emphasize that in their companies, further sustainability criteria have been integrated into the supplier selection process for certain sourcing categories. Notably, Company E has established a dedicated supplier development team responsible for assessing potential suppliers prior to final selection, ensuring they meet the required CSS.

> "Our minimum requirement is compliance with our Supplier Code of Conduct, as well as our General Terms and Conditions, which are a bit more specific. […] But then when we talk about indirect procurement, where there are hundreds of categories and product groups, then of course we must also be able to set certain product-specific or service-specific requirements." – Interviewee D

> "If you don't understand the sustainability risks and you don't ask about them when selecting a supplier, you will not select a supplier with whom you can easily implement sustainability later and who are eager and willing to develop their sustainability." – Interviewee D

Public standards, i.e. international certifications, were mentioned among four of the six interviewees as a key element of their established CSS. Among these, the ISO 14001 environmental standard, an international standard for environmental management, was specifically highlighted by Interviewees C and E. Interviewees B and F referred to certifications related to responsible forestry, particularly in connection with suppliers of paper or cardboard product. Interviewee F emphasizes the company to use such certifications in their supplier selection process, indicating that compliance with public sustainability standards plays a direct role in supplier selection.

> "This year, we have been buying only certified paper, meaning that we do not purchase anything from our suppliers other than certified paper, and if

> we cannot supply it, then that's the end of the supplier relationship." – Interviewee F

CSS can also be promoted through the voluntary disclosure of sustainability-related information to suppliers. Company C, for instance, adopts this approach to impose CSS. Interviewee C explains that the company sends voluntary sustainability policies to new suppliers early in the supplier selection process, inviting them to sign the documents. However, these policies are not mandatory requirements and signing them is not a strict criterion for supplier selection. Instead, they serve as a method to promote awareness and encourage alignment with the company's sustainability goals.

> "We have this sustainable procurement policy and a supplier code of conduct, which we generally always provide to new suppliers, and we hope that they will sign these forms and act in accordance with their common ethical principles. Whether they are working, we don't have much control over that." – Interviewee C

To conclude, the findings highlight that while supplier codes of conduct are widely established and form the foundation of CSS implementation, their content and application vary significantly across industries and supplier types. Companies increasingly complement these SCoCs with detailed requirements, certifications, and voluntary policies.

6.3.2 Communicating CSS to Suppliers

CSS are primarily communicated to suppliers through supply contracts as a part of the supplier selection process. Two-thirds of the interviewees stated that contracts serve as the main channel for conveying sustainability standards. These requirements are either embedded directly into the contract's terms and conditions or referenced separately and included as a liability breach. These CSS terms introduced during the contract negotiation phase, ensuring that suppliers are aware of them before finalizing the agreement. As a result, suppliers are required to accept the sustainability standards for the supply contract to become valid.

> "The sustainability standards are brought to the attention of suppliers at a very early stage. At the tendering stage, efforts are already being made to bring the code of conduct to the attention of the suppliers, which means that they should already have gone through it and in many cases already accepted it. It is then brought up in the contract negotiations, and finally, it is our requirement that it must be a part of the signed contract." – Interviewee D

For existing long-term suppliers, the interviewees consider continuous communication between the buyer and supplier to be the most effective communication method for conveying CSS. Interviewees A, B and E explain that their companies manage updates to sustainability standards through contract amendments, requiring current suppliers to agree to changes in the SCoCs. This approach allows the company to impose new CSS even on suppliers with whom contracts were originally signed over a decade ago. Furthermore, Company E has implemented a supplier relationship management framework to maintain ongoing communication with certain suppliers, especially key suppliers. This framework is also for broader communication related to sustainability standards and expectations.

Interviewees A and E mention that they have additionally published their CSS on their websites to make their sustainability requirements publicly accessible, not only for their current suppliers but also for potential suppliers interested in entering a business relationship with the company. By making this information available in advance, the companies aim to increase transparency and set clear expectations, ensuring that potential suppliers are already aware of and prepared to comply with the CSS before entering the supplier selection process.

6.4 Engaging Suppliers in Commitment to CSS

6.4.1 Purpose of Supplier Sustainability Engagement

The interview data reveal three main purposes for engaging suppliers in CSS. The majority of interviewees consider customer demand for sustainable products to be the most significant motive for supplier sustainability engagement in their companies. The interviewees state their companies aim to design supply chains that can withstand sustainable scrutiny when selling products to customers. The purpose is to fulfill sustainability commitments made to customers and meet the growing demand for sustainable products, as customers increasingly request information about supply chain sustainability. For instance, Company F has even developed a strategic goal to become a market leader in sustainable products, aiming to differentiate itself in the market and attract more customers.

While customer demand is a key driver, some interviewees emphasize the role of legal requirements. Interviewee A, for example, sees regulatory compliance companies are

facing as the primary driver for improving supply chain sustainability performance. Interviewees D and F also highlight the significant role of sustainability legislation and regulations. Both stress that the increasing legislation helps companies standardize supplier sustainability requirements and reduces the risk of greenwashing.

Beyond external pressures, companies' own values and broader corporate visions serve as important motives for supplier sustainability engagement for a majority of the case companies. Interviewee C highlights the shareholders' commitment to sustainability as a central driver, in addition to personal values discourage purchasing from unsustainable suppliers. Similarly, Interviewee E states that, alongside customer demand for sustainable products, shareholder concern and commitment to ensuring sustainability are major drivers of supply chain sustainability efforts. Company D has developed a dedicated sustainability vision, setting clear goals and a roadmap for achieving sustainability milestones within a defined time frame. Additionally, Interviewee A mentions employee attraction through bringing out the company's sustainability values as another factor driving supplier sustainability engagement.

6.4.2 Assessment-Based Approach to Engaging Suppliers in CSS

The supplier sustainability engagement actions utilized by Company D include supplier meetings, ongoing dialogue, and active review of sustainability-related matters. This process involves agreeing on specific sustainability KPIs, which are then monitored to gather relevant supplier sustainability data. Interviewee D emphasizes that the company aims to integrate sustainability as a regular component of supplier meetings, ensuring that sustainability is not treated as a one-time contractual obligation but as an ongoing focus throughout the supplier relationship. Similarly, Interviewee E highlights the use of regular conversations with suppliers to build a relationship of trust and to communicate the company's evolving sustainability expectations. These discussions also serve to assess whether the supplier's strategic sustainability goals are aligned with those of the company.

Half of the interviewees, D, E, and F, mention supplier sustainability audits as an additional method for assessing their suppliers' commitment on the CSS imposed on them. These audits are conducted to gain a comprehensive understanding of the supplier's sustainability maturity in their processes, operational practices, and management systems. In contrast, Interviewee C emphasizes that the company lacks the resources to conduct

supplier sustainability audits. As a result, they are compelled to rely on trust and the information provided by the suppliers themselves, without having the means to independently verify compliance.

> "We have suppliers in China, for example, and that's quite a tricky thing. They will ask us whether we want a red or blue stamp on the paper, so that they can give you the kind of answer you want to hear. Unless you go there on the supplier's site yourself and investigate, but we don't do that." – Interviewee C

Interviewee C mentions that the company requests new suppliers to complete a *New Supplier Self-Assessment Questionnaire*, which mainly includes questions related to financial matters, but also covers environmental standards and certifications. The rationale behind this is to ensure that suppliers provide similar information to what the company itself is required to disclose to its own customers, promoting transparency across the supply chain. Companies A, E and F all utilize supplier reporting tools to gather sustainability-related data from their suppliers. Notably, the additional minimum requirements currently being developed by Company A are based on a sustainability reporting tool *Sustainability Assessment Questionnaire* (SAQ). This tool assigns a sustainability score to each supplier, providing the company with a structured way to evaluate and compare suppliers based on their sustainability performance.

> "We are using a platform and a tool which is a sustainability assessment questionnaire called the SAQ 5.0 that is an industry wide tool. With all the answers that they [suppliers] give there and the documents that they upload for evidence is assessed by a third party based on a standard and then our suppliers are receiving a standardised sustainability score. That is how we are currently evaluating the sustainability score of a selected group of suppliers." – Interviewee A

Furthermore, Company A has submitted its emission reduction targets to the *Science Based Targets initiative (SBTi),* demonstrating its commitment to aligning with climate science. The company is also encouraging its suppliers to join the initiative as a method to promote shared climate action across the supply chain. While participation in SBTi is not currently a formal requirement for suppliers, it serves as a means to raise awareness and signal the company's expectations, as well as encourage transparency and dialogue.

Interviewee F explains that the supplier reporting tool the company uses is *EcoVadis*, which enables continuous monitoring to ensure that suppliers maintain a sufficient sustainability rating. Similarly, Company E uses a supplier reporting tool to gather data

on specific sustainability indicators, allowing them to track and evaluate the ongoing performance of their suppliers. In addition to this, Company E requires suppliers to report on development projects related to sustainability, promoting continuous improvement. Interviewee D also notes the company has established a reporting channel through which suppliers can voluntarily report issues, including those related to sustainability, encouraging open communication around potential challenges in the supply chain.

In addition to formal methods for gathering sustainability-related information, supplier sustainability data is also gathered through more informal means. Interviewee F mentions using email to request information on the origin of fiber to verify the commitment of their paper product suppliers to CSS. Interviewee D explains that during conversations, the company intentionally raises questions related to sustainability. These discussions help to reveal the supplier's level of maturity and engagement with sustainability issues. Interviewee D also emphasizes that there is no single method for gathering comprehensive information about a supplier's commitment to CSS. Instead, a combination of different channels, both formal and informal, contributes to building a full picture. Similarly, Interviewee E notes that the company informally observes supplier practices to identify any potential sustainability concerns.

> "Possible misconducts come to light if we have other problems with suppliers. If there are problems with a supplier in some area, and this is especially true for the direct material suppliers, then quite often there are also problems on the sustainability side. They just go hand in hand, that if the supplier's delivery reliability constantly dips or we are constantly arguing over agreed prices, then in the background, there may also be found problems other than those mentioned above." – Interviewee E

Interviewee C explains that while the company requests updated certificates when they are close to expirations, there is no systematic monitoring of sustainability standards in place. Both Companies B and C emphasize that, as medium-sized companies, they lack the resources and tools needed to collect data and continuously monitor their suppliers' adherence to CSS commitments after the initial agreement through the SCoC. As a result, the collection of sustainability-related information relies entirely on informal communication channels.

> "It basically comes from different kinds of communication, whether it's email, phone calls, bumping into something on LinkedIn or something like that. But there really isn't any systematic way of collecting data every year. Now, we have to remember that we are a medium-sized company. We don't

> have a person in the organization who is solely responsible for sustainability and environmental issues, which I'm sure some large companies have. Then they might have the time and resources to investigate and do things like this, but we don't have the time for that." – Interviewee C

The findings demonstrate that companies use a mix of formal and informal methods to gather and monitor supplier sustainability information, ranging from audits, reporting tools, and questionnaires to ongoing dialogue and personal observations. While larger companies can implement structured tools and systems for continuous evaluation, medium-sized companies often lack the necessary resources and rely more heavily on trust and informal communication.

6.4.3 Collaboration-Based Approach to Engaging Suppliers in CSS

Interviewees D and E mention that the companies conduct sustainability training for their suppliers. Company D has organized sustainability training sessions, for example, on their SCoC, with the goal of educating suppliers on the importance of the CSS and explaining the origins and rationale behind these standards. Company E, in turn, organizes sustainability training on a regular basis for its key suppliers, reinforcing expectations and supporting continuous improvement in sustainability practices.

> "Training is one of the things that is very often forgotten but is extremely important when we are talking about sustainability issues. We are trying to train, not only internally but our suppliers on what we are now, what we want to be in the future, and what it requires from them. We organize these supplier events, where we meet our most important suppliers and go through our future roadmaps, product roadmaps, technology roadmaps, and then, of course, listen to what our suppliers want to raise in terms of sustainability." – Interviewee E

Interviewee D explains that when a supplier is found to be non-compliant with the company's CSS, the company's first approach is not to terminate the supply contract. Instead, they aim to resolve the issue by working with the supplier to improve their practices and strengthen engagement. Similarly, Company F collaborates with suppliers to help them obtain required certifications, enabling the business relationship to continue rather than be disrupted. Interviewee A emphasizes the importance of lowering barriers for suppliers when it comes to sustainability reporting and gaining insight into their sustainability practices. The industry-wide reporting tool, SAQ, the company is using, allows suppliers to complete the sustainability questionnaire once and share it with multiple companies. Moreover, the platform is free for suppliers, and the company

requesting the reports covers the cost, demonstrating a commitment to supporting suppliers in meeting reporting requirements.

> "There is always a lot of pre-engagement and pre-communication to get them onboarded, to explain where the requirements are coming from, to increase awareness that this is not only a fun topic that we want to do, but this is coming from legal requirements. Especially smaller companies are lacking a lot of background information about this. That is also something that we see as a need of our service to explain and to get them engaged to answer them. And then use these low barriers, like using already established tools for our suppliers. I mean, it costs because they need to invest resources and time into those topics but at least make that available for free because we know that they already have to put in some work there." – Interviewee A

In addition to the potential consequence of contract termination for violations of imposed CSS, some companies are also using incentives to encourage supplier development and commitment to CSS. Interviewee E mentions that offering higher prices can serve as a method to encourage suppliers to commit to the company's CSS. The company signals to its suppliers that if the products are sustainably produced, they are willing to pay a premium. This approach is supported by the fact that their own customers are also prepared to pay more for sustainable products. In this way, financial incentives play a background role in reinforcing supplier commitment and guiding them toward more sustainable practices. Company D uses incentives by giving out awards to their best-performing suppliers in certain sourcing categories, offering smaller suppliers positive publicity or a small monetary award for strong performance. The company has also begun adding monetary bonuses to some supply contracts as a reward for good sustainability performance. Similarly, in its supplier events, Company E rewards suppliers for activities in various categories, including sustainability. In these events, suppliers can present their sustainability projects and developments, which are then evaluated by the company for their usefulness. The best ones receive an award. This approach is intended to engage suppliers in the company's CSS and encourage them to align their practices with its sustainability vision. Additionally, rewarded suppliers benefit from enhances brand visibility.

6.4.4 Processing Supplier Sustainability Information Internally

The case companies further process the sustainability information gathered through various methods and channels. However, the extent, effectiveness, and time frame of internal processing vary among these companies. Five of the six case companies report

utilizing sustainability data in different ways. Companies A, C and F internally process supplier sustainability information primarily for monitoring performance. Company C, for instance, conducts monthly management meetings where certain KPIs related to supplier environmental performance are occasionally reviewed. Issues identified in these meetings are then discussed in greater detail during the company's annual management reviews. Interviewee C highlights that if a supplier is found to significantly violate the company's CSS, the supplier can be replaced. Both Companies C and F explicitly gather sustainability data annually through certificates and supplier questionnaires to ensure the information is current and conduct annual evaluations to verify the validity of these certificates. Similarly, Company A tracks specific sustainability indicators aligned with its SCoC and SAQ. However, as the company's supplier engagement is currently focused primarily on onboarding new suppliers and yearly updates of the SCoC, the time frame for gathering and utilizing supplier sustainability information is relatively short-term.

Companies E and F actively use sustainability data in supplier evaluations and risk assessments. Company F incorporates the gathered information to assess the maturity of suppliers' sustainability practices, considering this data alongside traditional factors such as quality and price during supplier selection. Interviewee F also emphasizes that sustainability data contributes directly to the company's supplier risk assessment processes. Company E, on the other hand, relies heavily on supplier sustainability reports. The company's sustainability team analyzes these reports to evaluate supplier capabilities, both generally and withing specific tendering processes. The reports are compared against the company's own sustainability targets to monitor performance, identify risks, and integrate relevant requirements into specific clauses within supply contracts. Additionally, Company E utilizes the collected data for internal training purposes.

Two companies, D and E, place particular emphasis on the long-term utilization of sustainability information. Company D uses the gathered information in diverse ways across varying time frames. Interviewee D highlights the strategic use of sustainability information for both short-term responsiveness and long-term planning. Interviewee E further emphasizes the long-term perspective, explaining that due to the company's extended products design and lifecycle, supplier sustainability information is gathered and utilized over an extended period. Interviewee E also explicitly underlines the

importance of effective data management as foundation for long-term sustainability engagement.

> "It all starts with managing supplier sustainability information. What I mean is that we must know what we want, what we require, and how we can communicate that information to our suppliers. Of course, that includes how we want it to be done, the time frame in which we want it completed, how it will be reported, and how it will be reflected in our product." – Interviewee E

> "In certain matters, we aim to collect up-to-date information that can be used immediately. For example, the purpose of anonymous supplier surveys is to gather information that allows us to address concerns before they escalate. Or if we identify a violation of our code of conduct, we can raise grievances within a very short time frame. Then again, when we talk about other data collection, the information will also be used for longer-term planning; where do we have sectoral challenges, how can we develop and improve something? But the intention is to utilize that information in supplier collaboration and guidance throughout the contract period." – Interviewee D

However, half of the case companies, A, B, and D, admit to encountering difficulties in utilizing the supplier sustainability data they have gathered. Interviewee A explains that the company has not yet implemented these sustainability requirements into the supplier performance scorecards used by their purchasers, which currently focus primarily on financial and quality KPIs. Interviewee A emphasizes that integrating sustainability into these systems will be an ongoing process in the future. Interviewee D, on the other hand, highlights the challenge of managing large volumes of sustainability data in various formats, driven by increasing reporting requirements. The company aims to gather and organize all the data into a structured format in one location, which would enable more effective reporting. In contrast, Interviewee B admits that the company entirely lacks internal processing of supplier sustainability information.

6.4.5 Supplier Engagement Initiatives as a part of SSCM Strategy

Company A has developed a company-wide program that is linked to their sustainability strategy. The program focuses on implementing the formal sustainability strategy and its specific targets across company operations and daily work. Within this program, one key work stream addresses the mitigation of supply chain risks and emissions. The company also involves external stakeholders to ensure support suppliers sustainability engagement. Notably, its supplier reporting tool, SAQ, and its participation in the emission reduction

target initiative, SBTi, are both externally managed. Furthermore, Company A is considering membership in the *Responsible Minerals Initiative (RMI)* and already uses the initiative's standardized templates for reporting conflict mineral sourcing.

Similarly, Company F has a comprehensive company-wide program for emissions reduction, which includes supplier participation by requiring them to report their own emissions data. In addition, the company is a member of the *Together for Sustainability (TfS)* initiative, which aims to raise sustainability standards in the chemical industry through collaboration between companies and with suppliers. Company F's parent company also reports to the environmental disclosure database *Carbon Disclosure Project (CDP)*, requiring input also from the Company F's suppliers. Moreover, the company collaborates with the *Ellen MacArthur Foundation*, a nonprofit focused on advancing the circular economy, further demonstrating the use of external stakeholders in shaping supplier engagement practices.

Company D, in contrast, has integrated supplier sustainability engagement into its SSCM strategy through internal development projects. These projects focus on setting targets for sustainable sourcing and embedding these targets as a standard element of supplier collaboration. While this reflects an internal effort to formalize sustainability, the use of external stakeholders is relatively limited. Interviewee D notes that external partners have primarily been used for background research, such as risk assessment tools, rather than for ensuring suppliers commitment to CSS. However, the company does utilize third-party auditors for conducting supplier audits, showing some external involvement in monitoring. Similarly, Company E has a less formalized approach to integrating supplier sustainability engagement into its SSCM strategy. Interviewee E admits that company-wide programs lack depth. Instead, supplier sustainability is embedded unevenly across sourcing category strategies, with some categories placing greater emphasis on sustainability sue to the nature of the products or associated risks.

Two of the case companies, B and C, do not currently have any supplier engagement initiatives integrated into their SSCM strategies. Interviewee C highlights the need for global or continent-level frameworks, such as directives from the European Union, that would establish common requirements for all companies. The interviewee stresses that, for a medium-sized company, it is particularly challenging to invest significant time and resources into developing a company-specific system for ensuring suppliers commitment

with its own CSS. Similarly, Interviewee A points out the importance of streamlined standards and industry-wide collaboration, rather than each company creating its own approach in isolation. This need is especially relevant when managing the sustainability of the upstream supply chain, where many companies rely on the same n-tier suppliers and could benefit from shared frameworks and joint efforts.

Two of the six case companies have already incorporated n-tier supplier engagement in their SSCM strategies. The remaining companies continue to rely on trust, expecting their direct suppliers to manage the sustainability of their own suppliers. Interviewee E, however, considers it self-evident that the company should ensure commitment to its CSS not only from its direct suppliers but also at least from second-tier suppliers. The company therefore requires transparency throughout the entire supply chain. Company D is currently mandating its suppliers to pass the CSS on to their own suppliers and up the supply chain in their SCoC. Interviewee D adds that the company is also exploring additional ways to engage n-tier suppliers in its CSS, although this aspect is still under development.

> "We are trying to influence upstream, but in a certain way influencing through the code of conduct is just a first step. Additionally, we might audit our suppliers' management systems, look a little deeper into the value chain. On the indirect procurement side, we have not quite been able to do that yet, due to the number and scale of suppliers, but of course we want to deepen understanding. For some groups, such as suppliers who work on our site or in our industrial area, training is held in the same way for everyone, regardless of whether you are our supplier or an employee of our supplier's supplier. In certain limited environments of this kind, we are quite advanced, but in general, it's still quite limited to requiring through the code of conduct." – Interviewee D

The findings reveal varying levels of integration of supplier sustainability engagement within companies' SSCM strategies. While some companies have established comprehensive, company-wide programs supported by external stakeholders and industry initiatives, others rely primarily on internal development efforts or have yet to formalize supplier engagement practices. The involvement of external frameworks and collaboration, such as SBTi, TfS, and CDP, appears to strengthen supplier engagement and accountability. However, medium-sized companies often face resource constraints that limit their ability to develop and implement structured systems. Moreover, while engagement with n-tier suppliers is gaining attention, most companies still depend on

direct suppliers to manage upstream compliance, highlighting the ongoing need for shared standards, cross-industry collaboration, and scalable engagement models.

6.4.6 BSR Dynamics in Supplier Sustainability Engagement

Buyer dependent power dynamics, particularly those driven by supplier size and the buyer's relative share of the suppliers' total market, are recognized by interviewees as a significant factor affecting buying companies' ability to engage suppliers in sustainability. Interviewee C emphasizes that company size significantly impacts the company's ability to engage supplier commitment to CSS. Since most of Company C's suppliers are quite large companies, its influence is limited, allowing it to make requests rather than impose binding sustainability requirements. To dictate sustainability requirements and control their implementation, a medium-sized company would need to hold a dominant power position as a major customer for the supplier. Additionally, contract manufacturers face further constrains in imposing CSS on their suppliers, as these decisions are dictated downstream by their customers, limiting the buying company's direct influence over supplier sustainability practices.

> "We went to EcoVadis because our biggest customer told us to go. They said that in 3 or 4 years, they will not have suppliers who have not agreed to go to EcoVadis. In a way, as a large company, they have forced a smaller company to commit to their sustainability standards and we must take those similar things into account then. However, we won't be able to engage our suppliers in the same way that they might be able to engage us." – Interviewee C

Similarly, Interviewee D finds that supplier size influences the sustainability engagement methods the company employs, viewing it from the perspective of a large company with dominance over some suppliers. When in a buyer-dominant position, Company D can demand contractual commitments, which suppliers are generally more willing to accept. On the other hand, for smaller suppliers, the company adopts a different approach, using also incentives and training to encourage commitment to CSS, as smaller companies often lack the expertise and resources of larger corporations.

Interviewee A explains that the company intentionally tailors its sustainability engagement efforts with different suppliers. Engaging larger supplier in sustainability is considered relatively easy, as many are already integrated into industry-standard supplier reporting tool. In contrast, some smaller suppliers struggle with these requirements,

leading the company to exclude certain small suppliers from the reporting tool to reduce compliance burdens. Interviewee A elaborates that it is unrealistic to require a small, nine-person indirect material supplier providing cleaning services to implement a comprehensive human rights policy covering child labor. As a result, when the company deems reporting requirements unnecessary or impractical, it adjusts expectations and applies different sustainability engagement efforts than those used for larger suppliers, who are typically better equipped to implement such policies. Both Interviewees B and D also recognize that large multinational corporations with already-established sustainability reporting processes, are generally easier to engage in sustainability efforts.

Personal dynamics influence supplier sustainability engagement alongside company-level dynamics. Both Companies B and C mention that strong personal relationships and well-functioning cooperation with suppliers enhance the buying company's abilities to engage suppliers in committing to their CSS. Similarly, Interviewee E views personal dynamics between the person responsible of a certain supplier relationship, and the supplier's key account manager, to affect how the company can engage their suppliers in sustainability. However, Company E benefits from having sourcing specialists across different regions, allowing the company to leverage diverse cultural backgrounds to strengthen supplier cooperation and optimize supplier engagement methods.

> "We have suppliers from countries where reporting can be somewhat inconsistent, where personal relationships and trust-based interactions are more important and you can only get things forward through certain people, whereas with some suppliers we are very structured and have steering and strategy sharing and various kinds of reporting and analyses and discussions and cooperation projects. There are a huge number of these methods, but they vary, and we have by no means been able to standardise them with everyone. The requirements are the same for everyone, but the way in which you get the message through, varies." – Interviewee E

The findings underscore that power dynamics play a critical role in shaping supplier sustainability engagement. While dominant buyers can impose strict contractual sustainability requirements, smaller buying companies with limited influence may have to adjust its expectations. Engagement strategies are also frequently tailored to supplier capabilities. In addition, personal relationships and cultural understanding at the individual level can significantly enhance engagement effectiveness, highlighting the importance of both structural and interpersonal dynamics in advancing supplier commitment to sustainability.

7 Discussion and Conclusions

In this chapter, the empirical findings of the study are discussed in relation to the existing literature presented in the literature review. The research questions are comprehensively answered, evaluating whether the findings of this research support or contradict the previous research. Key findings are analyzed throughout the chapter, from which relevant conclusions are drawn. Additionally, the limitations of this study are acknowledged, and suggestions for future research are provided to guide further exploration in the research field.

7.1 Answering the research questions

The objective of this study was to thoroughly examine supplier engagement as a means for manufacturing companies to ensure their suppliers' commitment to their CSS, while also developing an understanding of the influence of BSR dynamics on how companies can implement supplier sustainability engagement in their procurement strategies. Consequently, this study aimed to fill in the research gaps on supplier engagement in ensuring CSS commitment, and the role of BSR dynamics within it. In Sub-Chapters 7.1.1 and 7.1.2, this objective is approached by answering the following research questions:

- *RQ1: How can suppliers be engaged to ensure their commitment to corporate sustainability standards?*
- *RQ2: How does the dynamic of buyer-supplier relationship influence supplier sustainability engagement?*

7.1.1 Engaging Suppliers to Commit to Corporate Sustainability Standards

While in Chapter 6, the findings of this research were initially presented under the themes that emerged from the interviews, this sub-chapter synthesizes the findings under the four Supplier Sustainability Engagement Strategies, i.e., *Disengagement*, *Basic Engagement Strategy*, *Transactional Engagement Strategy*, and *Collaborative Engagement Strategy*, presented in Table 1 and further detailed in Sub-Chapters from 3.3.1 to 3.3.4. This synthesis provides a clearer illustration on how these findings converge in practice.

Basic Engagement

Consistent with the literature, the engagement actions identified in the interview data suggest that companies adopt the engagement actions of basic engagement strategy as the primary effort to reduce information uncertainty about supplier sustainability, as argued by Dahlmann and Roehrich (2019). The findings of this research reveal that majority of the case companies conduct precontract screening of suppliers by requiring public sustainability certifications verified by third-party authenticators, at least in some sourcing categories. This aligns with prior research suggesting that, in the early phases of supplier selection, global buying companies typically require sustainability certifications (Grimm et al. 2014; Pereira et al. 2023) as they provide unbiased assessments that suppliers cannot influence (Grimm et al. 2016). Furthermore, the findings support existing literature by showing that CSS are then often embedded into contracts, particularly in large companies, requiring suppliers to comply before contracts become valid—a practice widely recognized as a key method for engaging suppliers in sustainability (Stocker et al. 2020; Bag et al. 2024).

Other basic engagement actions identified in the literature include reports, briefings, websites, newsletters, and sustainability audits (Stocker et al. 2020), which allow companies to unidirectionally assess supplier sustainability. Those actions emerged from the findings were websites, reports and audits, partially supporting previous literature. Websites are utilized by two case companies to communicate CSS to both current and potential suppliers. Supplier sustainability audits are a quite common method to ensure supplier commitment to CSS, with half of the case companies conducting such audits. Additionally, supplier reporting and self-assessments emerged as widely used practices, with five out of six case companies utilizing them, although the degree of structured in requesting these reports or self-assessments varies. Most companies rely on third-party supplier reporting tools to assess sustainability performance, while Company D has developed its own reporting channel for suppliers. Company C, on the other hand, requests new suppliers to complete a self-assessment questionnaire detailing sustainability performance and certifications.

The purposes and desired outcomes of engaging suppliers in sustainability vary across the four identified supplier sustainability engagement strategies. Half of the interviewees stated that compliance with legislation and regulations is the primary reason their companies engage suppliers in sustainability. Dahlmann and Roehrich (2019) explain this by arguing that this purpose is characteristic of the basic engagement strategy, where

buying companies prioritize fulfilling external stakeholders', such as government entities and regulatory bodies, requests for supplier sustainability assessment data, rather than gathering the information for internal development purposes.

Transactional Engagement

Literature suggests that transactional engagement extends basic engagement by actively processing and operationalizing sustainability data from supplier assessments into procurement processes to enhance control and drive more productive outcomes (Dahlmann & Roehrich 2019). The findings of this research indicate that many companies recognize the benefit of utilizing various tools and methods to process sustainability information gathered through supplier engagement. These methods include monthly management meetings to review KPIs, supplier risk assessments, and comparative sustainability maturity analyses. However, the findings also highlight that most companies are facing difficulties in effectively managing and utilizing the sustainability data they gather. Notably, one key finding from Interviewee B suggested that smaller companies have very limited or no internal data processing for supplier sustainability information, aligning with Dahlmann and Roehrich's (2019) argument that this reflects the information-focused basic engagement strategy.

Transactional engagement is characterized by more interactive and voluntary communication through engagement actions such as meetings, forums, and surveys (Stocker et al. 2020), as well as adjustments to procurement guidelines, including supplier selection criteria, updates in SCoCs, and contract clauses (Dahlmann & Roehrich 2019). The findings of this research highlight that SCoCs are evidently the key method companies use to impose and engage suppliers in CSS, as all case companies have established them for their suppliers. This fully confirms previous research, which identifies code of conduct as a key tool for monitoring and evaluating supplier sustainability (Qiao et al. 2022). Additionally, one interview revealed a notable finding: the voluntary signing of additional sustainability policies for new suppliers. This extends previous literature by identifying another transactional engagement action.

Furthermore, the interview data indicate that most of the case companies have implemented specific supplier selection criteria to impose more detailed CSS on selected supplier groups. This provides further empirical evidence supporting previous literature, which identified supplier selection criteria as a key action in transactional engagement to

ensure supplier commitment to CSS (Koplin et al. 2007; Ahmadi-Gh & Bello-Pintado 2024). The findings also suggest that processed sustainability information is further utilized in supplier tendering, stricter contracts, and internal training, extending previous literature. For current suppliers, supplier meetings, ongoing conversations, and active sustainability performance review emerge as effective engagement methods, aligning with earlier findings of Stocker et al. (2020). A key finding is Company E's supplier relationship management framework, which demonstrated active utilization of supplier assessment information. Additionally, Interviewee E emphasized the importance of fostering trust and aligning strategic sustainability goals through continuous dialogue.

Customer demand for sustainable products emerged as the most common reason for companies to engage their suppliers in sustainability, based on data from four interviews. Additionally, most interviewees highlighted company vision and shareholder values as significant drivers for improving supply chain sustainability through supplier engagement. Dahlmann and Roehrich (2019) and Ahmadi-Gh and Bello-Pintado (2024), explain this by suggesting that one key characteristic to transactional engagement strategy alignment with expectations, enabling buying companies to promote their sustainability values and norms while proactively identifying opportunities to enhance supplier sustainability performance through supplier assessments.

Collaborative Engagement

Collaborative engagement, as presented in the literature, focuses on establishing long-term partnerships and initiating sustainability project collaborations with suppliers (Stocker et al. 2020) through the exchange of tacit knowledge and deeper supplier involvement (Klassen & Vachon 2003). Recognized collaborative engagement actions include supplier training programs, workshops, seminars, summits, and award ceremonies (Dahlmann & Roehrich 2019; Koplin et al. 2007; Sancha et al. 2019; Grimm et al. 2016), as well as committees, associations, and alliances (Stocker et al. 2020). Consistent with the literature, the interview data suggest that some companies utilize supplier training to encourage commitment to CSS, emphasizing the importance of supporting suppliers and increasing their awareness. These findings indicate that companies recognize the need to guide suppliers and make their commitment to CSS as seamless as possible. Additionally, the findings support the use or rewards and award ceremonies as incentives for supplier commitment, aligning with previous research. A

key finding that notably extends the literature is the willingness of some companies to pay higher prices if a supplier demonstrates that its products are sustainably produced. Interviewee E highlighted this as an effective method for collaboratively engage suppliers in their CSS. This finding sheds light on the diverse approaches companies take in collaborative engagement.

The findings reveal that, currently, only two of the case companies, D and E, utilize processed sustainability information for long-term planning, a characteristic of collaborative engagement (Stocker et al. 2020). The other case companies take a medium-term approach, primarily using the data operationally for onboarding new suppliers and updating SCoCs, as well as diagnostically for immediate risk analysis. Literature identifies these practices typical of transactional engagement (Dahlmann & Roehrich 2019). Noteworthily, all collaborative engagement actions that emerged from the interview data were described by interviewees from large companies. This aligns with previous research, which suggests that effective sustainability collaboration requires substantial commitment and resource investment from the buying company (Sancha et al. 2019; Ahmadi-Gh & Bello-Pintado 2024), which small and medium-sized companies may struggle to meet.

On the other hand, the interview data indicates that most of the case companies have implemented at least some form of supplier engagement programs or joined sustainability initiatives. The findings suggest that engagement programs mainly serve as internal target-setting mechanisms, which companies then aim to integrate into their SSCM strategies. The initiatives are third-party sustainability reporting frameworks through which companies request supplier sustainability information. A key finding from Interviewee F highlights collaboration with an NGO on circular economy research, illustrating the effective use of stakeholder collaboration to achieve sustainability goals. These findings support Bag et al. (2024), who argue that strategic supplier engagement in CSS involves collaboration with both suppliers and external stakeholders through alignment, planning, information sharing, and continuous improvement to achieve sustainability goals.

Literature suggests that the diversity and depth of communication channels distinguish collaborative engagement from other engagement strategies. Unlike other approaches, collaborative engagement incorporates informal and spontaneous communication

methods such as personal emails, phone calls, meetings, discussion groups, web-based platforms, and sustainability events, alongside formal and structured information gathering (Dahlmann & Roehrich 2019; Sancha et al. 2019). Supporting the literature, gathering information through informal channels emerged from the interview data with half of the interviewees. However, in contrast to previous literature, the findings suggest that some smaller companies fully rely on informal channels, rather than using them as a complement to formal methods. This finding extends existing research by highlighting how resource constraints influence engagement strategies.

Dahlmann and Roehrich (2019) and Qiao et al. (2022) highlight that obtaining diverse information through collaborative engagement fosters sustainability innovation, driving process improvements, overcoming precompetitive barriers, and creating competitive advantages. However, none of the interviewees identified shared value, innovation, or strategic development as specific, desired outcomes of supplier sustainability engagement, suggesting a lack of collaborative engagement in practice.

Relational View on Supplier Sustainability Engagement

The relational view theory of Dyer and Singh (1998) provided the theoretical background for this research, emphasizing how companies can create competitive advantages through strategic relationships and collaborations with their partners. According to their theory, relational rents, i.e., competitive advantages, can arise through four mechanisms: *investments in relation-specific assets*, *extensive knowledge exchange*, *merging resources or capabilities that are complementary but scarce*, and *effective governance mechanisms*. By applying the relational view, the findings of this research identify the strategies Finnish manufacturing companies utilize to engage suppliers in sustainability and assess the impact these strategies have on suppliers' commitment to CSS.

These mechanisms can be identified within the findings. First, investments in relation-specific assets are demonstrated by some case companies' investments in supplier engagement practices tailored specifically to their BSRs. For instance, Companies D and E provide tailored sustainability training to their suppliers. Companies D and F collaborate closely with selected suppliers to help them commit to CSS, and Companies D and E additionally incentivize suppliers by offering rewards for high sustainability performance. Second, the findings highlight reciprocal knowledge exchange between some companies and their suppliers. Companies D and E emphasize ongoing dialogue on

sustainability to align strategic sustainability goals and to build trust within the relationship. Company E notably organizes supplier events to facilitate bidirectional communication and knowledge exchange.

Third, the findings illustrate that some case companies effectively leverage complementary resources and capabilities, which is not only found in collaborations between case companies and their suppliers, such as joint sustainability projects, supplier events, and awards, but also through partnerships with third-party organizations. Companies A, E and F, for example, use third-party supplier sustainability reporting tools. Companies A and F have joined industry-level sustainability initiatives that facilitate supplier sustainability engagement. By merging resources and capabilities with external organizations, buying companies can distribute the responsibilities associated with ensuring supplier commitment to CSS. Furthermore, effective governance mechanisms supporting efficient and fair collaboration are evidently demonstrated in the findings. Structured engagement actions, including embedding CSS into contracts, establishing SCoCs, and requiring third-party certifications, are consistently used across the case companies. These governance mechanisms lay a foundation for robust supplier sustainability collaboration.

Analyzing the findings through the relational view lens suggests that only two case companies, D and E, have broadly implemented collaborative engagement actions and thus effectively tapped into relational exchange as described by Dyer and Singh (1998). By doing so, these companies can most effectively positively impact supplier commitment to CSS. Other case companies are fully or mostly relying on supplier assessments of basic and transactional engagement strategies. However, notably absent from the interview data were explicit references to innovation, shared value, and strategic development as desired outcomes, even among Interviewees D and E, highlighting potential untapped opportunities to further leverage relational advantages.

7.1.2 The Influence of the Dynamics of Buyer-Supplier Relationships

The empirical findings of this research indicate an evident connection between buying companies' strong motivation to engage a certain supplier and their high dependency on that supplier. Business criticality emerged as a central driver for buying companies to desire to actively engage a supplier and establish a committed, long-term relationship. When a product or service is essential to the buying company's core operations over the

long term, the company prioritizes deeper engagement with the supplier. However, all interviews also suggested that companies are highly dependent on their quality-critical direct material suppliers, and these suppliers are either not interchangeable, or changing the supplier would be difficult. These findings align with Cox (2004), who suggests that buyer dependence commonly arises when a supplier holds a significant share of the buyer's total market, and the buying company faces high supplier changing costs and difficulties in finding alternatives. At the same time, suppliers offer distinctive products or services and hold greater informational advantages than the buying company, further amplifying the buyer dependence.

The findings reveal that buyer dependence significantly decreases companies' ability to require and ensure supplier commitment to CSS, particularly when the buying company is not large. Noteworthily, among the six case companies, only Companies B and C fully represented medium-sized companies with limited resources and leverage to engage their supplier in CSS, whereas the third medium-sized case company, Company F, benefits from the support from its parent company. Both interviewees B and C strongly emphasized their limited ability to impose strict sustainability requirements on large suppliers of which they are dependent on, especially when they hold a small share of the supplier's total market. Additionally, they lack the internal personnel and time needed to promote sustainable practices among their suppliers. These findings are consistent with Grimm et al. (2014), who find that small and medium-sized buying companies often struggle to implement and sustain sustainability collaboration with suppliers due to their limited resources and weaker negotiating leverage, ultimately constraining their ability to influence their suppliers' commitment to CSS and effectively drive improvements in sustainable practices.

Furthermore, data from half of the interviews highlighted contract manufacturing as a business model causing a very strong dependency on customer-determined suppliers. This uncovered a previously unexplored dynamic in supplier sustainability engagement literature. Interviewees described customers as having substantially greater leverage than the buying companies themselves in influencing direct material suppliers' commitment to the buying company's CSS. Grimm et al. (2014) argue that customers could be incorporated into SSCM strategy, using customer pressure to strengthen a buying company's ability to influence suppliers' sustainable practices. While this perspective could be applied to help address the challenge of engaging suppliers in CSS within the

contract manufacturing business model, the interviewees did not identify cooperation with other stakeholders as a method to mitigate this high dependency.

In line with Cox's (2004) research, the interview data indicate that large companies often hold power over their smaller suppliers and in BSRs in which they have a large spend on a specific supplier. Cox (2004) find that purchasing in large volumes, consistent demand, and facing low supplier switching costs often characterize supplier dependence. Suppliers in these BSRs typically offer standardized commodities, making it easy for buyers to find alternatives. The findings of this research highlight that in a buyer-dominant position, buying companies can impose strict sustainability requirements, to which suppliers are more willing to commit. Particularly for smaller suppliers, dominant buyers can reinforce commitment through both contractual requirements and incentives. These findings align with earlier research by Sancha et al. (2019) and Liu et al. (2019), confirming that imposing CSS and engaging suppliers in sustainability efforts are most effective when buying companies have power over their suppliers. With this dominance, they can influence suppliers' operational decisions and behaviors, ensuring commitment to CSS. One key finding, Company C's experience with its most important customer, demonstrated how a large, dominant buyer can engage suppliers in sustainability requirements, supporting and building upon the research of Sancha et al. (2019) and Liu et al. (2019), who argue that dependent suppliers proactively engage and commit to sustainability to secure long-term relationships.

A key finding that offers a novel perspective on BSR dynamics in supplier sustainability engagement is the shift in the viewpoint from the company-level BSR dynamics to personal dynamics. Specifically, this dynamic involves the buyer responsible for a supplier within the buying company and the supplier's key account manager handling the relationship with their customer, i.e., the buying company. Interviewee E brings attention to the significant influence of this personal dynamic on engaging suppliers in sustainability and ensuring their commitment to CSS, a factor that has been recognized within the company. In some countries, where personal relationships and trust play a major role and reporting standards are weak, suppliers cannot be engaged in sustainability through structured and strategic collaborative engagement actions, even when the buying company holds a dominant position over them. This aspect of BSR dynamics and its impact on company-level sustainability engagement has not been explored in previous literature.

7.2 Managerial Implications

This research offers several practical implications for manufacturing companies' procurement departments aiming to effectively engage suppliers and ensure their commitment to CSS. Procurement managers can utilize these insights to strategically align their supplier sustainability engagement strategies with organizational capabilities and BSR dynamics. Firstly, buying companies should prioritize robust pre-contract screenings as a foundation for effective supplier sustainability engagement. Incorporating sustainability criteria systematically into early supplier assessments and contracts reduces uncertainty regarding supplier performance and signals clear expectations for future sustainability development.

Secondly, the findings highlight significant opportunities in improving internal use of sustainability data gathered through assessment-based approaches in supplier engagement. Procurement managers should invest in tools and processes to analyze and operationalize such data. Practices like internal KPI reviews, risk assessments, and sustainability maturity analyses can transform basic supplier sustainability information into actionable insights. Transactional engagement methods, such as SCoCs and specified supplier selection criteria, also play a key role. Procurement managers are encouraged to actively involve suppliers through structured, ongoing interactions such as sustainability-focused meetings and performance evaluations. Aligning these activities with internal training programs and organizational sustainability goals can significantly enhance supplier commitment.

Thirdly, collaborative engagement strategy presents considerable potential for achieving deeper supplier commitment to CSS. Buying companies with sufficient resources should build strategic, long-term collaborations through sustainability training programs, joint sustainability projects, and incentive mechanisms like financial awards or preferential procurement terms, which can effectively strengthen supplier commitment.

The findings also emphasize that when in a dominant position, buying companies should proactively leverage their power to ensure supplier commitment to CSS. They can effectively impose strict sustainability requirements through a combination of contractual obligations and strategic incentives. In contrast, smaller buying companies or those in BSRs where they are highly dependent on suppliers, should seek to increase their influence by joining industry-wide sustainability initiatives or collaborating with third-

party organizations, thereby sharing the responsibility and resources required to drive supplier sustainability engagement.

For contract manufacturing companies, leveraging customer influence provides a means to mitigate the structural limitations of the business model. Jointly defining and imposing CSS requirements with influential customers and maintaining open communication around sustainability objectives can enhance customer support and influence supplier commitment. Embedding customer-driven sustainability requirements into SSCM strategies and actively engaging in third-party or industry-wide sustainability initiatives can also significantly support contract manufacturer's in meeting their sustainability goals.

Finally, procurement managers should recognize and strategically manage personal relationships within BSR dynamics. In contexts where formal structures are insufficient, such as in contract manufacturing or countries with limited reporting standards, a focus on building trust-based, informal relationships is essential. Tailored communication and relationship-building strategies that respect cultural and relational nuances can significantly enhance the effectiveness of supplier sustainability engagement.

7.3 Limitations and suggestions for further research

Supplier engagement in ensuring commitment to CSS, and particularly the influence of BSR dynamic within it, remains under-researched. Several key limitations are acknowledged to clarify uncertainty inherent in this research. Most notably, this study specifically focused on Finnish manufacturing companies, limiting the applicability of its findings to other sectors or geographical contexts. Industries or countries outside this scope may adopt different approaches and encounter distinct challenges and outcomes in supplier sustainability engagement. Another notable limitation is the small sample size, which restricts the generalizability of the findings. Although the findings align closely with previous literature, the data collected from six interviews may not have reached sufficient saturation to reliably support future research. Moreover, the inherent subjectivity of interview-based data represents another challenge, as interviewees might unintentionally provide biased responses about their company's engagement practices, potentially affecting the accuracy or depth of the findings. Additionally, even though the interview questions were provided beforehand, interviewees might not have presented a fully comprehensive picture of actual practices. Lastly, the predetermined structure of the

interview design itself might have inadvertently limited the depth of responses, meaning some relevant factors might not have been mentioned by the interviewees despite their presence in practice.

This study analyses supplier sustainability engagement from the buying companies' perspective, without exploring the viewpoints of suppliers themselves. As such, it does not address how these strategies are perceived, experienced, or internalized by suppliers. This limited scope provides an important avenue for further research: explicitly incorporating the suppliers' perspective could yield deeper insights into how sustainability engagement influence suppliers' behaviour, commitment, and their internal sustainability practices. In particular, investigating suppliers' views on the role and impact of BSR dynamics would significantly advance understanding in the field.

Given that the findings reveal that the dynamics within BSRs evidently influence companies' ability to engage suppliers in sustainability, future research should also investigate how companies can actively develop and transform their relationships from arm's-length interactions toward strategic partnerships. Additionally, future research could explore the strategies companies use to effectively manage or balance dependence asymmetries within BSRs. Moreover, future research should examine how resource constraints affect sustainability engagement, specifically identifying cost-effective strategies suitable for smaller and medium-sized companies. Lastly, although somewhat beyond the scope of this research, the findings indicated that some companies also utilize SCoC to pass on CSS further upstream in their supply chains, attempting to ensure sub-supplier commitment. Future studies could investigate this further to enhance understanding of how sustainability commitments can be effectively ensured throughout complex supply chain networks.

References

Achrol, Ravi Singh – Reve, Torger – Stern, Louis W. (1983) The Environment of Marketing Channel Dyads: A Framework for Comparative Analysis. *Journal of Marketing*, Vol. 47 (4), 55–67.

Ageron, Blandine – Gunasekaran, Angappa – Spalanzani, Alain. (2012) Sustainable supply management: An empirical study. *International Journal of Production Economics*, Vol. 140, 168–182.

Ahi, Payman – Searcy, Cory. (2013) A Comparative Literature Analysis of Definitions for Green and Sustainable Supply Chain Management. *Journal of Cleaner Production*, Vol. 52, 329–341.

Ahmadi-Gh, Zahra – Bello-Pintado, Alejandro. (2024) Sustainability isomorphism in buyer–supplier relationships: The impact of supply chain leadership. *Business Strategy and the Environment*, Vol. 33 (4), 3635–3653.

Amaeshi, Kenneth M. – Osuji, Onyeka K. – Nnodim, Paul. (2008) Corporate social responsibility in supply chains of global brands: A boundaryless responsibility? Clarifications, exceptions and implications. *Journal of Business Ethics*, Vol. 81 (1), 223–234.

Asif, Muhammad. (2020) Supplier socioenvironmental compliance: A survey of the antecedents of standards decoupling. *Journal of Cleaner Production*, Vol. 246 (118956), 1–18.

Awan, Usama – Kraslawski, Andrzej – Huiskonen, Janne. (2017) Understanding the Relationship between Stakeholder Pressure and Sustainability Performance in Manufacturing Firms in Pakistan. *Procedia Manufacturing*, Vol. 11, 768–777.

Awan, Usama – Kraslawski, Andrzej – Huiskonen, Janne. (2018) Buyer-supplier relationship on social sustainability: Moderation analysis of cultural intelligence. *Cogent Business & Management*, Vol. 5 (1429346), 1–20.

Awan, Usama – Sroufe, Robert – Kraslawski, Andrzej. (2019) Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. *Journal of Cleaner Production*, Vol. 226, 172–185.

Bag, Surajit – Rahman, Muhammad Sabbir – Naude, Peter – Srivastava, Gautam. (2024) Examining Buyers' Attitudes Toward Climate Change Policy and Their Firms'

Corporate Reputation: The Serial Mediation Effect of Suppliers' Engagement and Commitment. *Journal of Business-to-Business Marketing*, 1–24.

Busse, Christian – Schleper, Martin C. – Niu, Menglei – Wagner, Stephan M. (2016) Supplier Development for Sustainability: Contextual Barriers in Global Supply Chains. *International Journal of Physical Distribution & Logistics Management*, Vol. 46 (5), 442–468.

Butt, Atif Saleem – Alghababsheh, Mohmmad – Sindhwani, Rahul – Gwalani, Hema. (2024) Role of Supplier Engagement to Reduce Scope 3 Emissions in Circular Supply Chains. *Business Strategy and the Environment*, 1–14.

Cassell, Catherine – Symon, Gillian. (2004) Essential guide to qualitative methods in organizational research. *SAGE*.

Chen, Yinfei – Chen, Injazz J. (2019) Mixed sustainability motives, mixed results: the role of compliance and commitment in sustainable supply chain practices. *Supply Chain Management: An International Journal*, Vol. 24 (5), 622–636.

Cox, Andrew. 2004. The art of the possible: relationship management in power regimes and supply chains. *Supply Chain Management: An International Journal*, Vol. 9 (5), 346–356.

Dahlmann, Frederik – Roehrich, Jens K. (2019) Sustainable supply chain management and partner engagement to manage climate change information. *Business Strategy and the Environment*, Vol. 28 (8), 1632–1647.

Dahlmann, Frederik – Brammer, Stephen – Roehrich, Jens K. (2023) Navigating the 'Performing-Organizing' Paradox: Tensions between Supply Chain Transparency, Coordination, and Scope 3 GHG Emissions Performance. *International Journal of Operations & Production Management*, Vol. 43 (11), 1757–1780.

Darnall, Nicole – Seol, Inshik – Sarkis, Joseph. (2009) Perceived Stakeholder Influences and Organizations' Use of Environmental Audits. *Accounting, Organizations and Society*, Vol. 34 (2), 170–187.

Dyer, Jeffrey H. – Singh, Harbir. (1998) The Relational view: Cooperative Strategy and Sources of Interorganizational Competitive Advantage. *The Academy of Management review*, Vol. 23 (4), 660–679.

Eriksson, Päivi – Kovalainen, Anne. (2008) Qualitative Methods in Business Research (1st ed.). *SAGE Publications*.

Foerstl, Kai – Reuter, Carsten – Hartmann, Evi – Blome, Constantin. (2010) Managing supplier sustainability risks in a dynamically changing environment—Sustainable supplier management in the chemical industry. *Journal of Purchasing and Supply Management*, Vol. 16 (2), 118–130.

Galletta, Anne. (2012) Mastering the semi-structured interview and beyond: from research design to analysis and publication (1st ed.). *New York University Press*.

Gillham, Bill. (2000) Case Study Research Methods (1st ed.). *Continuum Research Methods Series*.

Gold, Stefan – Seuring, Stefan – Beske, Philip. (2010) Sustainable supply chain management and inter-organizational resources: A literature review. *Corporate Social Responsibility and Environmental Management*, Vol. 17 (4), 230–245.

Govindan, Kannan – Aditi – Darbari, Jyoti Dhingra – Kaul, Arshia – Jha, PC. (2021) Structural Model for Analysis of Key Performance Indicators for Sustainable Manufacturer–Supplier Collaboration: A Grey-decision-making Trial and Evaluation Laboratory-based Approach. *Business Strategy and the Environment*, Vol. 30 (4), 1702–1722.

Grimm, Jörg H. – Hofstetter, Joerg S. – Sarkis, Joseph. (2014) Critical factors for sub-supplier management: A sustainable food supply chains perspective. *International Journal of Production Economics*, Vol. 152, 159–173.

Grimm, Jörg H. – Hofstetter, Joerg S. – Sarkis, Joseph. (2016) Exploring sub-suppliers' compliance with corporate sustainability standards. *Journal of Cleaner Production,* Vol. 112, 1971–1984.

Grimm, Jörg H. – Hofstetter, Joerg S. – Sarkis, Joseph. (2023) Corporate sustainability standards in multi-tier supply chains – an institutional entrepreneurship perspective. *International Journal of Production Research*, Vol. 61 (14), 4702–4724.

Guest, Greg – MacQueen, Kathleen M. – Namey, Emily E. (2012) Applied thematic analysis. *SAGE Publications*.

Gulati, Ranjay – Wohlgezogen, Franz – Zhelyazkov, Pavel. (2012) The two facets of collaboration: Cooperation and coordination in strategic alliances. *Academy of Management Annals*, Vol. 6 (1), 531–583.

Harland, Christine – Brenchley, Richard – Walker, Helen. (2003) Risk in Supply Networks. *Journal of Purchasing and Supply Management*, Vol. 9 (2), 51–62.

Helper, Susan – Kiehl, Janet. (2004) Developing Supplier Capabilities: Market and Non-market Approaches. *Industry and Innovation*, Vol. 11 (1–2), 89–107.

Hilal, AlYahmady Hamed – Alabri, Saleh Said. (2013) Using NVivo for Data Analysis in Qualitative Research. *International Interdisciplinary Journal of Education*, Vol 2 (2), 181–186.

Jajja, Muhammad Shakeel Sadiq – Asif, Muhammad – Montabon, Frank– Chatha, Kamran Ali. (2019) Buyer-supplier relationships and organizational values in supplier social compliance. *Journal of Cleaner Production*. Vol. 214, 331–344.

Jap, Sandy D. (1999) Pie-expansion efforts: Collaboration processes in buyer-supplier relationships. *Journal of Marketing Research*, Vol. 36 (4), 461–75.

Johnston, David A. – Murat Kristal, Mehmet. (2008) The climate for co-operation: buyer-supplier beliefs and behavior. *International Journal of Operations & Production Management*, Vol. 28 (9), 875–898.

Kannan, Vijay R. – Tan, Keah Choon. (2006) Buyer-Supplier Relationships: The Impact of Supplier Selection and Buyer-Supplier Engagement on Relationship and Firm Performance. *International Journal of Physical Distribution & Logistics Management*, Vol. 36 (10), 755–775.

Kashmanian, Richard M. (2018) Supplier Codes of Conduct: Company Authorization of Subcontractors. *Environmental Quality Management*, Vol. 27 (4), 9–27.

Klassen, Robert D. – Vachon, Stephan. (2003) Collaboration and evaluation in the supply chain: the impact on plant-level environmental investment. *Production and Operations Management*, Vol. 12 (3), 336–352.

Koplin, Julia – Seuring, Stefan – Mesterharm, Michael. (2007) Incorporating sustainability into supply management in the automotive industry – the case of the Volkswagen AG. *Journal of Cleaner Production*, Vol. 15 (11–12), 1053–1062.

Leung, Lawrence. (2015) Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, Vol. 4 (3), 324–327.

Lintukangas, Katrina – Arminen, Heli – Kähkönen, Anni-Kaisa – Karttunen, Elina. (2023) Determinants of Supply Chain Engagement in Carbon Management. *Journal of Business Ethics*, Vol. 186, 87–104.

Liu, Lingxuan – Zhang, Min – Ye, Weili. (2019) The adoption of sustainable practices: A supplier's perspective. *Journal of Environmental Management*, Vol. 232, 692–701.

Lo, Sonia M. – Zhang, Shanshan – Wang, Zhiqiang – Zhao, Xiande. (2018) The impact of relationship quality and supplier development on green supply chain integration: A mediation and moderation analysis. *Journal of Cleaner Production*, Vol. 202, 524–535.

Murfield, Monique Lynn – Tate, Wendy L. (2017) Buyer and supplier perspectives on environmental initiatives: Potential implications for supply chain relationships. *The International Journal of Logistics Management*, Vol. 28 (4), 1319–1350.

Naffin, Jule – Klewitz, Johanna – Schaltegger, Stefan. (2023) Sustainable development of supplier performance. An empirical analysis of relationship characteristics in the automotive sector. *Corporate Social Responsibility and Environmental Management*, Vol 30 (4), 1–17.

Najjar, Mohammad – Yasin, Mahmoud M. (2023) The Management of Global Multi-Tier Sustainable Supply Chains: A Complexity Theory Perspective. *International Journal of Production Research*, Vol. 61 (14), 4853–4870.

Noble, Helen – Smith, Joanna. (2015) Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, Vol. 18 (2), 34–35.

Patil, Vrushali – Tan, Tarkan – Rispens, Sonja – Dabadghao, Shaunak – Demerouti, Evangelia. (2022) Supplier sustainability: A comprehensive review and future research directions. *Sustainable Manufacturing and Service Economics*, Vol. 1 (100003), 1–14.

Pereira, Michele M. O – Silva, Minelle E. – Hendry, Linda C. (2023) Developing Global Supplier Competences for Supply Chain Sustainability: The Effects of Institutional Pressures on Certification Adoption. *Business Strategy and the Environment*, Vol. 32 (7), 4244–4265.

Plambeck, Erica L. (2012) Reducing greenhouse gas emissions through operations and supply chain management. *Energy Economics*, Vol. 34 (Supplement 1), S64–S74.

Qiao, Jianqi – Li, Suicheng – Capaldo, Antonio. (2022) Green Supply Chain Management, Supplier Environmental Commitment, and the Roles of Supplier Perceived Relationship Attractiveness and Justice. A Moderated Moderation Analysis. *Business strategy and the environment*, Vol. 31 (7), 3523–3541.

Reinartz, Werner J. – Berkmann, Manuel. (2017) From Customer to Partner Engagement: A Conceptualization and Typology of Engagement in B2B. *Customer Engagement Marketing*, 243–268.

Saldana, Johnny. (2011) Fundamentals of Qualitative Research (1st ed.). *Oxford University Press*.

Sancha, Cristina – Wongb, Christina W.Y. – Gimenez, Cristina. (2019) Do dependent suppliers benefit from buying firms' sustainability practices? *Journal of Purchasing and Supply Management*, Vol. 25 (100542), 1–10.

Sarkis, Joseph. (2012) A Boundaries and Flows Perspective of Green Supply Chain Management. *Supply Chain Management*, Vol. 17 (2), 202–216.

Schniederjans, Dara G. – Khalajhedayati, Mehrnaz. (2021) Competitive Sustainability and Stakeholder Engagement: Exploring Awareness, Motivation, and Capability. *Business Strategy and the Environment*, Vol. 30 (2), 808–824.

Scott, Charles – Westbrook, Roy. (1991) New Strategic Tools for Supply Chain Management. *International Journal of Physical Distribution & Logistics Management*, Vol. 21 (1), 23–33.

Sharma, Amalesh – Borah, Sourav Bikash – Haque, Tanjum – Adhikary, Anirban. (2024) Engaging Customers and Suppliers for Environmental Sustainability: Investigating the Drivers and the Effects on Firm Performance. *Journal of the Academy of Marketing Science*, Vol. 1.

Stake, Robert E. (2005) Multiple Case Study Analysis. *Guilford Press*.

Stocker, Fabricio – Arruda, Michelle P. – Mascena, Keysa M. C. – Boaventura, João M. G. (2020) Stakeholder Engagement in Sustainability Reporting: A Classification Model. *Corporate Social Responsibility and Environmental Management*, Vol. 27 (5), 2071–2080.

Tidy, Martin – Wang, Xiaojun – Hall, Mark. (2016) The role of Supplier Relationship Management in reducing Greenhouse Gas emissions from food supply chains: supplier engagement in the UK supermarket sector. *Journal of Cleaner Production*, Vol. 112, 3294–3305.

Tuomi, Jouni – Sarajärvi, Anneli. (2018) Laadullinen tutkimus ja sisällönanalyysi (Uudistettu laitos). *Kustannusosakeyhtiö Tammi*.

Ukko, Juhani – Saunila, Minna – Nasiri, Mina – Rantala, Tero. (2021) The importance of sustainability engagement in small businesses supplier collaboration. *Sustainable Development*, Vol. 30 (1), 1–9.

Vaughn, Porcia – Turner, Cherie. (2016) Decoding via Coding: Analyzing Qualitative Text Data Through Thematic Coding and Survey Methodologies. *Journal of Library Administration*, Vol. 56 (1), 41–51.

Vivek, Shiri D. – Dalela, Vivek – Ahmed, Muhammad Sohail. (2022) A framework for partner engagement: Episodes in the life of interorganizational partnerships. *Journal of Marketing Theory and Practice*, Vol. 30 (4), 476-493.

Wieland, Andreas – Wallenburg, Carl Marcus. (2013) The influence of relational competencies on supply chain resilience: a relational view. *International Journal of Physical Distribution & Logistics Management*, Vol. 43(4), p. 300–320.

Wohlgezogen, Franz – Hofstetter, Joerg S. – Brück, Frank – Hamann, Ralph. (2021) Supplier Engagement in Sustainability Programs: A Field Experiment of Enabling Versus Coercive Formalization. *Organization & environment*, Vol. 34 (3), 435–458.

Wu, Aihua – Li, Tianfu. (2020) Gaining Sustainable Development by Green Supply Chain Innovation: Perspectives of Specific Investments and Stakeholder Engagement. *Business Strategy and the Environment*, Vol. 29 (3), 962–975.

Yen, Yu-Xiang. (2018) Buyer–supplier collaboration in green practices: The driving effects from stakeholders. *Business Strategy and the Environment*, Vol. 27 (8), 1666–1678.

Yepeng, Wu – Jiao, Yuanyuan – Hui, Xu – Lyu, Chongchong. (2022) The more engagement, the better? The influence of supplier engagement on new product design in the social media context. *International Journal of Information Management*, Vol. 64, 102475.

Appendices

Appendix 1 Interview guideline

Introduction

- Introducing the researcher, outlining the study and specifying its research objectives
- Assuring confidentiality and anonymity, and informing the interviewee about the recording and transcription process

Background and general questions

- What is your role in the company?
- What kind of procurement organization does your company have?
- Approximately how many suppliers does your company have?
    - How many of these are your key suppliers?

Supplier relationships

- With what kind of suppliers does your company aspire to establish deeper and more engaged, long-term relationships?
    - How would you describe the current power dynamic (i.e., your company's dependence on the supplier, and vice versa) of these supplier relationships?

Corporate sustainability standards

- What corporate sustainability standards (i.e., environmental and social requirements) has your company established for its suppliers?
    - How are these standards communicated to the suppliers?
- How does your company gather information of its suppliers' performance in regard to your corporate sustainability standards?
    - How is this information processed internally?

Supplier sustainability management and engagement

- What methods does your company use to manage and promote its suppliers' commitment to your corporate sustainability standards?
    - Do the methods vary depending on the supplier?
        - If so, could you please provide examples of what methods does your company use for which types of supplier relationships?
    - In which supplier relationships are these methods most effective?
    - For what purposes or outcomes does your company aim at by using these methods?
    - In what time frames does your company use these methods?
- Does your company aim to manage the sustainability performance of your second-tier or higher-level sub-suppliers?
- Does your company involve other stakeholders to ensure your suppliers' commitment to your corporate sustainability standards?
    - If yes, could you please elaborate which stakeholders and how do you involve them?
- Has your company implemented specific formal programs or initiatives as a part of your supply chain management strategy to engage suppliers in your corporate sustainability standards?
    - If yes, could you please elaborate what kind of programs or initiatives?
- How could supplier engagement be developed in your company in terms of ensuring your suppliers' commitment to your corporate sustainability standards?