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The process of supplier selection based on the environmental aspect of Corporate Social Responsibility

A case study of a multinational company in Vienna

Qualitative Study

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Table of Contents

List of tables & figures

List of abbreviations

CSR: Corporate Social Responsibility

TCT: Transaction Cost Theory

SCM: Supply Chain Management

TBL: Triple Bottom Line

MNE: Multinational Enterprise

EU: European Union

R&D: Resource and Development

1. Introduction

Over the last few years, environmental sustainability has increased eminence in the international business environment. As industrial activities and the exploitation of natural resources drive countries to more unsustainable conditions, there is a need for improvement within environmentally conscious practices, especially in the global supply chain management (SCM) (Soundararajan et al., 2014). Due to international competition, outsourcing activities and short product life cycles, supply chain management is getting much attention and importance (Mette et al., 2009). Companies are becoming progressively aware of the positive effects of environmental responsibility practices and the ability to withstand solid international competitors. Responding to these developments, companies adopt Corporate Social responsibility (CSR) practices as they feel responsible for the conditions and context under which their products are being produced and transported. Nevertheless, stakeholders such as consumers, shareholders, NGOs and trade unions manifest their increased interest in environmental and social concepts such as supply chain sustainability, triple bottom line, corporate greening and green supply and demand their implementation in companies' policies and practices (Mette et al., 2009).

CSR was revealed by the launch of ISO 26000 in November 2010, suggesting that CSR will be a topic of much importance in the upcoming years for supply chain businesses. The increasing importance of the role of CSR is more significant than any other organizational function in addressing social and environmental issues (Tate et al., 2010, as cited in Perry et al., 2012). The company's management is critical in supply chains, especially around supplier selection, logistics and purchasing decisions. They build the conditions under which a company is operationalizing with sustainability towards the environment. Thus, a business's CSR level is defined by its overall supply chain activities. The challenge is whether the company and its suppliers comply with labour rights and sustainable conditions throughout the production line. The global sourcing networks, meaning buying raw materials and components mostly at lower prices from around the world to assemble a product in a country, can reduce the supply chain visibility and impact the control of ethical issues in lower supplier lines. In addition, because CSR is a complex process and includes relationships and operations with different actors in different forms, it may be a challenge to find the right balance between CSR practices and competitive advantage, which is the goal of any organization in enhancing the competitiveness and simultaneously operating in a responsible way (Acquier et al., 2017). In this context, CSR requires cooperation and coordination with multiple participants, suppliers, contractors, distributors, stakeholders and clients. Therefore, a collective engagement occurs where different actors and stakeholders constitute a simple trade-off between costs and policies of CSR practices. CSR is closely tied to transaction and cooperation costs, enabling firms to gain a competitive edge by integrating economic and social value creation. Businesses can build stronger relationships with stakeholders, such as customers and suppliers, by engaging in CSR initiatives. This can result in more trust and collaboration, decreasing transaction and cooperation expenses. Thus, managers are asked to proceed with a cost-and-benefit analysis to get a good overview of the demand for CSR activities. If the costs of satisfying these activities are constitutive, this could create a competitive strategy. This could be seen as transforming social problems into business opportunities by contributing to the global society and solving critical environmental and societal challenges while being profitable. Competitive gains are meant for reputational improvements, market innovations, cost reductions, and increased employee motivation which can be obtained from CSR activities (Acquier et al., 2017).

The problem that appears is related to the conceptual nature of CSR, as companies show to engage in CSR practices in different ways, and their approaches differentiate from one another (Öberseder et al., 2013). That may be related to the fact that CSR has been often criticized for being a broad and complex concept (Mohr et al., 2001 as cited in Öberseder et al., 2013) since more than 40 definitions are being developed in the literature (Dahlsrud, 2008 as cited in Öberseder et al., 2013). For that reason, this study will establish the role of the environmental aspect of CSR in supplier selection. In addition, as mentioned above, CSR requires the cooperation of various actors with different interests. In an organizational context, a central role plays the process of how collaboration with other independent business partners potentially located in different areas around the world can corporately adapt and add value to the environmental and social practices of the firm. Hence, this master thesis aims to fill the literature gap in the supplier selection process based on the environmental aspect of CSR practices in connection with the different multi-stakeholder interests. Most studies focus on the various CSR issues without getting into details of the CSR practices and the supplier selection process, including multi-stakeholder perspectives.

The selection of suppliers based on CSR practices is a decisive process in supply chain management. It is not only a matter of cost minimization but has become more complex in achieving environmental practices. For that reason, multinational corporations are adopting CSR policies. They are trying to find the perfect balance between applying responsible techniques and developing competitive initiatives to achieve a stable position in the highly competitive business environment. Policies, including CSR practices, are perceived as strategic issues for creating shared values between society and the company and achieving competitive advantage (Acquier et al., 2017). A manager has to handle and take decisions driven by the ownership interests obtained by its economic investment. On the one hand, investors' highest priority is maximizing their economic gains. Yet this presumption has undergone numerous criticisms as CSR involves multiple stakeholders, and each stakeholder embraces his interests which should be partly familiar with the interests of the other stakeholders to create shared values and establish value for the entire supply chain (Alford &

Naughton et al., 2002, as cited in Soundararajan et al., 2014). Transaction cost theory (TCT) can be linked to managers' decision-making process in various ways; TCT recognizes that various costs exist and arise from different economic transactions, such as information and research costs from the supplier selection process. Managers are primarily considering the interests of investors in maximizing profits which may lead to higher transaction costs. This can happen when a company is sourcing materials from suppliers with poor CSR practices, which may cause extra costs from reputational damage and loss of customers' trust. TCT recognizes the economic transactions involving various stakeholders and their interests, which may only sometimes be aligned. This means that each stakeholder may have different incentives, goals, and preferences that can affect the transaction's outcome and the company's overall performance. For example, a company may want to outsource its manufacturing to a supplier in another country to reduce costs. The company's shareholders may support this decision because it could increase profits and shareholder value. Still, the supplier, on the other hand, may have incentives to compromise on quality or safety standards to reduce costs or increase profits, which could lead to adverse outcomes for the company's customers and reputation. For that reason, managers are asked, in the context of CSR, to balance all different interests by building collaborative relationships with suppliers, creating shared values, and reducing overall transaction costs (Perry et al., 2012). The diverse interests of stakeholders may contain some challenges which will be addressed in this master thesis, as stakeholders do not always provide information transparency along the supply chain, and this could threaten the CSR practices. Global supply chains are complex and include various activities such as selecting raw materials, their design, process, manufacture, packaging, logistics and delivery to end customers (Perry et al., 2012). CSR has, therefore, an impact on managers' decision-making process, which is simultaneously linked to the transaction costs associated with the different interests of stakeholders and economic transactions.

1.1 Research Gap & Research Question

This study aims to investigate how firms based on the environmental aspect of CSR practices proceed with selecting their suppliers. Managers often need help choosing suppliers who will not increase the firms' purchasing costs. However, when setting CSR as a high priority, costs should not be the leading indicator in the supplier selection process (Govindan et al., 2018). The reason for this master's thesis is to shed light on the main criteria based on which companies adopting environmental CSR practices proceed with supplier selection. It will be investigated based on the literature on CSR and supply chain practices, the dynamics of environmental practices and the working conditions of a multinational company specializing in energy management and automation in Vienna. By integrating concepts of transaction costs theory, CSR and supply chain management, a qualitative study in the form of a case study will be conducted to understand the challenges of CSR in supply chains.

The research question of this master thesis is the following:

- What are the criteria for supplier selection in a multinational company focusing on the environmental aspect of CSR practices?

The research question will be answered with the support of the Transaction Cost Theory (TCT), which provides a good lens for evaluating the effectiveness of CSR in supply chains. It can give an accurate elaboration and explanation of how CSR policies work for firms. TCT supports that transacting is the critical factor influencing the development of markets, with transaction costs being the costs of exchanging in a trading or cooperation relationship (Acquier et al., 2017). Transaction cost theory gives a good overview of how firms choose between different governance structures when entering into transactions with other firms or organizations. Companies should choose the governance structure that helps them minimize transaction costs, including costs associated with negotiating and enforcing contracts, coordinating and communicating with other party's interests, and monitoring and verifying compliance. Based on TCT, firms adopt CSR policies as long as customers and stakeholders are ready to pay and "invest" in their products and services. CSR policies are considered strategic issues creating shared value between the stakeholders and the society. This motivates the firm's competitiveness while improving the social and environmental issues (Acquier et al., 2017). In addition, TCT considers the multiple forms of cooperation and coordination of suppliers, clients, companies and distributors. In supplier selection, TCT could be used to understand how a company might evaluate the transaction costs associated with different suppliers and how these costs influence the supplier selection process. In particular, if a company chooses to prioritize suppliers who are more transparent and reliable regarding their CSR practices, this could reduce the costs of monitoring and verifying compliance of their suppliers' processes, as the company does not need to invest as much resources in these activities. Overall, TCT could provide a helpful perspective on the trade-offs that a company might make when selecting suppliers based on CSR practices. One factor affecting transaction costs in supplier selection is the transparency and reliability of a supplier's CSR practices.

The research gap of the following thesis focuses on how TCT can be applied to supplier selection decisions that are set as priority environmental CSR practices and the role of multiple managers in the process. Specifically, it will investigate how different types of transaction costs, such as information costs, negotiating and contracting processes with suppliers, etc., are impacted by supplier selection based on environmental CSR practices. In addition, it will be investigated how a multinational company navigates the tensions between maximizing economic gains and fulfilling its environmental responsibilities and the impact of this on supplier selection decisions. The current literature on supplier selection and CSR practices needs to include applying transaction costs theory (TCT) in this context. This research gap is significant because TCT provides a valuable framework for understanding the costs and benefits of different supplier selection decisions. By examining how TCT can be applied to supplier selection decisions that prioritize environmental CSR practices, this study aims to understand better the role of transaction costs in sustainable supplier selection practices. Furthermore, the study will explore how a multinational company navigates the tensions between maximizing economic gains and fulfilling its environmental responsibilities in the supplier selection process. The findings of this study could have important implications for other companies seeking to adopt sustainable supplier selection practices. Despite the growing importance of environmental practices in supplier selection decisions, there still needs to be empirical research exploring how TCT can be applied to this context. Specifically, managers need to understand better managers' role in promoting the company's environmental concerns to suppliers and how potential cooperation can contribute to reducing transaction costs and creating shared value. In addition, more is needed to know about how multinational companies navigate the complex trade-offs between environmental responsibility and economic considerations in the supplier selection process. This research gap is significant in the context of international companies, where complex global supply chains make it challenging to ensure that suppliers adhere to environmental CSR standards. This research aims to fill the existing gaps in the literature by exploring the application of TCT in the supplier selection process concerning environmental CSR. It will offer valuable insights and contribute to advancing efficient and sustainable supply chain practices.

Nevertheless, the existing literature on supplier selection and CSR practices has certain limitations that must be addressed. Past research has primarily concentrated on examining the factors influencing suppliers' adoption of CSR practices and the advantages these practices bring to companies. Nonetheless, further investigation is required concerning the influence of transaction costs on supplier selection choices that emphasize environmental CSR practices and strategies for managers to effectively address the conflicts between optimizing economic benefits and fulfilling environmental obligations. (Acquier et al., 2017). Thus, this study aims to address these limitations by examining the role of TCT in sustainable supplier selection practices in the context of a multinational corporation and how managers can navigate the trade-offs between economic gains and environmental responsibilities.

A case study of a multinational company will be conducted to explore its supplier selection criteria. The company has been named one of the best global sustainable supply chain organizations, and its suppliers come from all over the globe. The company has earned recognition through the ISO 9001 certification, affirming its adherence to a quality management system (QMS). This certification underscores the company's commitment to delivering tailored services and products, aligning with customer expectations and regulatory standards.

2. Theoretical Background

In this chapter, we delve into the theoretical background that underpins the research on supplier selection processes based on the environmental aspect of CSR. The central lens through which we analyze and comprehend the complexities of this subject is Transaction Cost Theory (TCT). This theory provides a comprehensive framework to explore the decision-making processes in choosing suppliers and managing supplier relationships, particularly in environmental sustainability.

The research focuses on understanding how a multinational company strategically balances various factors when selecting suppliers. The goal is to shed light on the company's approach to evaluating and qualifying suppliers, its strategies for managing supplier relationships, and the role of environmental considerations in shaping these decisions. By employing TCT as our theoretical lens, we can explore how firms navigate the complexities of supplier selection and seek to minimize transaction costs related to discovering business partners, negotiating agreements, and monitoring compliance (Acquier et al., 2017).

2.1 Transaction Cost Theory

Transaction cost theory (TCT) is central in analyzing and comprehending how managers decide on internalizing business operations and outsourcing activities. TCT clarifies why businesses are paying attention to long-term relationships to produce products and services and how in times of imperfect information, limited rationality, uncertainty or opportunistic behaviours, any economic activity could generate extra transaction costs and lead to coordination or cooperation problems between partners. Therefore, governance schemes are required to manage risks and solve problems between partners (Acquier et al., 2017). Three main transaction costs categories are being proposed by TCT relevant to CSR strategies; the costs of discovering business partners (such as suitable suppliers who fulfil the CSR requirements), the costs arising from negotiation agreements (such as the expenses/efforts involved in reaching mutually acceptable terms and conditions with suppliers) and the costs of monitoring and enforcing the compliance with the agreements made (Shelanski & Klein, 1995, as cited in Acquier et al., 2017). Transaction costs can be extremely high in volume, observed in frequent transactions between business partners where a higher level of asset specificity exists. Specific assets are physical or human investments that are not redistributable as they are specialized and connected to a unique task. These assets are attached to a place, a person or a physical asset; thus, they have a value only within the relationship between contracting parties and are hard to transfer or modify. Asset specificity entails heightened interdependence between business collaborators, which might lead to hold-up expenses if partners prioritize their interests and leverage their bargaining power to minimize their input while maximizing their gains. This usually occurs as parties remain legally independent, owning their assets and thus shaping autonomous decisions (Acquier et al., 2017). In the context of this research on how firms choose suppliers based on CSR, asset specificity can explain the potential challenges and costs involved in forming partnerships with suppliers with different views or levels of commitment to CSR. The idea of asset specificity suggests that the more interdependent partners become, the greater the potential for disagreements that can lead to higher costs for both the firm and the supplier. This is relevant for this research as CSR is a topic that can create differences in perspectives and goals between the two parties.

Consequently, different perspectives between the firm and the supplier can lead to challenges forming partnerships aligned with CSR goals. Therefore, companies should reconsider how they can mitigate these challenges by considering the level of asset specificity in their supplier selection process. For instance, switching suppliers incur high costs if a company relies on a unique supplier for a crucial component. The supplier can exploit this to negotiate better terms based on his interests. Similarly, a company dependent on a specialized eco-friendly material supplier might struggle to switch without compromising CSR goals. This underscores the need for firms to assess such risks and strategize to reduce dependency, safeguarding CSR commitments.

Encountering cooperation costs in the implementation of CSR shows that CSR strategies and policies do not constitute the private and autonomous regulation of the global value chain (King et al., 2007, as cited in Acquier et al., 2017). The governance of a supply chain can be differentiated from fully vertically integrated to completely independent. The first one refers to the execution of the entire business functions in-house and can ensure that its CSR policies are implemented throughout the entire supply chain. However, a company operating in a completely independent supply chain must rely on third-party suppliers to implement its CSR policies, which can be challenging and costly. In this case, the focal firm has the role of a coordinator by outsourcing its business functions (Perry et al., 2012). Therefore, the differentiation between fully vertically integrated and utterly independent supply chains affects the cooperation and coordination needed to implement CSR policies successfully. By understanding the governance structure of the supply chain, firms can better understand the potential challenges and costs associated with implementing CSR in their supplier selection process and make informed decisions accordingly (Carter & Rogers et al., 2008, as cited in Perry et al., 2012).

As the literature suggests, CSR can be, on the one side, a source of economic and social progress but, on the other side source of additional costs as new processes need to be integrated along the supply chain. CSR strategies are complex, and their implementation and adoption are also in the supply chains. Transaction cost theory tries to shed light on the relationship between the firm's chain members and their stakeholders, particularly the hidden risks and challenges when implementing CSR strategies by the suppliers with the support of a firm. CSR brings costs, and their nature is primarily organizational/ cooperation costs. However, TCT suggests that potential cooperation between chain members and stakeholders/ suppliers should not be taken for granted, even with business opportunities. The possibility of behaviour conditions misusage among a firm's members with the willingness to take advantage of the shared value highly exists. A fair collaboration and adoption of CSR strategies should not be taken as a starting point; it should be rather perceived as a goal that should be reached and accomplished (Acquier et al., 2017). When selecting suppliers based on CSR criteria, firms need to consider the potential challenges related to the cooperation and behaviour of chain members. They must ensure that their selected suppliers are committed to CSR policies and willing to cooperate in their implementation. Therefore, companies should take a strategic and goal-oriented approach to implementing CSR policies in their supply chains rather than assuming that cooperation and adoption of CSR strategies will occur naturally. They must work collaboratively with suppliers and stakeholders to implement CSR policies effectively and achieve the intended results.

The opinions around CSR strategies vary. On the one side, CSR can be seen as a generator of extra costs, which can reduce profits, or it can even be the outcome of an agency conflict where shareholders and managers possess different interests and are influenced by their preferences to create relationships with specific stakeholders (Ghoul et al., 2017). The first can be justified as adopting recycling programs and utilising natural resources to reduce pollution and CO2 emissions can be very costly for a firm, demanding extra capital/ resources, training and unique know-how. Though, this can be seen as a strategy or even an investment that can generate profits in the future. Intangible resources such as a good reputation and brand name can attract new environmentally friendly customers and increase the firm's profitability and competitive advantage. CSR can help the firm obtain resources and additional external support from suppliers. As trust increases, CSR can improve the company's specific assets, such as reputation, brand name and customer loyalty (Ghoul et al., 2017). In addition, CSR supports the firm's competitive advantage, increases the firm's resources and creates long-trustworthy relationships with customers and other stakeholders. CSR can be seen as an opportunity to reduce information asymmetry between shareholders and stakeholders in different aspects such as environmental protection, social welfare and community well-being (Ghoul et al., 2017). CSR aims to support the community as a whole and increase the trust and loyalty of the customers. It is worth mentioning that shared value is also created where the firm's and stakeholders' interests unify. It has even been proved that CSR reduces a firm's risks and helps it survive during insecurity (Miller et al., 2009; Saxton, 1997, as cited in Ghoul et al., 2017). Finally, the nature of CSR creates long-term relationships between the firm and its suppliers. By establishing contracts, including the fulfilment of CSR requirements, the supplier feels more secure in terms of losses and high costs as receiving the firm's support, training, and financial contracts, which increases the revenues and reputation of suppliers as being environmentally and socially friendly. Therefore, CSR supports, on the one side, suppliers' eagerness to extend trade credit and, on the other side, the consumers' confidence in exchange agreements (Ghoul et al., 2017).

Therefore, adopting CSR requires initiatives and investments in the production and evaluation processes. Specifically, CSR is associated with physical assets, which evaluate the pollution danger of material production or organizational and intangible assets, referring to CSR certificates and behavioral standards created by suppliers. These assets are considered unique in the value chain of a single firm and use their know-how and resources to produce and conform in a socially responsible way (Acquier et al., 2017). Consequently, firms deciding to adopt and implement CSR practices are being informed of the high transaction costs that the firm can potentially get imposed. Managers are asked to evaluate CSR strategies and investments in socially responsible strategies. In addition, they are asked to evaluate these investments and whether they will lead to economic compensation and competitive advantage. Implementing highly environmental strategies can be risky in the sense that the company should be aware of the investments and the potential extra costs that will occur to fulfil the requirements of the demanding customers and stakeholders; for example, additional costs can occur due to new environmental processes such as removing chemicals from raw materials, finding new suppliers, clients and create strategies of promotion/ marketing (Acquier et al., 2017). When considering a focal/ central company, an important asset is the high bargaining power and the ability to impose specific codes of behaviour in the business world. Langer international buyers cooperating with suppliers develop the ideal conditions for implementing strategic CSR policies. Under the presence of high environmental issues, leading firms are getting suppliers motivated to implement better working conditions and "cleaner" production processes in supply chains. This could hide some dangers that could threaten the implementation of CSR strategies as one focal firm has the power to impose behaviour standards and pricing conditions, which can lead to an unjust distribution of CSR strategies' benefits. As Acquier (et al., 2017) mention, leading firms can ask their suppliers to change their employment policies in a more socially responsible way by hiring permanent employees working full time and paying compensation after layoffs. This does not guarantee an efficient work result, and for the supplier's side, it could be financially a burden to continue with such responsible employment policies. On the contrary, for the firm's side, this would mean the leadership of CSR values (Kaplinsky et al., 2012, as cited in Acquier et al., 2017).

Summarizing, Transaction Cost Theory is being used as the theoretical framework to guide and structure this research. TCT argues that firms make decisions about their production and procurement activities based on the costs of transactions. In the context of supplier selection, the theory suggests that firms will choose suppliers who offer the lowest transaction costs, including costs associated with negotiating contracts, monitoring supplier performance, and resolving disagreements. By using the TCT, I aim to understand how the firm I have chosen for my research balances the costs of different transactions associated with choosing a supplier, including those associated with the aspect of environmental CSR practices mentioned above. This framework will help me analyze and understand the trade-offs that firms face when choosing suppliers and recognise the elements impacting their choices.

2.2 Corporate social responsibility

This section will explore the concepts of CSR and the supplier selection process based on these principles. The criteria and principles under which supplier selection occurs in a multinational company will be investigated. The first subsection will focus on the definition of CSR in different contexts. The second subsection will focus on selecting suppliers based on CSR practices and how companies proceed with the supplier selection process. This section aims to shed light on the existing literature and detect the existing literature gaps.

2.2.1 Definition of corporate social responsibility

CSR is inevitably a crucial aspect of success in international business and a core aspect of regulative activities. CSR explores ways businesses can be environmentally and socially responsible and accountable to society. The definition of CSR is complex, and its evolvement commits to the amelioration of the social legitimacy of organizations and is highly adaptable to economic objectives (Testa et al., 2018). CSR has four constituents: ethics, corporate social responsibility, sustainability and corporate governance. CSR is about operating a business that meets or exceeds the ethical, legal, and commercial expectations of customers, shareholders, employees, and communities (Kotler & Lee, 2005). CSR definitions interpret a social phenomenon but fail to direct the businesses on managing the challenges within this phenomenon. CSR is socially constructed and developed under specific conditions, and the question of how to integrate them into business strategies may arise (Dahlsrud, 2006).

CSR refers to environmental practices and economic and social responsibilities (Kumar et al., 2014). Therefore, CSR incorporates a combination of economic, environmental and social responsibilities building the Triple Bottom Line (TBL) (D.T Kumar et al., 2014). The concept of CSR in this master thesis focuses on the context of global supply chains. International trade is changing forms, and the exchange of goods and services is also transforming. Multinationals are responsible for their operations within the firm and for the activities of their global partners, such as suppliers or subcontractors (Andersen et al., 2009, as cited in

Soundararajan et al., 2014). Based on the different definitions of CSR, in the context of the global supply chain, which is the one addressed in this master thesis, describes CSR as a concept where companies are willing voluntarily to contribute to the environment and manage their working conditions reasonably (Soundararajan et al., 2014). This means that every international business focusing on CSR policies should reconsider its environmental practices and working conditions and set them as a high priority. The firm is responsible towards the social and environmental activities within the entire global supply chain, for the actions and the transformation of raw materials to goods till their transportation to the end customer. Referring to the social topics of CSR, we can identify three main areas; wages, working conditions and working hours (Sethi et al., 2003, as cited in Perry et al., 2012). Over time companies have been accused of failing to pay their workers/employees or even using child labour and abusing human rights by intruding on standard working conditions. While developed countries have an optimized and better-organized working system, CSR conditions are sometimes nonexistent in less developed countries. Based on Awaysheh and Klassen (2010, as cited in Perry et al., 2012), four categories for achieving supplier selection are formed on international standards, extended frameworks, supplier codes of conduct and supplier social audits (Perry et al., 2012). However, it has been argued that codes of conduct fail to deliver efficient CSR results as the global buyers do not entirely guarantee the transparency of the supplier's compliance with CSR practices (Perry et al., 2012).

According to the World Business Council for Sustainable Development, CSR is a process of continuous engagement in the business area in an ethical way which contributes to economic development while improving the quality of life of the employees as well as of the entire community and society at large (WBCSD, 1999, p. 3, as cited in Testa et al., 2018). CSR can be practised at different levels. Workplace CSR refers to labour practices, including diversity, recruitment, salary, safety, health and working conditions. Business operations must be characterized by transparent practices respecting the employees, communities and the environment by contributing to their general development and economic flourish (IBLF, 2003, as cited in Dahlsrud, 2006). Community CSR is about activities that help the community and society through volunteer programs, philanthropy, and initiatives in education or health care. CSR promotes corporate relationships with all its stakeholders, such as customers, employees, communities/ government and suppliers. This includes investing voluntarily in the improvement of the community, building healthy relations with the employees by creating and maintaining employment and promoting environmental protection programs (Khoury et al., 1999, as cited in Dahlsrud, 2006). A business implementing CSR practices is responsible for the impact it has in the life of its stakeholders (both in- and outside the firm) and should continually behave fairly and responsibly by contributing to their economic development and social amelioration (Commission of the European Communities, 2003 as cited in Dahlsrud, 2006).

Environmental CSR emphasizes the company's efforts to minimize pollution and CO2 emissions. Implementing the 3R strategy is essential to being responsible for the environment. 3R strategy includes reducing, reusing and recycling the materials used for the production and manufacturing of the products, including their packaging. Sustainability should also be mentioned under CSR; it concentrates on meeting the needs of humanity without causing harm to future generations. Sustainable businesses pursue economic, social, and environmental interests at the same time. Engaging in CSR is, therefore, a proactive approach to ethical behaviour, where companies focus on profit maximization, helping society, and protecting the environment. The goal is to create shared value for both stakes- and shareholders (Cavusgil et al., 2019). Adopting CSR can include increased sales and market share, operational cost savings, and attracting, motivating and retaining employees. CSR often enables firms' more accessible entrance to capital by increasing the company's appeal to investors and financial analysts (Kotler et al., 2012).

Moreover, it can lead to competitive advantage by strengthening the company's reputation and establishing a trustworthy brand, as consumers tend to prefer companies with strong CSR policies and thus tend to be loyal to them (Groza et al., 2011). Large corporations often highlight CSR in their operations, whereas in some countries, there are legal requirements for incorporating CSR in business activities. However, some challenges exist, such as choosing a social issue, selecting the correct initiative, and developing and evaluating plans. Failing to build CSR into the strategy can negatively affect firms, such as protests, revenue losses, and penalties. However, it can even ruin them through legal scandals, harming their reputation (Kotler & Lee, 2005). Often, CSR appears to be the cure for the global poverty gap, social exclusion, and environmental and social deterioration. Though interestingly, the shareholder view shares an entirely different perspective of CSR. According to the shareholder approach, CSR appears to be something that eventually leads to profit increases (Friedmann, 1962, as cited in Marcel van Marrewijk, 2003). Therefore, shareholders should focus on their profit maximization and believe that socially responsible activities should be overtaken by governments and not by business organizations. This definition of CSR represents the opinion that a business should engage with CSR only to the extent that it commits to the interest of the business, which is the establishment of long-term value for the owners of the business (Foley, 2000, as cited in Marcel van Marrewijk, 2003). As we notice, this perspective ignores humanity's global environmental and social issues and focuses only on business success and profitability. On the other side, according to the societal approach, companies are perceived as responsible for the good of society as a whole, and businesses are seen as an integrated part of this aim. This approach is more of a philanthropic approach where businesses should reconsider their position and do business in terms of the complex societal context and integrate into their operation the environmental and social issues (Marcel van Marrewijk, 2003).

Based on the article of Fetscherin (et al., 2010), CSR is defined as a company's duty to enhance social welfare through various business and social actions, ensuring fair and sustainable benefits for stakeholders (Staples, 2004; Sen & Bhattacharya, 2001; Turban & Greening, 1997, as cited in Fetscherin et al., 2010). Many companies implement CSR initiatives, which are critical contributors to success and offer a sustainable competitive advantage (Lichtenstein et al., 2004, as cited in Fetscherin et al., 2010). Embracing CSR initiatives that align with target customers' preferences can differentiate a company from its competitors, for example, by launching eco-friendly products. CSR initiatives are, therefore, drivers of success and offer a unique position in the market.

On the contrary, companies in developing countries are less likely to adopt CSR compared to those in developed countries (Welford, 2004, as cited in Fetscherin et al., 2010), and this is often attributed to lower levels of economic development in these countries (Baughn et al., 2007, as cited in Fetscherin et al., 2010). Existing research indicates that the business environment, including political, economic, social, and technological factors, can either hinder or support the development of CSR. CSR activities may be hindered by a lack of adaptation to the local culture (Gerson, 2007, as cited in Fetscherin et al., 2010). For example, Ewing and Windisch (2007, as cited in Fetscherin et al., 2010) argue that Western CSR approaches may not be practical in an Asian context due to cultural differences. Baughn et al. (2007, as cited in Li et al., 2010) also note that cultural, economic, and political factors influence CSR in Asia. Specifically, economic and political freedoms and low levels of corruption can facilitate effective CSR implementation. Chapple and Moon (2005, as cited in Fetscherin et al., 2010) suggest that a high level of foreign direct investment in a country enhances the chances that domestic companies will adopt CSR practices. The presence of foreign companies investing in a country may help/support domestic companies to implement CSR initiatives, such as environmental and social sustainability practices. The knowledge transferred from one company to the other is necessary for domestic companies with limited knowledge. Foreign companies can pressure domestic companies by getting international customers and investors who desire to do business with companies adopting strong CSR practices. In addition, we notice that CSR is a response to public concerns for companies prioritizing profit over social and environmental well-being. Companies pay special attention to their CSR practices in response to stakeholders' demands for greater transparency and involvement in community welfare (Fetscherin et al., 2010).

Table 1:Summary of the literature: CSR definitions & practices (source of table: author)

Aspect	***Practices***	***Definitions***
Society	Firm supports community financially and socially through donations in order to create societal value initiatives	Engagement in the business area of the society in a way that contributes to the economic development, while improving the quality of life of the society at large
	Community CSR through volunteer programs, philanthropies and initiatives in the field of education and health care	Sensibilization of the community members around topics of environmental and social issues in order to inform and mobilize them. This could be achieved by participating in projects sponsored by NGOs, motivating the society to be part of the community with the goal to unify them be part of these changes
	CSR is being integrated voluntarily by businesses willing to commit to the society in an ethical and responsible way	A business behaving in an ethical and responsible way exceeding the ethical, legal and public expectations of the society. Following social responsibility practices in every decision made of a firm
Environment	Implementation of environmental practices in the business operations of supply chain Implementation of the 3R strategy in the business's operations	- Firm's efforts of minimizing pollution and CO_2 emissions through resource efficiency - Investing in improved capital. - Promotion of transparency & proactive, long-term engagement in climate - 3R strategy: reduce, reuse, recycle of the used products
Stakeholders	Transparent business practices based on fair and ethical policies	Business practices which respect the employees, communities and the environment - contribution to sustainable business success Creation of corporate relations with all the stakeholders by investing to the community outreach, creating and maintaining the employment and promoting environmental stewardship
Employees	Behaving in a fair and responsible way by contributing to economic development of the employees and improving theirs and their family's quality of life.	Firms implementing CSR practices are feeling responsible for their impact their business operations have in the society and the environment, by trying to take decisions based on the entire well-being of the actors involved and not only on profit maximization.

In this context, environmental practices are the most relevant for this research. A supplier with a good track record of its environmental effect, such as reducing its carbon footprint or using sustainable materials, may be preferred by firms committed to reducing their environmental impact. By incorporating social and environmental factors into the supplier selection process, companies can align their economic interests with their social and environmental responsibilities and create shared value for all stakeholders. This can help ensure the quality of the economic transactions and reduce the risk of opportunism, ultimately leading to better long-term outcomes for both the company and the supplier. Additionally, environmental CSR practices have become increasingly important in business as consumers and stakeholders emphasize sustainability and environmental protection. By prioritizing environmental factors in the supplier selection process, companies can improve their reputation and brand image and contribute to the preservation of natural resources and the mitigation of climate change (Groza et al., 2011). Moreover, supplier selection decisions based on environmental CSR practices can help multinational companies comply with international environmental standards and regulations and reduce the risk of adverse environmental impacts. Prioritizing the environmental dimension of CSR in the supplier selection procedure can foster a sustainable and conscientious business framework, benefiting all stakeholders and contributing to developing a more robust and enduring global economy.

A firm incorporating environmental policies in its supplier selection process can provide a competitive advantage and differentiate it from companies with enormous and complex supply chain activities. In addition, it creates long-term benefits for the environment and the firm's market position. A firm that prioritizes the environmental aspect of CSR means supporting the environment per se and creating a long-term beneficial economic condition by saving costs through energy efficiency, waste reduction, and resource management. Furthermore, a sustainable supply chain is becoming more critical, is still in its early stages of investigation and has yet to receive substantial research attention. Thus, there is ample room for exploring and developing best practices. Firms can uncover new insights, methodologies, and strategies that can drive further advancements and contribute to a more sustainable and responsible business ecosystem, which is the future strategy of each business to succeed.

2.3 The triple bottom line approach of supplier selection

The triple bottom line (TBL) is closely interconnected with CSR and sustainability. Organizations actively embrace CSR initiatives by incorporating ethical, social, and environmental considerations into their operational strategies. The TBL framework offers a systematic approach for firms to integrate CSR principles by evaluating their performance across three dimensions: economic, social, and environmental sustainability. Notably, CSR and sustainability share inherent connections, as CSR embraces sustainable values. By adopting the TBL approach, companies can strategically advance environmental sustainability and social responsibility while fostering long-term economic value. In essence, both CSR and the triple-bottom-line framework advocate for sustainable business practices that factor in broader societal and ecological implications (Faisal et al., 2016). Moreover, the TBL's focus on comprehensive performance assessment aligns with my aim to understand how companies can strategically emphasize environmental CSR elements while upholding economic competitiveness by selecting suppliers. In essence, integrating the TBL framework empowers me to unravel the complexities of supplier selection decisions in a manner that fosters sustainable business practices and aligns with the broader principles of the environmental aspect of CSR.

The supplier selection process profoundly influences a company's value chain and its competitive stance within the market. This process directly shapes a firm's sustainability performance, influencing areas like productivity enhancement, quality improvement, and waste reduction within the supply chain. Consequently, businesses increasingly engage in enduring, collaborative partnerships with fewer suppliers to advance sustainability objectives (Faisal et al., 2016). However, selecting suitable suppliers involves intricate evaluations of diverse factors, many of which require comprehensive examination. A balanced consideration of quantitative and qualitative criteria is essential to achieve an effective supplier selection process. Existing research identifies several pivotal factors that influence supplier selection decisions across financial, organizational, technological, and other domains. Quality, delivery reliability, and cost are commonly emphasized criteria. Despite this, most research predominantly focuses on factors directly impacting financial outcomes, often sidelining other critical aspects.

It is apparent from the literature that long-term business sustainability necessitates a harmonious equilibrium between economic viability, environmental preservation, and societal well-being. The Triple Bottom Line principle underscores the significance of simultaneously factoring financial, social, and environmental elements into business operations to foster enduring and responsible practices (Elkington, 1998, as cited in Faisal et al., 2016). This equilibrium is pivotal, considering sustainable development thrives when generating benefits across all three dimensions. Monitoring a company's performance through sustainability indicators provides a tangible means of measuring progress. A sustainable supply chain operates within the environment, society, and economic performance. This necessitates cooperative partnerships with suppliers to develop innovative solutions, leveraging technology to ensure responsible practices and adhering to environmentally-friendly strategies (Faisal et al., 2016). The TBL comprises three core dimensions: environmental, social, and economic. Notably, environmental factors profoundly influence a firm's performance, facilitating resource optimization and cost reduction through recycling and waste management practices. Implementing environmentally-conscious strategies, commencing with procurement, enables the development of a green supply chain. This involves assessing alternative materials, curbing packaging waste, and eliminating hazardous substances. Importantly, achieving these transformative changes often requires supplier collaboration, reinforcing the need for compliance among upstream suppliers and downstream partners (Faisal et al., 2016). Likewise, addressing the social aspect mandates adherence to social responsibility imperatives throughout the supply chain. Criteria encompass diversity within the supply base and workforce, community initiatives, human rights, and worker safety—the implementation of safety and health management systems, such as OHSAS 18001, bolsters social performance. Consumers' increasing willingness to support socially responsible behaviour necessitates businesses to evaluate the reputation of their suppliers carefully (Faisal et al., 2016).

From the economic perspective, sustainable profitability hinges on supplier commitment to enhancing components while minimizing costs to expedite new product introductions. A supplier's long-term dedication to quality enhancement and timely deliveries significantly influences a firm's success. Economic sustainability enhances economic viability through sustainable strategies prioritizing long-term revenue growth, expanded market share, and increased share prices. Tools like kaizen, benchmarking, and lean manufacturing efficiently realize economic sustainability objectives. Additionally, factors like product longevity, reusability, and packaging waste reduction are becoming increasingly important from a sustainability standpoint (Faisal et al., 2016).

The interplay of the three TBL dimensions – environmental, social, and economic sustainability – resonates closely with CSR and stands as pivotal consideration in the supplier selection process. This comprehensive approach ensures a holistic assessment of potential partners, fostering responsible practices that resonate across all facets of corporate activity.

Table 2: Summary of the TBL concepts of sustainability (source of table: author)

Dimension of sustainability	*Key components*	*Benefits for the company*
Environmental sustainability	- Reduction of resource consumption - Recycling and waste management - Evaluation of alternative materials - Reduction of packaging waste - Elimination of hazardous materials	Cost savings, reduced resource consumption, improved brand reputation, compliance with environmental regulations, reduced carbon footprint
Social	- Compliance with social responsibility requirements - Diversity in supply base and workforce	Improved brand reputation, access to new markets, increased

sustainability	- Community initiatives - Protection of human rights - Worker health and safety management systems	customer loyalty, compliance with ethical standards and regulations
Economic sustainability	- Revenue growth - Increased market share - Long-term focus on sustainability - Use of tools such as kaizen, benchmarking, and lean manufacturing	Improved profitability, reduced risk, increased innovation, enhanced competitiveness, improved supplier performance

2.4 The role of stakeholders

Stakeholders can play an essential role in studying sustainable supplier selection practices. Stakeholders, such as customers, employees, regulatory bodies and managers, possess valuable information and expertise regarding environmental practices and sustainability, which can support the environmental practices and strategies of the company. Their insights and knowledge can help the company identify suppliers that align with their environmental goals and standards. In addition, involving stakeholders such as managers in the supplier selection process can help to ensure that the selected suppliers meet the company's social and environmental standards, as well as the expectations of stakeholders. Acknowledging the significance of stakeholders in this research can lead to a more inclusive understanding of sustainable supplier selection practices.

The highest impact regarding implementing CSR practices within a company holds the multiple stakeholders, which are vital actors. Stakeholders can be classified into two categories: external and internal stakeholders. External stakeholders are the customers, suppliers, investors, governmental offices and, in general, the wider environment surrounding an organizational institution. Internal stakeholders are the direct part of a company, such as the employees, different company owners and managers. When considering implementing CSR practices in a firm, the customers, shareholders and governments are vital actors. Each holds different views and power on the decision-making of the CSR processes (Govindan et al., 2018). An essential role in the organization of a multinational company plays as well the governmental institutions such as the European Union as it shapes the rules under which companies are supposed to do business. The European Commission proposed in February 2022 a law in corporate sustainability called the EU Supply Chain Law (Leisering, 2022). Companies implementing supply chain activities are obligated to comply with the EU regulations by simultaneously respecting human rights and environmental protection.

This denotes the audition of the company's suppliers along the entire supply chain, counting all direct and indirect business relationships. That way, a fair and sustainable global economy will be promoted. Once the European Parliament and Council approve the drafter, states will be required for two years to include and successfully adopt this law in their national laws (Leisering, 2022). International companies with more than 500 employees are affected by this law. Though, small and medium enterprises are not directly influenced in comparison to suppliers of larger companies. However, what does it mean precisely for large companies complying with this law? In the initial stages, businesses must recognize existing or possible adverse impacts on the environment and human rights, including labour exploitation or improper utilization of child labour. Measures should be integrated and effectively implemented into the company's management policies and systems to prevent such conditions. Most importantly, transparent and public information such as annual reports should be placed to achieve trustworthy relationships. The entire chain of activities and processes, from the employees' contracts to the company's suppliers related to the production of the goods, should be transparent and comply with the legal requirements. Companies are being asked to analyze the origin of the supplied goods, the manner of their production and the consequences on the environment and the entire society (Leisering, 2022).

The question that arises is why companies adopt CSR practices in their businesses. What are the motives behind them? Explained; either they feel obligated to do so or are willing/ feel responsible for dealing with environmental and social issues (Rathert, 2016). As has been argued by Rathert (2016), MNEs may adopt CSR strategies either as a substitute for absent regulatory institutions or as an addition to regulatory institutions since institutional arrangements embrace stakeholders to demand socially responsible behaviour from the firms (Campbell, 2007; Gjolberg, 2010, as cited in Rathert, 2016). Regardless of their role, stakeholders have three main motives for CSR engagement. The first is the instrumental and mostly self-interest-driven motive, and the second is relational and relates to the relationships among group members. The third motive constitutes the moral values related to ethical standards and moral principles (Rathert, 2016). Stakeholders, particularly customers, can motivate firms to adopt CSR practices through their evaluations and product purchasing, as they possess the power of monitoring and applying sanctions by stopping their purchasing habits. Interest groups can also be great motivators by using public statements. This influences firms to change their environmental and social policies and be more attentive to CSR issues. Hence, stakeholders can pressure and damage a firm's resources, future revenues and reputation (Aguinis & Glavas, 2012).

Consequently, if a company does not meet stakeholders' expectations regarding CSR practices, it may face higher transaction costs, including potential damage to its reputation or loss of customers. By monitoring the company's CSR practices and holding them accountable, stakeholders can reduce the risk of opportunistic behaviour by the company and increase trust in their transactions. Stakeholders' involvement in CSR practices can be a way to mitigate potential opportunistic behaviour and foster more cooperative and efficient transactions between the parties.

A meta-analysis of CSR outcomes showed that companies adopt CSR practices, which has numerous positive effects. First and most importantly, it has been proved that the firm's reputation and financial performance were improved after applying CSR practices. The relationship with customers is an essential mediator for the CSR outcomes such as customer satisfaction, customer trust and thus, customer loyalty (Vlachos et al., 2009, as cited in Aguinis & Glavas, 2012). Summarizing, we observe that stakeholders' actions and influence are determinants for CSR practices and policies – they influence whether a firm would engage in CSR. Institutional organizations such as regulations, standards and certifications also affect the type of CSR strategies.

Nevertheless, there is still much uncertainty regarding the institutional conditions under which CSR emerges and institutional governments' influence in adopting CSR policies. As it has been proved, adopting CSR policies is highly connected to the internationalization of firms. Many CSR issues arise with the firm's desire to internationalize and spread its activities in developing countries (Wijen, 2014, as cited in Rathert, 2016). Developing countries mostly lack political rights, which affects the adoption of issue-unrelated CSR to offset legitimacy concerns (Brammer et al., 2009, as cited in Rathert, 2016). On the contrary, Ioannou and Sarafeim (2012) argue that firms adopt higher CSR practices in countries with more powerful organized labour movements. Gjolberg (2010) also agrees with this opinion and claims that norms of corporatism and collectivism boost the adoption of CSR and MNEs, especially in Nordic countries (Rathert, 2016).

As mentioned above, CSR can be a substitute for regulatory institutions. This happens, for example, when MNEs are increasing their philanthropic efforts and actions in response to politically unfree countries (Brammer et al. 2009, as cited in Rathert, 2016). When stakeholders such as customers or social activists lack functioning regulatory institutions, MNEs adopt CSR as an answer to government corruption and violations of fundamental human rights (Greenhill et al., 2009, as cited in Rathert, 2016). Therefore, adopting CSR is primarily related to the degree of management's willingness to deal with the stakeholders' issues. The company's management should either distance itself from violations of laws and norms or take place and represent its position by adopting CSR practices. Host countries characterized by insufficient regulatory institutions can experience environmental or human disasters, which could also damage the company's image as it can be assumed that it is making a profit under such conditions (Rathert, 2016).

Institutional pressures are increasing from stakeholders with different intentions regarding CSR practices. Stakeholders are influencing firms to adopt CSR for various reasons, taking different roles and engaging in other activities of CSR. Firms are attracted mainly by adopting CSR strategies as it increases competitiveness and legitimacy. In addition, normative reasons such as the feeling of responsibility and duty of being environmental and social consciousness are great motivators of CSR practices (Aguinis & Glavas, 2012).

2.5 CSR in Supply chains

CSR is an expansive concept and includes activities in the company which influence the overall well-being of the employees and the environment. Companies are now required not only to behave within their juridical norms but to consider the impacts that the environmental and labour activities of their global trading partners, such as suppliers, have on the globe (Mette et al., 2009). The most significant part of international trade associated with CSR activities is directed by systems of governance, which connect different sourcing and contracting arrangements (Gereffi et al., 1994, as cited in Mette et al., 2009). "Governance" includes main actors in the supply chain, like multinational corporations, who distribute activities and tasks to the labour based on their capabilities. Therefore, they can control the production over more considerable distances in different plants without exercising ownership (Jenkins, 2001, as cited in Mette et al., 2009). These main actors are mainly located in developed countries such as multinational manufacturers, retailers and brand-name firms (Gereffi, 1994, 2001, as cited Mette et al., 2009).

These main actors are mainly located in developed countries such as multinational manufacturers, retailers and brand-name firms (Gereffi, 1994, 2001, as cited Mette et al., 2009). These main actors hold central market power and control critical resources in supply chains. They are the primary decision-makers regarding the products that should be produced and their quantity. As Jenkins (2001, as cited in Matte et al., 2009) explains, the rise of global value chains is partly caused by the buyers of the North who control or even determine the behaviour of suppliers in the South and supervise the delivery dates, the product quality, the working conditions and the environmental impacts. As a consequence, the increased pressure from customers, NGOs, employees and governments regarding the adverse effects that the supply chain activities and the offshore production locations of firms may have on the environment and society as a whole has led to the acceleration of multimedia communication technology, which follows to more transparency of their unethical activities at their suppliers.

Several times, the media exposed illegal and unfair practices of multinationals, such as violation of human rights, use of child labour, unsafe working conditions and gender and race discrimination. Some examples have been well-known multinationals such as Nike, Gap and H&M (Frost & Burnett, 2007, as cited in Mette et al., 2009). However, multinationals are aware of the needs and expectations of their stakeholders and, for that reason, are developing and implementing systems and procedures to ensure the compliance of their suppliers with the CSR requirements. The development of codes of conduct is increasingly suggested in contracts between companies and suppliers to motivate them to work according to the company's principles, standards and values. These principles are often derived from local legislation such as the UN's Global Compact, ISO 14001, ILO Declaration, etc.

Nevertheless, the system has shown that many multinational corporations needed help implementing these codes of conduct in their global supply chains. Although codes of conduct have positive intentions, as Klein (2000, p. 430, as cited in Mette et al., 2009) explains, they cannot be applied the same way as legal requirements, nor do they correspond fully to the needs of the employees. Codes of conduct can be accused of being presented as public statements of uplifted purpose and ambition without specific content (Sethi, 2002, as cited in Mette et al., 2009).
Nevertheless, Sobczak (2006, as cited in Mette et al., 2009) argues that codes of conduct embrace national labour and employment laws and are often adopted to prevent pressure from stakeholders who expect or demand socially responsible investment.

A supply chain is defined as integrating and adding value to the end customer through business processes created by the suppliers that provide products, services and information. Generally, suppliers, manufacturers, and end customers define supply chains. The manufacturing process is where the suppliers select the materials and start finalizing their production to be ready for shipment to the end customer (Xu et al., 2012). The end decisions of supply chain activities are imposed mainly by a "locus of power". This refers to the "power" of roles between the supply chain actors.
On the one hand, the buyer's power is seen as the lead role in deciding how the products are produced. Therefore he partly determines the parameters and conditions under which the supply chain activities will occur. They are seen as "experts" who lead the processes and outsource the manufacturing activities to the suppliers (Soundararajan et al., 2014). The leverage of global buyers in topics such as product and suppliers' selection processes in international business is generated through the "weakness" of mainly developing countries to control the supply chain mechanisms of businesses as global buyers are independent of formal constitutional structures (Lund-Thomsen, 2008, as cited in Soundararajan et al., 2014). This allows them to set the rules in the supply chain and even obligate suppliers to comply with their standards of working

conditions (Locke et al., 2009, as cited in Soundararajan et al., 2014). Factory audits, such as third-party auditors, are proper actors and promote the working conditions under which factories operate. This information is provided to encourage trustworthy information and help promote guaranteed improvements in the workplace conditions of the factories. Coming back to global buyers, they have strength over their suppliers. At the same time, they use the information provided by audits to have higher control over the labour standards and improve the working conditions of global supply chain participants. Compliance with the standards of the working condition of international buyers is essential as the costs of not complying with these standards can be higher, and penalties can occur. Penalties can be followed by damaging the firm's reputation, losing customers and paying high penalties in governmental institutions. From a TCT perspective, these penalties can be seen as additional transaction costs that can occur due to non-compliance. Suppliers may comply with labour standards to avoid these extra costs and maintain their relationships with buyers. Therefore, choosing to abide by the regulations to avoid penalties and keep the relationship with the buyers safe should be highly important for the suppliers (Soundararajan et al., 2014).

Consequently, TCT could help explain the motivations behind global suppliers' decisions to comply with labour standards in the context of their relationships with influential buyers. Compliance with standards can be a way to reduce transaction costs and enhance trust between parties, leading to more efficient and mutually beneficial business interactions.

2.6 The process of supplier selection

This section will be discussed the supplier selection process based on CSR practices. First, the importance of supplier selection in CSR will be defined and clarified. Secondly, the criteria under which a firm decides whether a supplier corresponds to its environmental requirements will be investigated. In the third and last subsection, the concept of environmental sustainability of CSR and its relevance to the supplier selection process will be researched and discussed.

2.6.1 The importance of supplier selection in CSR

Supplier selection is essential to CSR since it affects a company's overall image. By adopting CSR practices, companies manage their business processes to positively impact society, including environmental, social, and economic aspects. CSR is considered an essential quality of any firm nowadays. A company where CSR principles are being ignored could even lead to customer loss risk. Furthermore, suppliers could be considered an extension of the company, considering their actions reflect its image. Therefore, companies must ensure their suppliers comply with CSR standards to avoid reputational risks. Companies can also positively influence their suppliers by encouraging them to adopt more environmentally sustainable practices and improving their CSR performance (Xu et al., 2012).

The corporation of CSR in supply chains aims to maximize income and minimize risk and pollution (Xu et al., 2012). Therefore, as we see, companies are incorporating CSR practices in their supply chains to achieve these goals. By maximizing income, companies aim to create long-term economic value for their stakeholders while also considering the environmental impacts of their operations. This can involve the creation of opportunities to reduce costs and increase the supply chain's efficiency while promoting sustainable business practices. Minimizing risk could include identifying and reducing potential reputational or legal damage risks. Reducing pollution involves minimizing the environmental impact of the supply chain by reducing waste and other forms of pollution.

CSR intends not only the successful implementation of social, environmental and economic practices but also the successful image of a firm. It is essential to clarify that under supply chain, we understand the incorporation and operation of business processes starting from the suppliers who provide the original products, services and information intending to add value for customers and stakeholders through the collaborative efforts of supply chain members (Xu et al., 2012). Depending on the supply chain, the process starts with the suppliers by sending the materials to the manufacturer, who collects and afterwards processes them. The process ends up with the distribution of the finished products to the end customer. Companies choosing suppliers based on CSR practices can ensure an environmentally and socially successful supply chain. This includes ensuring suppliers comply with environmental and labour standards and avoid unethical practices. By selecting responsible suppliers, companies can also improve their reputation by being seen as socially responsible and environmentally conscious.

Moreover, choosing sustainable suppliers can result in cost savings since they are less prone to operational disruptions, which can incur significant expenses for companies that depend on them. The suppliers should promote their organization to maintain a competitive position and implement an efficient supply chain (Xu et al., 2012). Supplier selection is an operation through which companies, based on some criteria, evaluate and select their suppliers. Supplier selection is costly and requires financial resources for the company to assess between many quality suppliers. In addition, as every company creates its strategies, the same applies to the supplier selection process. Some firms are willing to invest and pay more money to improve their purchasing strategies than other firms. Purchasing strategies are, therefore, strongly connected to the supplier selection process (Xu et al., 2012).

CSR policies can generate three types of costs; organizational costs, transaction costs with business partners such as suppliers and cooperation costs with secondary stakeholders (Acquier et al., 2017). Organizational costs refer to the expenses incurred by a company by implementing and maintaining CSR policies, such as conducting training programs or hiring third-party staff to verify and analyze their environmental compliance. Transaction costs with business partners involve additional expenses and efforts to ensure suppliers align with CSR requirements. This may include evaluating and renegotiating contracts and investigating working conditions through audits. Conducting audits can be costly for firms as they require thorough assessments of the supplier's operations, including inspections of their facilities and processes, to verify compliance with environmental policies. Cooperation costs with secondary stakeholders involve addressing the demands and expectations of local communities, NGOs, or other external groups. This may require changing production processes, adopting responsible technologies, and engaging highly skilled employees who possess knowledge of CSR practices and policies. In addition, firms implementing CSR policies must also integrate local stakeholder needs; four major areas are being identified; first, product transformations and productive process improvements should be made by evaluating and including more responsible supply chain processes that correspond to the CSR policies in the product lines. Follows the reorganization of the production system and the establishment of more responsible technologies connected with highly skilled firm members who possess specific knowledge of CSR processes and policies. Therefore, CSR practices generate additional transaction costs as workplace conditions and existing contracts with suppliers should be investigated and newly evaluated to correspond to the CSR requirements (Acquier et al., 2017).

Incorporating CSR practices in supplier selection is essential for fulfilling social and environmental practices. Long-term and trustworthy relationships between the firm and its suppliers are crucial to establish CSR values. The selection of suppliers with the same environmental perceptions is a requirement when the firm's products have the goal of being environmentally friendly. In addition, CSR supports the utilization of local suppliers; choosing local suppliers over outside suppliers is crucial when dealing with CSR as it helps the local community and its economic growth. Besides, minority suppliers whose development is growing need additional support by encouraging them to improve their profit margin through sourcing business (Govindan et al., 2018). Therefore, selecting suppliers who require economic growth and paying attention to the impact their practices may have on the environment should play a determinant role at the time of selection and evaluation by a company.

Based on the literature on supplier selection criteria, the assessment of suppliers was divided into three main aspects based on supplier performance, environmental protection, and supplier risk, each of which had three to four criteria (Lo et al., 2018). Based on the supplier performance aspect, firms are asked to confirm the quality of their products and provide additional relevant quality certificates such as ISO 9000 and QS9000. By obtaining these quality certificates, suppliers can demonstrate that they meet the requirements for quality management and have implemented the necessary processes in their system to ensure a consistent quality of the products (Kuo et al., 2010 as cited Lo et al., 2018). The manufacturing process is also counted as an essential supplier performance criterion. Suppliers must prioritize the business strategy of CSR practices and primarily environmental responsibility. Clean and environmentally friendly production refers to using sustainable practices in manufacturing processes (Uygun and Dede, 2016, as cited in Lo et al., 2018). This includes, for example, reducing waste, pollution, using renewable energy sources and minimizing harmful chemicals. This is based on the environmental aspect of CSR. The third and last criterion of supplier performance refers to the level of service needed to meet customer demand, including delivery times and responsiveness. This may not be directly connected to CSR practices. However, it has been proved that for companies, it is essential that their suppliers can adapt quickly to changes and ensure fast delivery times, which can help companies strengthen their customer satisfaction and loyalty (Kuo et al., 2010, as cited in Lo et al., 2018). This means that companies must have systems to manage changes in customer demand and respond quickly to changes in orders. This may include agile supply chain management systems, efficient order processing and effective communication with suppliers and customers.

The second dimension refers to environmental protection, where suppliers are asked to comply with environmental regulations for products and minimize waste. Companies prioritizing CSR are essential that their suppliers are actively committed to safeguarding the environment. This emphasizes the importance of following rules related to environmental protection when producing and selling products. It also highlights the supplier's proactive approach to protecting the environment, indicating that they are taking steps beyond what the law requires to minimize their environmental impact. This could include measures such as using sustainable materials, reducing packaging waste, and integrating environmental manufacturing processes (Uygun et al., 2016, as cited in Lo et al., 2018). In addition, the transportation process of the materials is an essential criterion for firms. Firms prioritizing CSR values need their supplier's effective transport and logistics planning to minimize pollution during transportation. This could include measures such as using less pollutant fuel modes of transportation or optimizing delivery routes to reduce the CO2 emissions released during transport (Uygun et al., 2016, as cited in Lo et al., 2018). For example, opting for sea freight over air freight is a more favourable transportation choice.

The third and last dimension includes supplier risk. This refers to evaluating suppliers based on different factors such as their production activities, such as staff productivity and turnover rates (Rezaei et al., 2015, Govindan et al., 2015, as cited in Lo et al., 2018). It is essential to consider whether the supplier has effective labour practices to ensure high productivity and low turnover rates. Turnover rates indicate the proportion of employees leaving the company, which shows employees' satisfaction and is further connected to the social aspect of CSR, which respects the employee's needs and offers them respectful and high-quality working conditions. Moreover, the financial status and stability of the supplier are considered critical factors since they can influence their capacity to deliver goods punctually and maintain consistent quality. This implies as well the suppliers' reliability and responsiveness to the firm.

The supplier selection process based on CSR can be challenging and involves various complex factors that must be considered. One significant challenge is managing information uncertainty, as firms seek reliable data to make informed decisions about potential suppliers' environmental practices. TCT recognizes the costs of acquiring and processing information during selection, especially when dealing with long-term relationships and interdependent partners (Acquier et al., 2017). This highlights the importance of gathering comprehensive and accurate data on potential suppliers' CSR performance to minimize transaction costs risks. Firms must learn how to manage information uncertainty, making it challenging to make informed decisions. While CSR practices play a prominent role in the selection process, it is crucial to acknowledge that other essential criteria are also relevant. Price, quality, reliability, and financial stability are still highly significant for supplier evaluation (Lo et al., 2018). Thus, companies must balance CSR considerations and traditional supplier selection criteria to achieve optimal outcomes. By integrating TCT into the supplier selection process, companies can evaluate the transaction costs associated with different supplier relationships and make strategic decisions accordingly. TCT emphasizes the importance of long-term relationships to minimize transaction costs (Acquier et al., 2017). For instance, investing in well-established suppliers with a track record of sustainable practices can help reduce negotiating costs and monitor compliance with CSR agreements.

2.6.2 Definition of the supplier selection process

Analyzing and describing the process of supplier selection is a challenging task. Earlier, price, quality and delivery times were the leading supplier selection criteria. Though, due to the increase of globalized trade methods, the competition between firms changed, as well as the approaches under which they can minimize their costs and maximize their profits. Due to those factors, companies choose strategies that cover the environmental requirements of CSR practices in their supplier selection. With the increased levels of a competitive environment, an efficient and successful selection of suppliers is essential for a company to flourish. From the manufacturing perspective, supplier selection is provided by just-in-time (JIT), which supports collaboration and a numerous selection of suppliers and their sufficient utilization. Criteria such as quality of materials, delivery times and reliability are often the most important criteria when searching for suppliers. Dickson (as cited in Xu et al., 2012) was the first one involved in vendor selection criteria and identified 23 criteria. He examined the importance of social and ethical responsibility for firms; the first place in ranking for choosing vendors was the quality of products, followed by the delivery time, and sixth place took the factor of price.

Further research showed that improvement is proportional to time, and factors such as the quality of products, lead times, prices and the possibility of repairing service and technical capability were lower ranked (Xu et al., 2012). Mainly is being highlighted how supplier selection is a lasting assessment process which requires good policy-making skills. In addition, material costs were always playing a significant role in the selection of suppliers, though with the emergence of CSR topics in the business area, supplier selection criteria changed form and different priorities were established. Criteria such as discrimination in the working conditions, abuse of human rights including child labour and long working hours are ranked higher in the criteria priority list.

Based on the supplier selection method of Robinson, Faris and Wind (as cited in Xu et al., 2012), the process of supplier selection includes the following steps; starting from a recognition of a need and the willingness to come up with an idea/ a solution, for example, the offer of a product or service to customers. This follows by determining the product's characteristics and the quantity needed. The process continues with the search for potential sources, with costs, quality analysis, and evaluation of the multiple proposals. The process ends with selecting the supplier and evaluating their performance within a timeframe (Wesley et al., 1996, as cited in Xu et al., 2012). This method provides a systematic approach to choosing the most suitable suppliers for the company's needs. In addition, this process allows companies to assess potential suppliers' financial stability, quality assurance practices, and overall reputation. This helps mitigate risks associated with partnering with unreliable or financially unstable suppliers.

2.6.3 The ANP method of supplier selection

The ANP-based framework proposed by Faisal (et al., 2016) uses these determinants and sub-dimensions to evaluate potential suppliers based on their sustainability, cost, and quality criteria performance. This framework can help companies make more informed decisions when selecting suppliers, leading to a more sustainable supply chain.

The evaluation process involves the assessment of suppliers in six different criteria and sub-criteria. The first determinant pertains to the legal requirements of suppliers, encompassing compliance with environmental, labour, and health and safety regulations. The suppliers are evaluated based on their adherence to these regulations. The second determinant is CSR, which includes sub-dimensions such as human rights, labour practices, environmental sustainability, and community involvement. Suppliers are evaluated on their efforts to promote social responsibility within their operations. The third determinant is brand image, which includes sub-dimensions such as public perception, customer perception, and media perception. Suppliers are evaluated based on their practices' impact on the company's brand image. The fourth determinant pertains to suppliers' financial performance and ability to contribute to the company's economic sustainability. This determinant includes sub-dimensions such as pricing strategy, cost structure, financial stability, innovation and research & development (R&D). The fifth determinant pertains to environmental sustainability, encompassing the efforts of suppliers to reduce their environmental impact and promote sustainability. This factor covers various aspects, including energy preservation, waste minimization, pollution control, and the adoption of renewable resources. By assessing suppliers based on legal compliance, financial stability, and environmental sustainability, the ANP framework helps companies identify suppliers with lower risks of non-compliance, economic instability, or environmental issues. This multidimensional evaluation process allows companies to gain deeper insights into suppliers' practices and performance across various criteria. With a clearer understanding of suppliers' strengths and weaknesses, companies can work collaboratively with their suppliers to address any shortcomings and improve overall performance.

Overall, the supplier selection framework developed by Faisal et al. (2016) provides a comprehensive and multidimensional approach to evaluate suppliers based on their sustainability practices. The framework can assist companies in selecting suppliers that align with their sustainability goals and contribute to the overall sustainability of their supply chain. The ANP framework's multidimensional evaluation process provides companies with valuable insights into suppliers' capabilities, potential weaknesses and performance. By prioritizing specific criteria suppliers fulfil, companies can reduce transaction costs and minimize extra information search costs.

Table 3: Summary of the supplier selection framework by Faisal (et al., 2016) (source of table: author)

Determinant	***Sub-dimension***
Legal Requirements	Environmental, Labor, Health and safety regulations compliance
CSR	Human rights, Labor practices, Environmental Sustainability, Community involvement
Brand Image	Public perception, Customer perception, Media Perception
Financial sustainability	Pricing strategy, cost structure, financial stability, innovation, Research & Development
Environmental sustainability	Energy conservation, waste reduction, pollution prevention, use of renewable resources
Social sustainability	Employee well-being, diversity and inclusion, social impact assessment, stakeholder engagement

2.6.4 Sustainability in supplier selection & evaluation in terms of CSR

Firms have recognized the fundamental impact their suppliers have on their environmental performance in terms of CSR. Based on Gimenez (et al., 2012), corporate governance involves managing business processes that positively impacts society and the environment. This includes environmental, social, and economic sustainability. Companies extend their traditional corporate governance process by including their supply chain partners. That means taking into account the impact their suppliers have on these areas. For example, a supplier not complying with environmental regulations or labour laws can negatively impact the company's reputation and its performance in terms of CSR. By developing strategies that extend their traditional corporate governance processes beyond their boundaries, companies can ensure that their suppliers meet their CSR standards, which can positively influence the company's overall performance in terms of CSR (Gimenez et al., 2012). Companies are making their supply chains more socially responsible by utilizing various practices. This can include using supplier assessment tools, establishing codes of conduct, and collaborating with suppliers. These practices are implemented to evaluate and monitor suppliers' performance of CSR, set standards and guidelines for suppliers to follow, and work with suppliers to achieve shared CSR goals.

Nevertheless, the literature highlights that while it is easy to create codes of conduct for CSR, it is difficult to ensure that suppliers comply with these codes. That is one of the reasons why collaboration and partnerships with suppliers are necessary to implement CSR practices effectively. However, there is often a disconnect between the requirements set out in the codes of conduct and suppliers' actual level of compliance (Gimenez et al., 2012). Therefore, selecting suppliers based on their CSR policies and known practices may only sometimes guarantee compliance with the codes of conduct. Therefore, collaboration and monitoring may be necessary to ensure the selected suppliers adhere to the company's CSR standards.

The most effective way for a firm to improve its environmental practices is to partner with suppliers by implementing new, more environmentally friendly technologies. Collaboration with suppliers and companies can improve operational and environmental performance. Consequently, the company needs to engage proactively with supply chain partners closely connected to the company regarding environmental performance. By collaborating with suppliers, companies can identify and create multiple opportunities to reduce their ecological impacts, minimize costs and increase product efficiency. By designing more environmentally friendly products, companies can help reduce their prices and their harmful waste and energy usage. The "Eco-design" approach effectively creates products with minimal negative environmental impact throughout their entire lifecycle, from sourcing raw materials to manufacturing, use, and product end-of-life (Gimenez et al., 2012). By collaborating with suppliers committed to environmental sustainability, companies can work together to identify opportunities to reduce their environmental impacts, minimize costs, and improve product efficiency. In the context of supplier selection based on CSR, companies can prioritize suppliers who have already demonstrated a commitment to environmental sustainability, such as those who have implemented eco-design principles in their product design and manufacturing processes. By selecting such suppliers, firms can collaborate with them to further improve the environmental sustainability of their products, reduce costs, and increase product efficiency.

In addition, it has been shown that collaboration between companies and suppliers can improve the suppliers' environmental capabilities. A partnership can help to share information and best practices and identify areas where the suppliers need to improve. Furthermore, when both assessment and collaboration are used, it creates a positive combined effort, resulting in a more significant development of environmental capabilities. The combination of evaluation and collaboration enables both parties to exchange information, gain insights from one another, and recognize areas where improvements can be made. This, in turn, leads to more efficient development of environmental capabilities (Gimenez et al., 2012). Sharing knowledge, best practices and identifying areas of improvement is an essential component of CSR in supply chain management.

Moreover, the need to differentiate between small and large suppliers is emphasized when assessing them. This is an essential consideration for companies as they develop their supplier selection criteria based on CSR practices. By differentiating between small and large suppliers, companies can tailor their evaluation methods to address each supplier's specific needs and challenges, leading to more effective and efficient development of environmental capabilities (Gimenez et al., 2012). In addition, it is essential to differentiate between small and large suppliers due to their distinct characteristics and capabilities. Treating all suppliers as equal entities can lead to inaccuracies and inefficiencies in the evaluation process. Small suppliers often need more financial and human resources, making it more challenging to implement comprehensive CSR practices. On the other hand, larger suppliers may have more established systems and processes for CSR compliance and reporting. This differentiation enables companies to tailor their evaluation methods to address each supplier's needs and challenges.

Furthermore, Lee and Klassen (2008, as cited in Gimenez et al., 2012) differentiate between two factors that initiate and motivate companies to adopt CSR in their supply chain management. Drivers are factors that create and encourage firms to adopt sustainable practices, while enablers assist firms in achieving these sustainable practices. The identified enablers have been grouped into two categories: internal and external enablers. Internal enablers are factors within the company that help to achieve sustainable practices, while external enablers are factors beyond the company's boundaries. The internal enablers identified include the company's environmental commitment, management's support, the available resources and the strategic role of the purchasing department.

Regarding the resources available, a company wishing to implement sustainable practices must have sufficient resources to initiate and implement the processes needed. In addition, investing in technological integration with suppliers is necessary for CSR practices to be ingrained in the organization. The identified enablers that help in achieving this are, for instance, mechanisms that increase knowledge within the company and its suppliers, a performance measurement system, and resources (Gimenez et al., 2012). Regarding CSR, the study found two characteristics that appear to implement CSR activities more accessible in the supply chain: the size of the company and the complexity of its CSR systems (companies with complex CSR systems are more likely to implement CSR activities in the supply chain). This provides valuable insight into the factors that motivate companies to adopt CSR practices in their supply chain management. The differentiation between drivers and enablers can be used to understand how companies can effectively implement CSR practices in their supplier selection process. Identifying internal enablers, such as the company's environmental commitment and management support, can inform the development of strategies and policies supporting sustainable practices within the supply chain.

Summarizing, we observe that both evaluating suppliers and working directly with them to provide support and training positively impact environmental performance and CSR. Solely assessing suppliers is not enough. The main conclusion for managers is that companies should adopt both approaches of assessment and collaboration. Evaluating suppliers can be the starting point in identifying needed actions, but companies must also collaborate with suppliers to improve sustainability (Gimenez et al., 2012).

2.7 International certifiable standards

International certifiable standards, such as ISO 14001 for environmental management and ISO 26000 for social responsibility, provide a framework for companies to implement CSR practices and monitor their suppliers' compliance. By using these standards, companies can ensure that their suppliers follow recognized CSR practices, increasing the transparency and credibility of their CSR efforts. Therefore, it is essential to implement this section in this research. Using these standards can help reduce (transaction) costs in the supplier selection process, as companies can rely on the certification of suppliers rather than having to conduct their evaluations. Companies can easily restrict their target and save time and resources while ensuring suppliers meet the necessary CSR criteria (Ciliberti et al., 2009).

The pressure from multiple directions is increasing, yet stakeholders, employees, customers and NGOs demand the integration of sustainable processes within the entire supply chain practices. Therefore, implementing CSR practices is becoming inevitable (D.T Kumar et al., 2014). International certifiable standards aim to improve CSR practices and corporate behaviour and have been proposed as a global governance mechanism for firms to avoid cross-country differences in national government regulations. The question that arises, therefore, is how CSR is mainly related to international standards, such as the ISO 14000 environmental management system or the SA 8000 social accountability standard. Based on Ciliberti (et al., 2009), supply chain directors can implement the SA8000 certification across the supply chain, which helps to reduce transaction costs. SA8000 is a certification which evaluates and monitors fair labour practices, and it is widely accepted as it ensures compliance with international labour standards and increases social performance. Consequently, firms can measure throughout the supply chain that all of their suppliers are meeting the social and environmental standards required by the firm. This can reduce the transaction costs associated with monitoring and evaluating suppliers' social performance, as the certification provides a recognized certification for labour practices (Gimenez et al., 2012).

International standards promote CSR practices, requiring certified firms to implement specific management processes to improve their environmental conduct or working conditions (Christmann et al., 2006). Global non-governmental organizations such as the International Organization for Standardization (ISO) are essential to developing these international certifiable standards. Third-party auditors are responsible for the confirmation (or not) of the firm's compliance with the standard environmental and societal requirements, which then follow with the certification of a firm. The standards required for the certification are adopted voluntarily by every firm desiring certifiable international standards. Establishing international requirements and using third-party auditors to certify the supplier's compliance with international standards has facilitated the pressure of foreign customers and has become a pre-requirement for international business (Christmann et al., 2006). Firms expanding abroad are more likely to be forced by foreign customers to comply with higher standards of CSR than firms that are not export-oriented and focus primarily on their domestic market. Therefore, firms internationalizing abroad have a higher intention of adopting CSR practices. Certification programs are even criteria based on which customers can choose. Suppliers with higher certified characteristics, such as quality performance, environmental manufacturing competencies, sustainable working conditions and financial strengths, are highly recommended by firms (Christmann et al., 2006). Suppliers not complying with these environmental criteria will be mostly rejected from the selection process. The implementation of environmental practices is linked in addition to potential sanctions, as transaction cost theory suggests sanctions for opportunistic behaviour reduce the possibility that an exchange partner will act opportunistically (Williamson, 1996, as cited in Christmann et al., 2006). This deals with potential higher switching costs if a firm ends its contract with a supplier. Therefore, firms with higher switching costs are less likely to replace their suppliers. The higher the relationship-specific investments meaning, the more time and effort spent to create better working relationships between the supplier and the firm, and the lower the steps of maintaining customers through higher environmental practices (Christmann et al., 2006). That case is also observed in the example of IKEA, where the company sets its relationships with the suppliers as a high priority because it invests time, money and effort in creating the ideal conditions corresponding to the CSR values. Though, it is highly possible that after longer relationships between the customer and the supplier, the supplier may act opportunistically and may not anymore fully comply with the implementation of environmental practices. Therefore, we observe that the process of CSR is a long-term operation, and the actors involved should be persistent and motivated with the actions required.

The determinants of CSR performance are divided into "hard" and "soft" elements. The first one refers to the organizational aspects of a company which constitute the technological resources of a firm, its work processes, accounting systems, strategies, plans and, in general, the management system of a firm. Soft elements are related to the more social side of a company which is associated with the human resources of a firm, such as the employees' capabilities, their mutual social interaction, their attitudes, beliefs and values (Robbins, 2001, as cited in Testa et al., 2018). The role of certified management standards called meta-standards is essential concerning the complex determinants of CSR. Certifiable managerial measures are one of the few formal organizational structures whose adoption is identifiable externally by the certification of the firms' operations. As mentioned above, international certifiable standards intend to improve a firm's CSR practices. They are being proposed as a governance mechanism enhancing the advantages of cross-country differences in national government regulations (Christmann et al., 2006). Certifications such as the ISO 1400 (international standards) and the SA8000 (social accountability) are required for firms seeking CSR practices. The firm's management implements them to improve their environmental and working standards. Those certifications are being monitored by third-party auditors validating firms' compliance with the standard requirements of CSR and environmental protection (Christmann et al., 2006).

Soft elements of CSR performance include organizational citizenship behaviours (OCBs), which refer to managers' values and employees' commitment. Individuals' Behaviour characteristics, including employees and managers, are essential for achieving an organization that functions well. Personal values and norms are crucial for individual action in an organization, and as several authors have proved, the relationship between environmental CSR practices and the attitudes and commitments of a firm's managers and employees can be measured by the adoption of these specific actions (Testa et al., 2018). For example, as Cordano and Frieze (2000) discuss, individual values towards the environment have a positive relationship with implementing resource reduction activities. As we notice, the soft determinants of CSR, such as the manager's values, beliefs, principles and normative standards, should be considered and even measured by firms adopting CSR practices (Testa et al., 2018).

Nonetheless, the effect of a manager's morals on CSR performance is incomplete when the involvement of employees does not support it (Norton et al., 2015, as cited in Testa et al., 2018). The employee's commitment can make the formal management system effective. In addition, it has been mentioned that certifiable CSR standards such as ISO 14001, Eco-Management & Audit Scheme (EMAS), and SA8000 are not necessarily a guarantee for corporate engagement. Still, it could instead be used as a motivator of external legitimacy without applying considerable changes inside the firm (Testa et al., 2018). Though, we must highlight that the progress in sustainability performance is highly related to the different levels of internationalization of the management system integrated into daily practices and routines. An effortless adoption of a formal system is, for that reason, not sufficient, and even a certification itself does not secure a substantial internal commitment to sustainability (Yin & Schmeidler, 2009, as cited in Testa et al. 2018).

Summarizing, an appropriate adoption of sustainability and CSR depends on managers' and employees' involvement, on knowledge and value sharing (Hart, 1995, as cited in Testa et al., 2018) as well as on the promotion of a collective and supportive atmosphere between them (Lamm et al., 2015, as cited in Testa et al., 2018). These aspects are perceived as intangible, informal, and voluntary, depending on OCBs not prescribed by formal management systems (Organ, 1988, as cited in Testa et al., 2018). Research in multiple

Canadian manufacturing companies has proved that the role of OCB positively influences CSR performance, which can achieve a positive outcome inside the organization and increase the chances that a firm will have improved environmental practices. Nonetheless, CSR does not only depend on individual values and initiatives but also formal management systems and practices. Certifiable standards such as SA8000 and ISO14001 on CSR management empower traditional methods to improve CSR performance.

2.7.1 Codes of Conduct

Codes of Conduct have been introduced by many multinational corporations forming a guideline for how companies could improve their social and environmental performance (Pedersen & Andersen, 2006). Codes of conduct are official documents articulating the ethical responsibilities of organizations. Those codes are humanmade, and well-known international brands such as Nike, Gap, and Adidas have developed their codes of conduct. All codes are rules and methods which measure the level of social and environmental acts of business (Soundararajan et al., 2014). In addition, supply chain management demands establishing closer and long-term relationships with suppliers and stakeholders to create a competitive advantage (Mette et al., 2009). In the last years before the emergence of CSR, big multinational companies have often been accused of weak working conditions, child labour and excessive working hours with low wages. This phenomenon arises mainly as global companies often cooperate with emerging production centres in developing countries where their political system lacks justice and a primarily absent fairness system (Locke et al., 2007). Even if NGOs and trade unions pressure global corporations to comply with international labour laws, compliance cannot be guaranteed. Yet, the effectiveness of the companies' codes of conduct is only sometimes guaranteed. It has been argued that a code of conduct primarily replaces profound government and union intervention instead of protecting labour rights or improving working conditions, they are rather restraining the legal liability of global brands to avoid damage to their reputation (Esbenshade, 2004, as cited in Locke et al., 2007). On the contrary, others argue that firm's-made codes of conduct don't threaten the state but instead are used as an answer to the global production networks and the poor capability of developing countries to implement and promote labour laws and regulations (Nadvi & Wältring, 2004 as cited in Locke et al., 2007).

The company selected for this research has developed its code of conduct, which summarizes the most fundamental requirements towards its suppliers. The company's code of conduct outlines the principles that all suppliers delivering goods or services are expected to follow. To comply with these expectations, suppliers must implement a robust management system that ensures adherence to these principles, reduces the risk of non-compliance, and promotes continuous improvement. The company has identified six long-term commitments for suppliers, including facilitating a climate-positive world, resource efficiency, equal opportunities, intergenerational cooperation, and community empowerment. In addition, suppliers are asked to utilize the ISO26000 guidance, with minimal rating prerequisites and continuous monitoring of progress through third-party assessment (Schneider Electric, 2021).

Regarding the environmental aspect of the code of conduct, which is the focus of this master thesis, the company expects its suppliers to have a management system, organizational structure, and procedures to assess and mitigate environmental risks and maintain environmentally responsible business practices. Suppliers must comply with all the environmental laws, regulations and requirements, including obtaining the necessary permits and licenses, maintaining compliance with the performance standards, monitoring and reporting emissions or discharges, and submitting all the required reports and paperwork promptly and accurately. Suppliers are expected to quantify their greenhouse gas emissions to limit global warming and set ambitious targets to reduce them (Schneider Electric, 2021). They should take action to achieve carbon neutrality and net zero emissions in their operations and encourage their supply chain to adopt similar measures. The policy should not be limited to energy efficiency but also promote innovation by examining the use of raw materials and technology and extending these measures to their supply chain. Appropriate management systems are meant systems in place to identify, manage, and minimize the risk of environmental hazards resulting from their operations. These hazards include pollution, air emissions, effluent discharge, waste disposal, and the use of hazardous substances. Suppliers are supposed, in addition, to use natural resources responsibly by re-evaluating their production processes and technologies, using more recycled content in their products and raw materials, exploring the use of alternative materials, minimizing waste, and implementing circular business models. The aim is to conserve natural resources such as raw materials, minerals, and fossil fuels (Schneider Electric, 2021).

3. Research Methodology

This chapter outlines the research methodology to be employed in this study. It covers the research approach, philosophy, data collection, interview, and data analysis. Subsequently, the chapter addresses the credibility and reliability of the research. It concludes by discussing the study's quality criteria and ethical considerations.

In this master's thesis, I aim to investigate the decision-making processes used by a multinational firm when selecting suppliers based on the environmental aspect of CSR practices. To achieve this, a qualitative research design in the form of a case study is preferred, explicitly conducting in-depth interviews with managers from the firm in the supply chain industry. The interviewees will include individuals involved in the supplier selection process, such as procurement managers, quality managers who audit the suppliers and others. Through these interviews, we will gain insights into the factors influencing the firms' supplier selection criteria, the methods used to assess suppliers' environmental practices, and the challenges and successes experienced in implementing environmental CSR supplier selection.

3.1 Research Philosophy

In IB journals, about 80% of articles followed implicit positivism as the primary approach. Positivism, as a research philosophy, believes knowledge can be acquired through empirical observation and scientific methods. It aims to study social phenomena, focusing on generalizations by identifying general patterns through empirical observation. Researchers adopting a positivist approach seek to minimize biases and subjectivity, relying on empirical evidence to draw conclusions and predict the social world (Piekkari et al., 2009). The case study in this master's thesis will also follow the positivism approach as it investigates the supplier selection process in a company.

3.2 Research Strategy

A qualitative methodology was selected to offer a comprehensive insight into the intricate and ever-changing characteristics of the subject under investigation: the supplier selection process based on the environmental aspect of CSR practices. Through the qualitative approach, it will be possible to identify the underlying values, beliefs, and motivations that guide a company's decision-making processes in Vienna in selecting and evaluating their suppliers based on the environmental aspects of CSR criteria. Using qualitative methods will allow a detailed and nuanced exploration of the research questions and provide rich and complex data that can be analyzed afterwards. This approach is beneficial for studying social phenomena, such as CSR, where multiple perspectives and implementations can exist. Moreover, the qualitative methodology empowers the researcher to engage with the data deeply, recognizing emerging motifs and trends, thus enhancing their comprehension of the research subject (Krishnaswami et al., 2010, p.7). The type of research will be exploratory, an initial investigation conducted by a researcher to gain a preliminary understanding of a new or unfamiliar problem for which little or no prior knowledge exists. It generates insights, ideas, and hypotheses about a research problem or topic, which can then be used to develop a more comprehensive research design. Exploratory research often involves various qualitative data collection methods, such as interviews, to gather rich and detailed information about the phenomenon under investigation (Krishnaswami et al., 2010, p. 12). This method helps capture participants' perspectives, experiences, and insights, allowing for a comprehensive exploration of the research problem. Through interviews, participants' narratives provide context and depth to the phenomenon being studied, unveiling nuances that quantitative methods might overlook.

As one multinational company is being chosen to collect the data, a single case study design will be used to investigate the supplier selection process based on the environmental aspect of CSR practices.

3.3 Case Study

A case study research strategy aims to understand complexities within a specific setting. A case study can involve one or more cases and encompass various levels of analysis. It can also adopt an embedded design, which entails using multiple levels of research in a single study. Different data collection methods are employed in case studies, including archives, interviews, questionnaires, and observations. The information collected in case studies can include qualitative, quantitative, or a mix of both types (Yin, 1984, as cited in Eisenhardt, 1989).

There are various case studies, such as single or multiple case studies. Some researchers who lean towards a positive perspective emphasize that the multiple case study approach is the most suitable for obtaining informative qualitative data. However, some criticize classical qualitative research for needing to fully recognize the importance of single case studies. In this research, the most suitable choice is the single case study. According to Wilkins and Dyer (1991), single case studies can advance theories, mainly when researchers aim to understand complex and unique organizational phenomena. Single case studies allow for in-depth exploration and analysis of a particular case, providing rich and detailed information that can lead to deeper insights and theory building. However, there is a risk of using single case studies as the sole basis for theory formulation, as it may lead to generalization or lack of external validity. However, a single case study becomes especially useful when researchers aim to understand a specific case's unique details and complexities, overcoming the limitations inherent in a single case study (Eisenhardt, 1989, as cited in Dyer & Wilkins, 1991). As Stake (1994) also argues single cases studies can be highly valuable and useful when investigating social phenomena which are complex with the real-life context. He emphasizes that a single case study can stand alone as a rigorous and informative research design. Stake (1994) suggests in addition, that single studies should be preferred when the goal is to understand a specific context deeply as single cases studies provide in depth insights and generate rich descriptions from the data obtained from interviews, documents, and observations from a number of cases.

A single case study approach in supplier selection based on CSR can provide an in-depth and comprehensive understanding of how companies implement environmental CSR practices in their supplier selection process. By opting for a particular company and analyzing its procedure for selecting suppliers, one can understand the determinants shaping their choices, the obstacles encountered, and the tactics employed to navigate them.

3.3.1 Case selection

Selecting cases is critical in developing theories from case study research. Similar to hypothesis-testing research, a population is essential because it determines the entities from which the research sample is drawn. Choosing an appropriate population helps control external factors and establishes the boundaries for generalizing the findings. Researchers developing theories often employ a mix of data collection methods, including interviews, observations, and archival research, while remaining receptive to exploring additional approaches (Eisenhardt, 1989).

The case for this study will be a large multinational company that operates in the manufacturing industry and has a global supply chain. The company was founded in 1836 and has its headquarters in France. The company is operating in over 115 countries and has over 128,000 employees and 20,000 suppliers worldwide. The company is renowned for its dedication to environmental sustainability and has taken several measures to minimize its carbon footprint and endorse sustainable initiatives. The company's supplier selection process is expected to be complex. The method includes various factors, such as environmental CSR initiatives and establishing a code of conduct, to guarantee that its suppliers adhere to its sustainability goals. The selection of this company as a case study is appropriate for examining the role of environmental CSR practices in supplier selection decisions of large multinational firms and how these decisions can contribute to the development of more sustainable global supply chains. The data gathered for this study comes from the managerial level of the company, where the employees are directly involved in the supplier selection process. As I am the researcher and an employee of the selected company, it was chosen as the sole case for this study. To maintain objectivity and minimize potential bias, steps such as avoiding asking leading questions that might influence the participant's response in a certain way will be taken to mitigate the possible influence of the researcher's position in the company. Overall, the goal is to ensure that the research is conducted transparent, ethically, and unbiased, regardless of the researcher's position within the company.

3.3.2 Participant selection & Data Collection

The participants in this study will consist of key decision-makers involved in the supplier selection process within the selected company. These individuals will include procurement managers, sustainability managers, suppliers' auditors and other relevant staff members knowledgeable about the company's environmental CSR practices and supplier selection criteria. The selection of participants will involve purposive sampling, considering their level of engagement in the supplier selection process and their capability to offer detailed insights into the company's decision-making procedures. All participants will be informed about the study's purpose and practices, and their consent will be obtained before data collection. Strict confidentiality and anonymity measures will be upheld during the study to protect the participants' privacy. The sample size will be established based on the point of data saturation, which refers to reaching a point where no new information emerges. If needed, the participant selection process will also be done through snowball sampling, where participants may be identified through referrals from initial participants in case the number of participants needs to be increased. The data collection will be done through semi-structured interviews, which will be audio-recorded and transcribed. Semi-structured interviews aim to comprehend how individuals perceive and interpret their daily experiences. These interviews are designed to gather information about participants' views and understanding of their surroundings and experiences (Brinkmann & Kvale, 2018, p. 14). Considering the shared knowledge and the nature of personal interaction during interviews, it's essential to recognize that research interviews are not equal discussions between partners. Instead, they are a distinct professional conversation with a significant power difference between the researcher and the interviewee. Interviewers often assume that the information gathered during interviews accurately represents the interviewee's reality beyond the interview setting. As a result, they try to minimize their influence on how interviewees describe their lived experiences. When the interviews are being used as a research tool, they must be receptive and avoid influencing the interviewees' responses. This poses a methodological challenge to the validity of the interview data (Brinkmann & Kvale, 2018, p. 21). Achieving accurate reports that genuinely represent the reality beyond the interview setting is challenged, leading to the interviewers' main challenge of having to justify and explain the significance of analyzing the interview dialogue rather than obtaining accurate recollections of the subjects' experiences. To overcome this challenge, the interviewer can build trust with the interviewee and foster a safe, non-judgmental atmosphere that encourages sharing experiences without apprehension of judgment.

In addition, semi-structured interviews are being preferred as they offer a unique opportunity to delve into the complex phenomenon investigated and as Patton (2015) describes they allow a flexibility during the interview, where researchers can adapt questions in real-time based on the participant's responses, ensuring a comprehensive exploration of the topic. An important point emphasized by Patton (2015) is the significance of considering the cultural backgrounds of the participants in qualitative research, particularly in the context of semi-structured interviews. Patton (2015) underscores that culture can profoundly influence how individuals perceive and respond to interview questions. When participants hail from diverse cultural backgrounds, it becomes crucial for the researcher to be aware of and accommodate these potential cultural influences on the interview data. In such instances, researchers should be mindful of how questions are framed, the precise choice of words, and the overall interview approach. These considerations should be adapted to promote cultural sensitivity and respect. This approach ensures that participants from various cultural backgrounds can comfortably express their thoughts, ultimately leading to the generation of more authentic and meaningful data. This information is being highly relevant as the participants of this research come from different cultural backgrounds.

Table 4: Profile of managers chosen for the interviews (source of table: author)

Managers	**Position of Interviewee**	**Industry Sector**	**Years of experience in the company**
I1	Manager director of the plant	Electrical Equipment	~26
I2	Supply Chain Quality Manager	Electrical Equipment	~20
I3	Procurement Leader	Electrical Equipment	~10
I4	Sustainability Manager	Electrical Equipment	~17
I5	Supplier performance Director	Electrical Equipment	~ 20
I6	Procurement Manager	Electrical Equipment	~ 24
I7	Supplier Quality Leader	Electrical Equipment	~10
I8	Supplier Quality Leader	Electrical Equipment	~23
I9	Procurement Manager	Electrical Equipment	~15
I10	Sustainability & Strategic Manager	Electrical Equipment	~20

3.4 The stages of interview

Seven key stages will be involved in this research to collect the data needed for the research interview. The first stage is thematizing, which consists of formulating the research objectives and identifying the theme to be investigated, as in chapter one of the introduction. It is essential to clarify the purpose and scope of the investigation before considering the methodology to be used. The second stage of conducting the interviews for research purposes is designing the study. The study design should aim to obtain the intended knowledge and be developed with an awareness of the moral implications of the research. This stage is crucial as it sets the foundation for the interview process and helps to ensure that the data collected is relevant and meaningful for the research objectives (Brinkmann & Kvale, 2018, p. 41). During the interviewing stage, the interviews will be conducted using an interview guide to maintain consistency and structure in the questions. The interviewer should approach the interview with a reflective mindset, mindful of the knowledge sought and the interview situation's interpersonal dynamics. It is essential to establish a comfortable and safe environment for the interviewee and actively listen and engage with their responses.
During the interview, the researcher listens to the informant's verbal responses and pays attention to their body language, facial expressions, pauses, and the environment in which the conversation occurs. This two-way communication allows the researcher to understand better the informant's perspectives and experiences (Krishnaswami et al., 2010, p. 99). The interviews will be conducted partially in person and via online platforms as some of the participants are based in other countries of the multinational company. The discussion will be recorded and afterwards transcribed, which involves converting the audio or video recordings of the interviews into a written format for analysis. This process requires careful attention to detail to accurately capture the content and structure of the interview dialogue. Establishing a clear and consistent transcription style is essential, including notations for pauses, tone, and nonverbal communication (Brinkmann & Kvale, 2018, p. 41).

3.4.1 Development of the Interview Guide

Analyzing data in case study research is crucial for developing theories, yet it is the process's most challenging and least standardized aspect. For analyzing the data collected from the conducted interviews, I will proceed with a thematic analysis in the following way: the data will be transcribed, and by identifying key themes and patterns, I will form categories. I will then examine the relationships between the types and develop an overall conceptual framework that discusses the findings. It is essential to ensure that the themes and categories are grounded in the data and that the analysis is systematic. The interview content analysis from this research will follow the classification of the five steps from Brinkmann & Kvale (2018, p. 116). During the initial interview stage, the interviewees openly share their experiences, feelings, and actions related to the topic without much interpretation or clarification from either the interviewer or the interviewee. This step involves the interviewee describing their own "life-world ". In the second step, the interviewees explore new connections and meanings in their experiences during the interview without any influence or interpretation from the interviewer. They may make discoveries and gain insights through their spontaneous descriptions.

The third step in the process involves the interviewer summarizing and interpreting the meaning of what the interviewee has described and communicating this back to the interviewee. The interviewee then has the chance to respond, and the process continues until one possible interpretation or it becomes clear that there are multiple, possibly conflicting interpretations. This interview involves ongoing understanding and the possibility of immediate confirmation or correction, leading to a self-correcting interview process (Brinkmann & Kvale, 2018, p. 116). The fourth step involves the interviewer analyzing the recorded interview. The interview is typically structured for analysis through transcription for textual analysis. The analysis consists of interpreting the interview's meaning, shedding light on the subject's understanding and providing new perspectives from the researcher. The fifth step involves the possibility of a re-interview, where the researcher presents their interpretations of the topics and allows them to comment on the accuracy and validity of the interpretations. This allows the issues to validate their participation in the research process by including their views and interpretations in the analysis. The re-interview may also enable the researcher to clarify any ambiguous or unclear statements made by the subjects during the initial interview (Brinkmann & Kvale, 2018, p. 117). This possibility is highly preferred if the interviewees are willing to be re-interviewed for clarification.

Both coding and categorizing are methods for analyzing texts. Coding involves attaching keywords to text segments, while categorizing involves a more systematic conceptualization of statements, allowing for quantification. Coding is crucial to various analysis methods, including content analysis, grounded theory, and computer-assisted analysis of interview texts. Gibbs (1028, as cited in Brinkmann & Kvale, 2018, p. 121) emphasizes the importance of using code memos in the coding process, which involves assigning keywords or categories to text segments for later identification. Code memos include information about the codes used, the date of coding, and the researcher's thoughts about the code. There are two types of coding: concept-driven and data-driven. Concept-driven coding involves using codes pre-developed by the researcher through an analysis of existing literature or sample material. In contrast, data-driven coding starts the coding process without pre-existing codes. In this research, a data-driven coding of the interviews will take place.

The final chapter of the study will take the form of a self-contained summary of the whole research, including the background investigation, methodology summary, and essential recommendations. This chapter will start with a brief statement of the research gap, the purpose of the study, and the findings based on factual information and analysis. The summary may reproduce the topical sentences of the various results and conclusions presented in the main body. A researcher must be cautious in concluding based on their limited data or preconceived notions not validated through analysis (Krishnaswami et al., 2010, p. 182).

3.5 Data Analysis

The supplier selection process is complex, especially when the environmental aspect of CSR is involved. Indeed, participants provided valuable insights into the various departments involved in the supplier selection process and shed light on the criteria and procedures employed to assess and qualify suppliers. By exploring these perspectives, we aim to gain a comprehensive understanding of how a multinational company selects its suppliers and what are the criteria that are being prioritized by it. Through this analysis, valuable insights will be gained into how supplier evaluation and selection can contribute to environmental sustainability goals, answer the research question of this master thesis, and provide practical guidance for organizations seeking to enhance their supplier selection processes.

Qualitative data analysis encompasses various materials, such as conversations, images, observations, and interviews. Analyzing qualitative data is multifaceted and can be influenced by different methodologies, theoretical perspectives, research traditions, and fields of study. While there is no singular correct approach to analyzing qualitative data, it is utilized to generate insights and understanding. It is crucial are standard practices that often emerge in qualitative analysis, including assigning codes to field notes, making marginal reflections, sorting and identifying patterns, themes, and relationships, using these findings to guide subsequent data collection, formulating generalizations based on consistent patterns, and comparing these generalizations with existing knowledge or theories (Lester et al. 2020).

The data analysis of this master thesis will take a form similar to the approaches taken by Gioia, Corley and Hamilton (2012). The analysis process begins by identifying primary codes directly from the interviews. These codes were then organized into second-level thematic categories representing theoretical concepts. These categories were further aggregated into broader knowledge dimensions through further intended synthesis. The analysis focused on the ten interviews conducted with the company's managers and compared the insights gained, identifying resemblances and developing shared interpretation (Gioia et al., 2013).

The two types of analysis look as follows: a "1st-order" analysis focused on the informants' perspectives using their terms and codes, and a "2nd-order" analysis incorporating the researchers' concepts, themes, and dimensions. This dual approach allows us to present both the voices of the informants and the researcher, demonstrating the rigorous connection between the data and the development of the new concept called "sense-giving" (Gioia et al., 2013).

The following step was followed for the analysis of the data gathered from the interviews (Gioia et al., 2013);

1. First and most importantly, the ten interview transcripts were thoroughly read multiple times to understand how the participants interpret the supplier selection process based on the environmental aspect of CSR.
2. After familiarizing myself with the data, I engaged in initial open coding. This involved reading the interview transcripts and systematically assigning codes to different data segments. It, therefore, followed a posteriori coding strategy, meaning codes were identified directly from the data. I identified and labelled 1st order codes based on the key concepts, ideas, and themes present in the interviews.
3. To move towards developing categories or themes, I began grouping related codes. This involved examining the similarities and connections between the 1st order codes and identifying patterns that emerged from the data. I looked for commonalities and recurring themes, considering the relationships between different codes. From approximately 50 codes – 10 grouping-related codes were created. In the 2nd-order analysis, specific codes and categories were developed to explore broader theoretical concepts that can help us understand and explain the phenomena and research question being studied (Gioia et al., 2013). Much attention was paid to emerging themes that may not have been previously discussed in the literature or existing concepts highly relevant to the research. The aim was to develop a set of themes and ideas that adequately describe and explain the researchers' observations. Getting deeper into the analysis, the goal was to seek a "theoretical saturation" point where the themes and concepts provide a comprehensive understanding of the data.

Following 2nd order data were revised from the analysis, which captures the main aspects or dimensions related to the supplier selection process and its connection to the environmental part of CSR practices.:

1. Supplier selection process/ criteria
2. Supplier selection stages
3. Supplier communication process
4. Supplier cooperation
5. Supplier environmental performance
6. Quality Control & Assurance
7. Measurement & Evaluation
8. Supply Chain Management & Cost Analysis
9. Cost-Benefit Analysis
10. Environmental Sustainability

4. According to Gioia et al. (2013), the next step was to investigate whether it is possible to refine the emergent 2nd-order themes even further into 3rd-order "aggregate dimensions." This involved examining the relationships and connections between the 2nd-order codes to identify overarching dimensions or higher-level constructs encompassing multiple themes (Gioia et al., 2013). The following aggregate dimensions were developed based on my data;

Aggregate Dimension 1: Supplier Selection Process and Evaluation

- Supplier selection process/ criteria
- Supplier selection stages
- Supplier communication process
- Supplier cooperation

Aggregate Dimension 2: Performance and Quality Assurance

- Supplier environmental performance
- Quality control and assurance
- Measurement and Evaluation

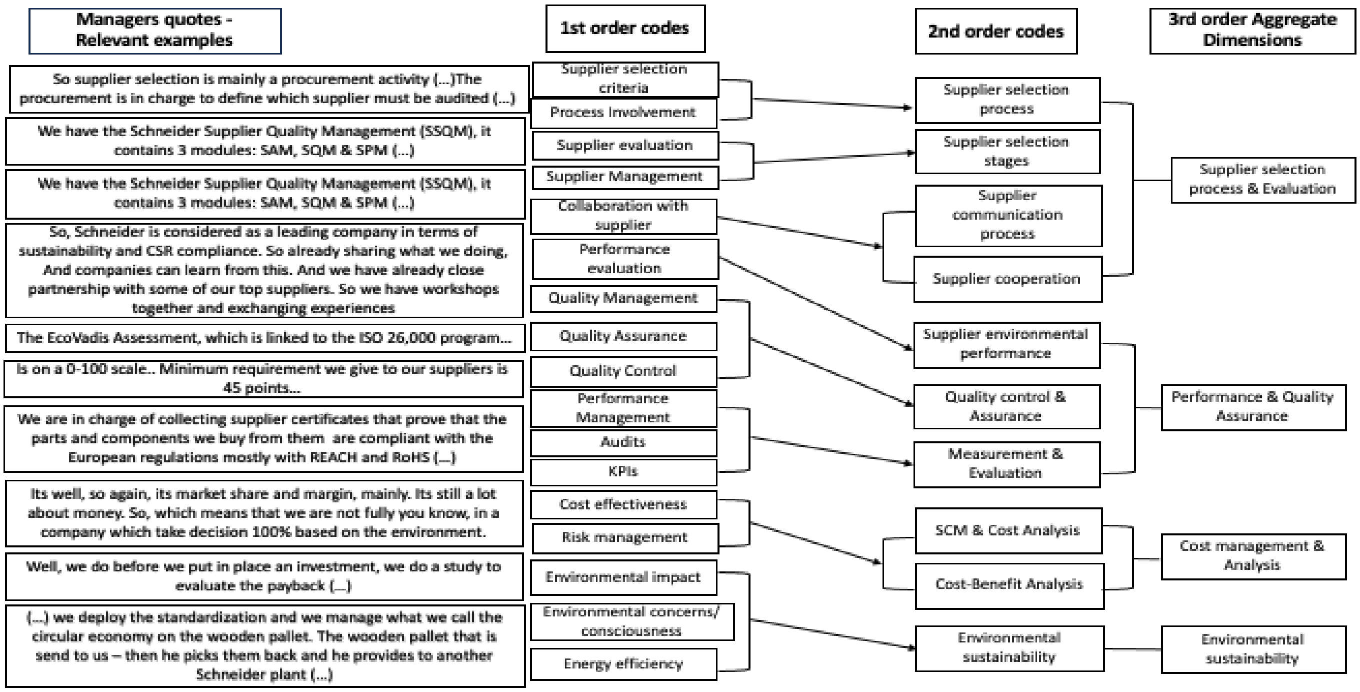
Aggregate Dimension 3: Cost Management and Analysis

- SCM & Cost Analysis
- Cost-Benefit Analysis

Aggregate Dimension 4: Environmental Sustainability

- Environmental sustainability

Figure 5: Represents a synopsis of the data structure: The process of supplier selection in a multinational company (source of table: author)



3.6 Quality of the data

The reliability and validity of the interviews involve more than just technical or conceptual considerations and raise fundamental questions about the objectivity of the knowledge. Neutrality is multifaceted and can be understood as freedom from bias, agreement between individuals, correspondence to reality, and the ability of objects to resist or challenge interpretations (Brinkmann & Kvale, 2018, p. 140). A well-designed interview can be an objective research method when it is free from bias. Reliability refers to the degree to which research findings can be replicated or repeated consistently and accurately. It is essential to ensure the research process is reliable so that random errors or inconsistencies do not influence the results. To increase reliability, standardized questions will be used to maintain consistency (Brinkmann & Kvale, 2018, p. 142).

Validity refers to the truthfulness, correctness, and persuasiveness of a statement or argument. In social sciences, validity concerns whether a research method investigates what it intends to study. A valid way is well-grounded, justified, and strongly supports its claims. Validation, therefore, involves choosing the most credible interpretation among competing and falsifiable knowledge. Validity is determined by examining the sources of invalidity; the researcher must critically examine the analysis, present their perspective on the subject matter, and apply controls to counteract selective perceptions and biased interpretations. The researcher should play the devil's advocate towards their findings, adopting a critical perspective to ensure the validity of their research (Brinkmann & Kvale, 2018, p. 143).

Depending on the research purpose, different methods can be used when presenting interview results. In this research, interview quotes will be given to illustrate the interview findings. The editing guidelines from Brinkmann & Kvale (2018) will be followed. The quotes will be presented in context, as they are fragments from a more extensive interview. It is essential to provide the interview context, including the question that was asked to prompt the answer. This approach lets the reader discern whether a specific theme originated from the interviewer or the subject and how its presentation influenced the given response.

To produce high-quality interview knowledge, flawed assumptions, such as the tendency to ask leading questions that can result in shallow or superficial interviews, will be avoided. Professional academic interview research involves not only acquiring practical skills in conducting interviews but also reflecting on the theoretical aspects of the research topic and being conscious of the ethical and epistemological foundation of interview-based studies (Brinkmann & Kvale, 2018, p. 154).

3.7 Ethical considerations

The researcher carefully followed ethical principles during the data collection for this study. In-depth interviews with managers within the organization involved confidential details due to the sector's competitive dynamics. Before each interview, explicit verbal consent was obtained for recording purposes. Before each interview, explicit verbal consent was secured for recording purposes. Participants were reassured of their freedom to respond only to questions they were comfortable with and to omit those they preferred not to address. To safeguard confidentiality, participant identities and confidential information were anonymized. Despite being advised not to reveal the company name, all participants voluntarily disclosed it. Participants emphasized that concealing the company's name is unnecessary, and as a result, it will be utilized in the data analysis. It is pivotal to underscore that the insights provided by participants are handled with the utmost care and respect.

4. Presentation and discussion of findings

This chapter explores how managers in a multinational company evaluate suppliers based on their environmental sustainability practices and how various departments are involved in the supplier selection process. Our data analysis (Fig. 1) showed four underlying knowledge dimensions: Supplier Selection Process & Evaluation, Performance & Quality Assurance, Cost Management & Analysis, and Environmental Sustainability.

4.1 Supplier selection process & Evaluation

In this point, I will discuss the similarities and differences between the answers based on ten managers of the interviews starting from the first aggregate dimension: "Supplier Selection Process & Evaluation". Based on the answers provided by the participants, it is evident that the supplier selection process involves multiple departments and stakeholders within the organization. The main departments mentioned include mostly the departments of procurement, quality and supply chain. The involvement of these departments reflects the multidimensional nature of supplier evaluation and selection. Participants highlighted that the supplier selection process is mostly initiated by procurement, with the involvement and support of the quality and supply chain department.

The 7th interviewee explains that the supplier selection process takes place mostly within procurement. He mentions the involvement of regional category managers, quality and supply chain auditors, and the plant requesting the audit. The process differs for new suppliers and existing suppliers. For new suppliers, there is a scouting phase followed by self-assessment and supplier visits. If the supplier meets the firm's needs, they undergo audits conducted by quality and supply chain auditors. Comparing the managers' answers, we can see that they all highlight the strong involvement of procurement teams in the supplier selection process. These answers indicate that the company has a structured supplier selection and qualification approach within their procurement department. The involvement of multiple teams ensures a comprehensive evaluation of suppliers based on various criteria, such as quality and sustainability. This approach enables the company to assess suppliers from different perspectives and make informed decisions when forming partnerships. As Transaction Cost Theory recognizes, economic activities can generate transaction costs, including those arising from imperfect information, limited rationality, uncertainty and opportunistic behaviours. Therefore, firms aim to minimize these transaction costs by involving different departments in the supplier selection. Firstly, the involvement of procurement ensures that suppliers are evaluated based on their ability to meet the firm's procurement needs, such as costs, quality and delivery requirements. In addition, they negotiate contracts and assess supplier capabilities, helping reduce information asymmetry and ensure favourable agreements. By involving other departments in supplier selection, firms aim to comprehensively evaluate potential suppliers, considering multiple dimensions of performance and minimizing transaction costs associated with information asymmetry and opportunistic behaviours. This multidisciplinary approach recognizes that supplier selection decisions have far-reaching implications for the firm and require input from stakeholders with specialized knowledge and perspectives to manage risks and solve problems between partners (Acquier et al., 2017). Moreover, involving multiple departments in the supplier selection process aligns with the principles of TCT, which highlight the need for governance mechanisms to manage risks and solve problems between partners. In this case, the involvement of different departments serves as a governance mechanism to ensure comprehensive supplier evaluation and minimize transaction costs (Acquier et al., 2017).

Now, moving to the 2nd order code, the supplier selection stages, it has been highlighted by all the participants that the whole supplier selection process is linked to a process called Schneider's Supplier Quality Management (SSQM) consisting of three verification steps of three departments: procurement, quality, and logistics. Initially, procurement sends a self-assessment to potential partners/ suppliers, gathering information on finances and other relevant aspects. Based on this initial assessment, a decision is made to proceed to the subsequent steps. For quality verification, a dedicated auditor contacts the supplier to schedule an appointment and conducts a comprehensive audit. This Evaluation includes the supplier's global quality management system, environmental considerations, health and safety practices, customer satisfaction, warehouse and material handling management, and other non-compliance issues. The outcome of the quality audit can result in approval, conditional approval, or rejection. In the case of conditional approval, suppliers receive feedback and are expected to address identified weaknesses. They must provide an action plan and commit to specific timelines for implementing corrective actions. A complementary audit is conducted to verify if the corrective measures sufficiently address the conditional points for final approval. If a supplier is rejected, it signifies their inability to meet the necessary standards. In such cases, the decision may involve reauditing after a substantial action plan or discontinuing collaboration. A similar approach is followed for the logistical aspect of supplier evaluation. This participant's explanation sheds light on the systematic and rigorous nature of the supplier selection process, emphasizing the importance of quality, environmental considerations, and continuous improvement.

Schneider's Supplier Quality Management (SSQM) consists of three modules: the Supplier Approval Module (SAM), the Supply Qualification Module (SQM), and the Supplier Performance Module (SPM). The SAM module assesses suppliers through various audits, including purchasing, supply chain, and quality audits. Additionally, the technical capability of the supplier to produce the desired product is reviewed. The

SQM module evaluates the supplier's capability to consistently deliver quality products in the short and long term. Qualification models ensure the supplier's ability to maintain high-quality production over time. Once a supplier is approved and engaged, their performance is continuously monitored to identify any negative deviations, prompting corrective actions. The Supplier Performance Module measures the continuous supplier performance in purchasing, quality and supply chain to ensure supplier compliance on sustainable development. The three modules, SAM, SQM, and SPM, reflect a holistic approach to supplier assessment, qualification, and ongoing performance tracking. The participant's emphasis on continuous monitoring highlights the importance of maintaining a high level of supplier performance to ensure consistent quality and operational efficiency. By incorporating these insights into the analysis, it becomes evident that the company has established a robust system that encompasses different stages of supplier engagement, from initial approval to long-term qualification and performance management.

Schneider Electric's suppliers' assessment method exhibits similarities to the approach outlined by Lo (et al., 2018). The supplier assessment criteria based on Lo (et al., 2018) are categorized into three main aspects, which align with the present study's findings. The first aspect focuses on supplier performance, corresponding to the Supplier Assessment Module (SAM) discussed earlier. Like Lo et al. (2018), Schneider Electric emphasizes delivery times, customer service responsiveness, and the supplier's ability to adapt quickly to changes and ensure fast delivery. These criteria reflect the importance of supplier reliability and agility in meeting the company's needs and maintaining a smooth supply chain.

The second aspect involves evaluating the environmental performance of suppliers, which corresponds to Schneider Electric's Supplier Quality Management (SQM) process. This aligns with the environmental aspect of supplier assessment highlighted by Lo et al. (2018). Both Schneider Electric and Lo emphasize the importance of sustainable practices and environmentally friendly manufacturing processes. Schneider Electric assesses its suppliers' commitment to environmental responsibility by considering waste reduction, pollution prevention, and renewable energy sources. This demonstrates the company's focus on promoting sustainability throughout its supply chain. The third aspect addresses supplier risk, which is also acknowledged by both Schneider Electric and Lo et al. (2018). Assessing supplier risk is crucial for ensuring the reliability and stability of the supply chain. Like Lo et al., Schneider Electric considers factors such as financial stability, compliance with regulations, and the supplier's ability to manage potential risks effectively. By evaluating supplier risk, Schneider Electric aims to mitigate potential disruptions and safeguard its operations. The alignment between Schneider Electric's supplier assessment method and the framework presented by Lo et al. (2018) highlights the consistency and relevance of the criteria considered in evaluating suppliers. This convergence supports the validity and applicability of both approaches and underscores the importance of key performance indicators, environmental responsibility, and risk management in supplier selection and management processes.

"Depending on what supplier can fulfil in the first round, we can say okay, you can become a Schneider supplier, but on this level, you are not allowed to get too big portion of the business because you need to improve further (…) the goal is not to get rid of suppliers, but to improve their performance in all areas (…) we have different supplier categories, the biggest and the most appealing is the strategic supplier, so 90% of the spend is concentrated with them" (I6)

The participant's statement sheds light on the company's supplier management approach, focusing on the progression and improvement of suppliers over time. The company recognizes that not all suppliers may initially meet the requirements to become strategic suppliers, but they are first given the opportunity to develop and enhance their performance. This approach allows suppliers to enter into a partnership with the company, though with limitations on the extent of their business involvement until they demonstrate further improvement. The participant emphasizes the importance of continuous improvement in all areas of supplier performance. Schneider Electric conducts quarterly business reviews where procurement teams thoroughly evaluate suppliers based on their specific areas of responsibility. These evaluations act as a stage for suppliers to either advance or downgrade their position depending on their performance. Different supplier categories highlight the hierarchical structure in supplier management, with the strategic supplier category being the most desirable. Being a strategic supplier means having a significant portion of the company's spend allocated to them, indicating a high level of trust and reliance. However, the participant acknowledges that becoming a strategic supplier is challenging due to strict requirements and increased competition.

The findings from the interview analysis strongly support the literature's suggestion that firms with higher switching costs are less likely to replace their suppliers (Christmann et al., 2006). Switching costs arise when a firm changes supplier, which entails investing additional time, effort, and resources to identify, evaluate, and integrate new suppliers into the supply chain. These costs can be particularly substantial in complex supply chains characterized by specialized products. The interviewee emphasized suppliers' challenges in becoming the firm's strategic partners. The firm's investment in its suppliers, such as knowledge transfer, training programs, and specialized equipment, contributes to developing unique relationship-specific assets specific to the firm-supplier collaboration. In addition, as discussed in the TCT, asset specificity is causing high costs and has a less easily transferable value. It can bring hold-up costs if the relationship between the supplier and the firm ends. These assets are valuable primarily within the confines of the established relationship and are not easily transferable to other suppliers (Acquier et al., 2017). The participant (I6) specifically highlighted the strategic objective of not seeking to replace or, as he mentions, "get rid" of suppliers but rather focusing on improving their performance. This approach reflects the firm's recognition of the substantial switching costs associated with supplier replacement and the importance of enhancing existing supplier relationships where investments are already placed. The distinction between strategic suppliers and others underscores the significance of the relationship between the firm and its strategic suppliers. By assigning a strategic supplier status, the firm indicates a higher level of trust, commitment, and reliance on these suppliers, as evidenced by a significant portion of the firm's spend being allocated to them. The findings from both the interview analysis and the literature converge on the understanding that firms with higher switching costs are more interested in preserving and enhancing their relationships with suppliers. By prioritizing supplier performance improvement over supplier replacement, firms can leverage their investments in existing supplier relationships, mitigate the costs and risks associated with supplier switching, and cultivate long-term collaborative partnerships. These strategic efforts promote stability mutual growth, and drive operational efficiency within the supply chain (Christmann et al. 2006).

The following interview statement caught my interest and needs to be noted:

"*But let's say and be very transparent, we don't consider sustainability as one of the key sectors at the supplier selection. Also, Schneider does not use too many new suppliers; mostly, we are using the globally famous ones, and we know for them the risk is quite low; they also have a similar commitment or action as Schneider for the green products."* (I3)

The participant's statement reveals an interesting perspective regarding sustainability in the company's supplier selection process. He admits that sustainability is not considered a primary factor when selecting suppliers. Instead, the company tends to rely heavily on established global suppliers with a well-known reputation. This approach suggests that the company emphasizes mitigating risks and ensuring a reliable supply chain rather than prioritizing sustainability as a key criterion. The participant's mention of famous global suppliers implies that the company places a high level of trust in these suppliers, considering them to have low associated risks. This trust is likely built on previous successful collaborations and shared commitments to sustainability, particularly regarding green products. It is worth noting that while sustainability may not be a primary consideration in supplier selection, the participant implies that sustainability commitments and actions are still valued within the company's operations. This insight into the company's approach to sustainability within supplier selection adds a nuanced perspective to the analysis. It suggests that while sustainability may not be a decisive factor, it is still an important aspect of the company's overall sustainability strategy, emphasizing working with suppliers with similar sustainability commitments. This approach acknowledges the broader sustainability efforts within the company while highlighting the prioritization of risk mitigation and reliability in supplier selection. As above, we see the importance of the firm trying to avoid transaction costs and minimize the risks associated with smaller suppliers. Choosing global suppliers with a strong environmental performance and positive brand image can provide companies with assurance regarding sustainability practices. This can reduce the need for extensive evaluation and verification processes, saving the supplier selection process time and resources. Moreover, the positive brand image of global suppliers can enhance the company's reputation and credibility regarding sustainability commitments (Acquier et al., 2017).

Regarding how the company communicates its environmental expectations to potential suppliers, most of the answers highlighted that its primary means of communication is through the Supplier Code of Conduct, a foundational document for outlining its requirements. This code of conduct is accessible to suppliers through various channels, including the company's website. The participant mentions the Schneider Supplier Portal, a supplier relationship management platform. This portal facilitates communication and engagement between the company and its suppliers. It is a central platform where the company can share new initiatives and updates, including environmental expectations. To communicate the firm's changes/ updates, Schneider Electric utilizes the portal to create a document outlining the updated terms and conditions. Suppliers can access the document through their login credentials on the portal. This approach allows suppliers to review the changes, accept them, or provide any necessary comments or feedback. By leveraging the Supplier Code of Conduct and the Schneider Supplier Portal, the company establishes a transparent and interactive communication channel with its suppliers regarding environmental expectations. This approach ensures suppliers know the company's environmental requirements and can actively engage by accepting or providing feedback on new initiatives and updates. Overall, the participant's response highlights the importance of the Supplier Code of Conduct and the Schneider Supplier Portal in effectively communicating environmental expectations to potential suppliers and fostering a collaborative relationship centered around sustainability and compliance.

4.2 Performance & Quality Assurance

The manager - supplier quality leader/ auditor (interview 7) clarifies the criteria used to assess a supplier's environmental performance during a supplier audit process. He mentions that if a supplier possesses ISO 14001 certification, this recognized standard already covers many environmental requirements. He emphasizes pollution prevention and resource reduction as key areas of focus. The supplier is expected to demonstrate robust processes if pollution risks are identified during the risk assessment. The participant also highlights the involvement of external companies in conducting different analyses, such as water analysis, to assess the supplier's environmental impact.

Regarding waste management, the participant mentions suppliers should identify waste origins and periodic collection by an external company. The participant touches upon energy consumption as well. While it may not fall under the audit scope discussed, he provided an example of a supplier that presented projects to reduce energy consumption, such as installing solar panels. The participant mentioned a specific case of a supplier in Bulgaria with a fully roofed facility equipped with numerous solar panels. The participant's response highlights Schneider Electric's attention to various environmental aspects during supplier audits. This includes assessing pollution risks, waste management practices, air emissions, material restrictions, water contamination management, and energy consumption. The mention of ISO 14001 certification underscores the importance of recognized standards in evaluating a supplier's environmental performance. Schneider Electric aims to ensure its suppliers adhere to sustainable practices and actively engage in initiatives to minimize their environmental impact.

The literature review also underscores the significance of international certifiable standards, such as ISO 14001 for environmental management and ISO 26000 for social responsibility, in guiding CSR practices and monitoring supplier compliance. These guidelines offer a structure for companies to integrate CSR practices and guarantee that their suppliers follow established optimal methods (Ciliberti et al., 2009). By utilizing these standards, companies can reduce transaction costs in the supplier selection process. Instead of conducting their evaluations, they can rely on the certification of suppliers to verify their compliance with CSR criteria. This approach allows companies to streamline their supplier evaluation process, saving time and resources while ensuring suppliers meet the necessary CSR requirements.

International certifiable standards have been proposed as a global governance mechanism to address cross-country differences in government regulations and improve CSR practices. For instance, the SA8000 certification, which evaluates and monitors fair labour practices, can be implemented across the supply chain to reduce transaction costs and ensure compliance with international labour standards (Ciliberti et al., 2009). As transaction cost theory recognizes, transaction costs can arise due to factors such as imperfect information, opportunistic behaviour, and uncertainties (Acquier et al., 2017). One way to mitigate these costs is by relying on certifications and standards to evaluate suppliers' compliance with CSR criteria. Companies can reduce transaction costs by relying on international certifications such as SA8000 to assess suppliers' labour practices. By implementing this certification across the supply chain, firms can ensure that suppliers meet international labour standards, thus reducing the need for extensive monitoring and evaluation of suppliers' social performance. This reliance on certifications helps to minimize transaction costs associated with information asymmetry and the potential for opportunistic behaviour. Furthermore, international certifiable standards, such as SA8000, are seen as a global governance mechanism. TCT emphasizes the importance of governance mechanisms in managing risks and solving problems between partners (Acquier et al., 2017).

In the screenshots below is provided the audit template demonstrating the criteria that every supplier should fulfil in the area of environmental assessment to be able to be a company's supplier. The first point the supplier should possess are the required permits, approvals, licenses and registrations that are obtained by the environmental authorities as required by law, such as the ISO 14001, which helps suppliers identify and manage their environmental impacts, reduce resource consumption, minimize waste generation, and comply with applicable environmental regulations. It offers a structured method for companies to establish environmental goals, incorporate ecologically sustainable strategies, and make necessary corrective measures when needed.

A very important point of the audit is the hazardous substances, and it is being strongly assessed how the supplier identifies and classifies its hazardous substances as they should maintain lists and databases of hazardous substances along with their associated risks and safety guidelines to ensure proper handling, storage, transportation, and disposal. The points of air emissions, stormwater management, energy consumption and greenhouse gas emission are highlighted, as well as important assessing criteria for suppliers. These criteria are essential in evaluating a supplier's environmental performance and commitment to sustainability. By considering these factors, the company can assess the potential impact of a supplier's operations on air quality, water resources, energy usage, and climate change. Implementing effective measures to minimize air emissions, manage stormwater effectively, reduce energy consumption, and lower greenhouse gas emissions are key indicators of a supplier's environmental responsibility and alignment with sustainable practices. Such assessments help the company make informed decisions when selecting suppliers and promoting environmentally conscious supply chains.

Furthermore, the environmental assessment of suppliers at Schneider Electric aligns with the second supplier selection criteria of Lo et al. (2018), which emphasizes the importance of environmental protection in supplier practices. Schneider Electric assesses suppliers based on compliance with environmental regulations and efforts to minimize waste generation. Consistent with the literature, the company also evaluates suppliers' use of sustainable materials, packaging waste reduction, and integration of environmentally friendly manufacturing processes (Uygun et al., 2016, as cited in Lo et al., 2018).

(Screenshots taken from the participant`s file which was being shared during the meeting)

C) Environment					
VAP-C1	Environmental Permits and Reporting				
VAP-C1.1a	Are there legally required licenses, permits, approvals or registrations needed?	Yes	ISO 14001:2015 expired date 10/11/2024		
VAP-C1.1b	The facility has obtained all required environmental permits, approvals, licenses and registrations **(only applies if C1.1a = "yes")**	Conformance	reports and documentation exists, Air emission, Water, Energy.. Legal requirement ISO 14001:2015 expired date 10/11/2024		Site Observations 1) Any unidentified impacts to: a) Air emissions b) Wastewater discharge
VAP-C1.2a	Is there legally required environmental reporting?	Yes	ISO 14001:2015 expired date 10/11/2024		
VAP-C1.2b	Reporting to environmental authorities as required by law is performed timely **(only applies if C1.2a = "yes")**	Conformance	reports and documentation exists, Air emission, Energy.. Legal requirement applied		Site Observations Not Applicable Record Review 1) Process a) A documented process is in place to
VAP-C2	Pollution Prevention and Resource Reduction				
VAP-C2.1	Adequate and effective programs, including objectives and targets, to identify, manage, minimize or eliminate at the source emissions and discharges of pollutants and generation of waste and conserve the use of natural resources	Conformance	the waste from the painting (powder) has been stored properly and handled by external Company periodically		Site Observations Not Applicable Record Review
VAP-C3	Hazardous Substances				
VAP-C3.1a	Are hazardous materials (including wastes) used, handled, generated, stored on site or disposed of?	Yes			
VAP-C3.1b	Hazardous substances including wastes are properly categorized, labeled, handled, stored, transported and disposed using government-approved and/or licensed vendors **(only applies if C3.1a = "yes")**	Conformance	clear identification and storage condition managed in restricted area		Site Observations Record Review Management Interview Worker Interview 1) Management
VAP-C3.2	Hazardous waste is safely disposed of including a disposal supplier(s) assessment	Conformance	Official company with evidences of contract and treatment of Waste		Site Observations Record Review Management Interview Worker Interview Not Applicable 1) Policy
VAP-C4	Wastewater and Solid Waste				
VAP-C4.1a	Is solid waste generated or stored on site?	Yes			
VAP-C4.1b	Solid waste is managed and responsibly disposed of **(only applies if C4.1a = "yes")**	Conformance	clear identification of the waste material with code which is used also for reporting in government web site		Site Observations 1) Management a) Waste is adequately and effectively
VAP-C5	Air Emissions				
VAP-C5	Air Emissions				
VAP-C5.1a	Are there air emissions?	Yes			
VAP-C5.1b	Air emissions are routinely monitored and air emission control systems are routinely monitored for performance. **(only applies if C5.1a = "yes")**	Conformance	air emission is monitored following the law requirement - Mask wearing recommended - not mandatory		Site Observations 1) Equipment a) Equipment for air emission treatment is well maintained and appropriate and identified 2) Treatment a) Air emission are treated prior to discharge
VAP-C5.2a	Does the site have legal requirements on environmental noise?	Yes			
VAP-C5.2b	Environmental noise levels are within regulatory limits **(only applies if C5.2a = "yes")**	Conformance	Measurement done according to the law requirement and PEE suggested earplugs external company management -		Site Observations 1) No excessive boundary noise Record Review
VAP-C7	Storm Water Management				
VAP-C7.1	Adequate and effective procedures are in place to document, characterize, and monitor water sources, water discharge and control channels of contamination	Conformance	underground tank in the to the extrusion dept. - hatch for insection		Site Observations 1) Water withdrawal a) Water withdrawal and discharge points
VAP-C8	Energy Consumption and Greenhouse Gas Emissions				
VAP-C8.1	Energy consumption and all relevant Scopes 1 and 2 Greenhouse gas (GHG) emissions are tracked and documented	Not included in this Audit			Site Observations 1) Greenhouse Gas emissions a) There is no significant energy consumption or GHG emissions at the facility that are not tracked and documented
VAP-C8.2	Cost-effective methods to improve energy efficiency and to minimize their energy consumption and all relevant Scopes 1 and 2 greenhouse gas (GHG) emissions are implemented	Not included in this Audit			Site Observations 1) Technology or management strategies to minimize energy consumption and GHG emissions are visible.

Based on the participants' quotes regarding the measurement and tracking of the suppliers' environmental performance, using the EcoVadis assessment is highlighted as a key tool for measuring and tracking suppliers' environmental performance. EcoVadis is a third-party assessment program that evaluates companies' sustainability practices based on the ISO 26000 standard. The participants emphasize that meeting the minimum requirements and achieving a certain score on the EcoVadis assessment is crucial for suppliers to be considered strategic partners. The participants mentioned that Schneider Electric applies the same assessment to its suppliers, indicating a mutual expectation of sustainability performance throughout the supply chain. This demonstrates a comprehensive environmental management approach, where suppliers and customers are held to similar standards. The participants also mentioned that Schneider Electric itself undergoes the EcoVadis assessment and proudly states being in the top 1% of companies based on the results. This emphasizes Schneider's commitment to sustainability and reliance on a strong supply chain to achieve high sustainability scores. In addition, the quotes indicate that EcoVadis scores and assessments play a significant role in supplier evaluation and management. Suppliers are expected to participate in the EcoVadis assessment and achieve a minimum score, typically 45 points, to be considered strategic partners. This demonstrates Schneider Electric's commitment to selecting suppliers prioritizing sustainability and aligning with their environmental standards.

Overall, the analysis highlights the importance of the EcoVadis assessment in measuring and tracking suppliers' environmental performance for Schneider Electric. It serves as a standardized tool for evaluation, setting minimum requirements, and monitoring progress. In assessing suppliers' sustainability practices, Schneider Electric uses a third-party assessment to ensure transparency, comparability, and credibility. This approach aligns with their commitment to sustainability and enables them to build a strong and responsible supply chain. Using the EcoVadis assessment aligns with the principles of TCT by reducing transaction costs associated with gathering information, evaluating suppliers, and managing relationships. Schneider Electric can leverage the expertise and resources of EcoVadis to streamline the evaluation process, minimize information asymmetry, and ensure transparency and credibility in assessing suppliers' sustainability practices.

4.3 Cost management & analysis

The managers' responses provide insights into how Schneider Electric balances environmental considerations with other factors, such as cost and quality when selecting suppliers. Overall, Schneider Electric recognizes the importance of environmental CSR considerations when selecting suppliers. While quality and competitiveness are typically primary factors, the participants emphasize that sustainability is given significant weight in the decision-making process. The answers vary regarding the importance of environmental aspects in the supplier selection process.

"It's not the primary focus; it can be considered a KPI. Before addressing the aspect of CSR, the key factors for a business are competitiveness, quality, level of service, and pricing. However, if during an audit, we identify any significant issues, such as child labour in the production process, it becomes a critical concern (…)." (I7)

The participant acknowledges that while environmental CSR is not the primary focus, it is considered a Key Performance Indicator (KPI). The key factors for selecting suppliers are competitiveness, quality, level of service, and pricing. However, if significant issues are identified during an audit, such as child labour or using hazardous substances without proper control measures, the priority shifts from other factors to addressing these critical concerns. Almost the same condition is described by Xu (et al., 2012), who, next to the traditional criteria of quality, delivery times, reliability, and material costs, highlight the significance of discrimination in working conditions, abuse of human rights (including issues like child labour), and long working hours. Including these criteria reflects a growing awareness and emphasis on ethical and social responsibilities in supply chain management. Companies are increasingly concerned about ensuring fair and responsible practices throughout their supply chains, not just focusing on product quality and cost.

The findings from previous research on supplier selection, which emphasize the importance of various factors grouped into categories such as financial, organizational culture and strategy, and technology, align with the statement made by the participant (I7). The participant highlights key factors in supplier selection, including competitiveness, quality, level of service, and price. These factors are commonly recognized as crucial considerations in supplier evaluation and are consistent with the literature (Karpak et al., 2001; Gonzalez et al., 2004, as cited in Faisal et al., 2016). Notably, sustainability is perceived by the participant as a key performance indicator (KPI) rather than a primary factor in supplier selection. This finding suggests that while sustainability is recognized as important within the broader context of business performance, it may not hold the same level of priority as factors such as competitiveness, quality, service, and price. This aligns with the literature's emphasis on quality, delivery, and price as the most critical factors in supplier selection. The participant's viewpoint highlights the pragmatic approach taken by businesses, where sustainability is considered within the framework of key performance indicators and overall business objectives. This perspective acknowledges the significance of sustainability as a metric for measuring supplier performance but suggests that other factors play a more influential role in the selection process. It is important to note that the participant's statement reflects their perspective, and other participants have different viewpoints on the importance of sustainability in supplier selection, such as the following statement:

"(...) So, for me, it's really on the same level. I will never choose a supplier with lower prices if the sustainability is not there. We are managing this time on many plants, many programs to reduce our carbon emissions, to use circular economy, to manage our plastic waste. We are focused on the plastic reduction. "(I9)

However, sustainability is considered equally important, and the participant states that they would never choose a supplier solely based on lower prices if sustainability is not present. The participant highlights the focus on reducing carbon emissions, adopting circular economy practices, and managing plastic waste, demonstrating a commitment to environmental sustainability while involving the employees in these practices.

Indeed, there are connections between the literature and the participant's statement regarding the importance of sustainability in supplier selection. The literature emphasizes that quality, delivery reliability, cost to the customer, and service are important criteria in supplier selection, aligning with the participant's statement that these factors are considered in their decision-making process. The participant's emphasis on sustainability as a key factor with lower prices reflects a broader perspective on supplier selection beyond immediate economic considerations. This suggests that the participant recognizes the long-term benefits of sustainability, such as increased revenue, market share, and share prices, as mentioned in the literature (Faisal et al., 2016). Overall, the connections between the literature and the participant's statement highlight the growing recognition of sustainability as a critical factor in supplier selection. Both sources emphasize the need to consider sustainability alongside traditional economic factors, reflecting a broader perspective encompassing long-term economic viability, environmental impact reduction, and promoting sustainable practices.

Another participant adds: *"It's really not an easy one. So, I think, let's be honest, let's be transparent. I think today, when you look at it, quality will always be first, which means that even if you have best in class environmental supplier with bad quality, well quality will always be first and then cost versus environment will be at the same level (...). "(I10)*

This response acknowledges that balancing environmental considerations with other factors is not easy. Quality is the top priority, and the decision-making process considers cost and the environment equally. The participant mentions that the decision may vary depending on the business and country context. While environmental products can be sold at higher prices in mature countries to compensate for margins, cost considerations may still play a role in other countries. The response indicates that the company is aware of the need to change and prioritize the environmental aspect more in the future.

"So, first in Schneider, we never talk about quality with other things, quality is the number one. But if the supplier is seriously not meeting the sustainability requests, we don't have business with him (...). (I3)

In this statement, the interviewee emphasizes the importance of quality as the top priority for Schneider Electric. He states that quality is always the first consideration when doing business with a supplier. However, they also mention that if a supplier does not meet the sustainability requirements, Schneider Electric would not engage in business with them. This indicates that while quality is paramount, sustainability is also a significant factor in supplier selection for Schneider Electric. They are committed to ensuring their suppliers align with their sustainability goals and meet the company's sustainability requests. If a supplier falls short in sustainability, it can impact their ability to collaborate with Schneider Electric, even if the quality and cost aspects are favourable. This approach demonstrates Schneider Electric's dedication to integrating sustainability into its supply chain and reflects its commitment to responsible

business practices. It highlights their recognition that sustainability considerations are important alongside traditional factors like quality and cost when forming supplier partnerships. The similarities between the participant's statement and the literature review are evident in their recognition of quality as a primary consideration in supplier selection. Both sources acknowledge that the quality of products or materials is a fundamental criterion when evaluating potential suppliers (Dickson, as cited in Xu et al., 2012).
Additionally, the literature review emphasizes the shift in supplier selection criteria due to increased globalization and the need for companies to address the environmental requirements of CSR practices. Similarly, the participant's statement highlights the importance of sustainability in supplier selection for Schneider Electric. They emphasize that if a supplier is seriously not meeting sustainability requests, the company will not engage in business with them, indicating the significance of sustainability considerations alongside quality.

Both sources also highlight the evolving nature of supplier selection and the increasing importance of factors beyond price and delivery times. The literature review mentions the importance of just-in-time (JIT) practices and the collaboration with numerous suppliers. Although not explicitly referring to JIT, the participant's statement suggests that sustainability requirements are considered alongside traditional criteria such as quality, delivery times, and cost when forming supplier partnerships.

While some of the participants in the responses acknowledged that environmental considerations are important, there are indications that other factors, such as cost and quality, take precedence. As mentioned, quality will always be the priority, and cost versus environment will be at the same level. They also highlight the challenges of selling environmental products at higher prices in some countries, influencing their end-decisions. Most participant answers state that the decision-making process is not currently based 100% on the environmental aspects at Schneider Electric. These responses suggest that while environmental CSR is recognized as significant, some priorities may be balanced with other factors. It indicates the need for ongoing efforts to further integrate and elevate the importance of environmental considerations in supplier selection processes. Schneider Electric can continue to evolve its approach to ensure that environmental considerations consistently hold a higher position alongside cost and quality factors.

When I posed the question of the company ever had to decide between cost savings and an environmental objective and how they prioritize the factors of price product quality, the responses from the participants varied as follows:

"(…) *we are manufacturing at Schneider switches for which we are willing to put more recycled plastic in, but putting recycled plastic within the switches, fees make the customer product a bit higher. So, for some* *specific regions, we decided not to go with recycled plastic because we will not be able to sell the product at the price which will be needed to save our margin (...)*" (I10)

The participant describes a situation where the company had to decide between using recycled plastic in switches to increase the product's cost or choosing non-recycled plastic to maintain a lower price and preserve margins. In this case, the decision was to prioritize costs over the environment, as the company believed that compromising quality to achieve environmental objectives would not be beneficial. In addition, it was noticed during the interview that the participant believes that the company is not yet at the point where costs play no role when deciding between environmental aspects and costs.

"(...) I can tell you that sustainability and CSR aspects are more important than price. Because of the consequences, it's really easy if we miss fulfilling some of our promises that we made to our customers, they can come back later with their complaints, and we need to recall a product from the market (...) "(I6)

The following participant expresses that sustainability and CSR are more important than price. He highlights the potential consequences of not fulfilling customer promises, such as product recalls, increased costs, and damage to the company's reputation. The participant asserts that compromising sustainability and CSR is never an option for the company, emphasizing the significance of these factors.

This perspective resonates with the literature's view that supplier selection is a critical aspect of CSR since it directly impacts a company's overall image and reputation. The literature review suggests that CSR practices are essential for businesses in today's society, as they contribute to positive societal impacts across environmental, social, and economic dimensions. Ignoring CSR principles can lead to risks such as customer loss (Xu et al., 2012). In this context, the participant's statement highlights the potential consequences of compromising sustainability and CSR, including product recalls, increased costs, and damage to the company's reputation. The literature review also recognizes the role of suppliers as extensions of a company, emphasizing that their actions reflect on the company's image. Thus, companies must ensure that their suppliers comply with CSR standards to mitigate reputational risks (Xu et al., 2012), which also strongly connects with the TCT emphasizing the importance of managing opportunistic behaviour and reducing transaction costs in business relationships. In supplier relationships, firms aim to minimize transaction costs associated with imperfect information, limited rationality, and uncertainty. One way to mitigate these risks and transaction costs is by selecting and partnering with suppliers who align with the firm's values, including CSR standards. By considering suppliers as extensions of the company, firms recognize the potential reputational risks associated with the actions of their suppliers. If suppliers engage in unethical or unsustainable practices, it can negatively impact the company's image and reputation. To mitigate these risks, firms should ensure the environmental compliance of their suppliers.

Comparing the interviewees' answers, we observe varying perspectives on prioritizing cost savings and environmental objectives. Answer one highlights prioritizing quality over the environment when cost implications are involved. Answer two positions sustainability and CSR as more important than price due to potential consequences and reputation impact. Other answers showcase a situation where environmental and quality considerations were weighed together, suggesting a balanced approach. These diverse perspectives indicate that the company's decision-making process may differ among individuals and situations. Factors such as price, quality, supplier-related considerations, and environmental objectives are weighed differently based on individual priorities and the specific context of each decision.

Regarding the costs associated with forming partnerships with suppliers with different views or levels of commitment to CSR, the participants explain that the company shares information about their sustainability journey with suppliers, showcasing Schneider's success and how sustainability can contribute to profits rather than compromising them. They hold Schneider supplier days to exchange details on how suppliers can contribute to sustainability performance. The company encourages suppliers to actively participate in the CSR journey by demonstrating their commitment to sustainability and its benefits. However, if a supplier neglects or shows unwillingness to engage in sustainability, it implies that they may not be suitable for a long-term partnership with Schneider.

The participants' answers provide insights into the company's strategies for managing costs associated with partnerships with suppliers of varying CSR commitment levels. In general, it highlights the importance of sharing information and demonstrating the benefits of sustainability to encourage suppliers to actively participate to avoid having suppliers with significantly different commitments to CSR. The company is even ready to invest in the suppliers' technologies to help them overcome financial problems. Investing in new technology advancements to reduce negative environmental impacts demonstrates a commitment to helping suppliers improve their sustainability practices. It can be seen as a form of support and collaboration. This aligns with the literature's suggestion of reorganizing production systems and adopting responsible technologies to meet CSR requirements (Acquier et al., 2017).

Investing in technologies demonstrates its commitment to sustainability by actively assisting suppliers in addressing financial challenges that may hinder their ability to adopt sustainable practices. This support can come in various forms, such as sharing expertise or facilitating access to sustainable technologies. Investing in technologies can help suppliers overcome financial barriers that may prevent them from implementing environmentally friendly processes or adopting sustainable technologies. By providing financial assistance or resources, the company encourages suppliers to improve their sustainability practices, aligning with its sustainability goals.

The company shares a proactive approach to investing in advanced technologies and offering its solutions to suppliers. Lastly, it is being acknowledged the potential cost implications and the company's aim to work with suppliers who align with their sustainability commitments. Overall, these approaches reflect the company's commitment to sustainability while trying to avoid potential costs in forming partnerships with suppliers with different views or levels of commitment to CSR.

Table 6: Summary of the supplier selection criteria of the firm (source of table: author)

Criteria	***Importance***	***Description***
Quality	High	Quality is always the top priority in supplier selection. The company places a strong emphasis on the quality of products or materials supplied.
Competitiveness	High	Competitiveness in terms of pricing and cost considerations is crucial for the company.
Environmental Sustainability	High	The firm recognizes the importance of environmental CSR considerations and sustainability in supplier selection.
Delivery Reliability	High	Timely and reliable delivery is a critical criterion for evaluating potential suppliers.
Costs	Medium	While cost is important, it may not always be the primary factor. The firm balances cost considerations with other factors, such as quality and sustainability.
Service Level	Medium	The level of service provided by suppliers is considered in the decision-making process.
Compliance with sustainability requests	High	Suppliers must comply with the firm's sustainability requests, demonstrating a commitment to environmental practices.
Reputation and Customer promises	High	The firms' values, its reputation and the promises made to customers, ensuring that suppliers align with CSR standards to mitigate reputational risks.
Long term partnership potential	High	The firm seeks suppliers with the potential for long-term partnerships and collaboration.

Alignment with the firm's sustainability goals	High	Suppliers must align with the firm's sustainability goals and actively participate in the CSR journey.
Adaptability to sustainable technologies	High	Suppliers' willingness and ability to adopt sustainable technologies are key factors in supplier selection.

4.4 Environmental sustainability

Participants acknowledge that the company is encountering increasing challenges in finding suppliers that meet their environmental standards.

"*I think we are encountering it more and more (...) we need to find partners who are able to get this visibility in sustainability, which makes it super challenging because in terms of data availability (...)* "(I10)

The participant attributes this to the company raising the bar and seeking partners who have visibility in sustainability throughout their operations. However, the participant acknowledges that obtaining this level of visibility and data availability is more difficult for smaller companies compared to a larger company like Schneider. This highlights the challenges in ensuring comprehensive sustainability practices throughout the supply chain. Nevertheless, in response to addressing this challenge, the company has implemented a proactive approach. They offer help and services through their Sustainability Consulting Group to support suppliers who cannot fulfil Schneider's requirements. This assistance includes creating a roadmap for decarbonization and setting up IT tools to monitor data related to sustainability metrics. However, it's important to note that these services are provided at a cost, indicating that suppliers are expected to invest in improving their environmental performance.

The analysis of this exchange demonstrates the company's commitment to not only holding suppliers accountable but also assisting them in meeting the environmental standards set by Schneider. The company actively promotes sustainability and decarbonization efforts among their suppliers by offering support and services through its Sustainability Consulting Group. This approach helps suppliers improve their environmental performance and fosters long-term partnerships based on shared sustainability goals. Furthermore, the participant's mention of suppliers needing to pay for these services implies that the company is leveraging their expertise and resources to drive change and motivate suppliers to raise their environmental performance. This approach recognizes that sustainable practices require investments and a willingness to collaborate and provide necessary tools and guidance. Overall, the analysis highlights the company's proactive stance in addressing the challenges of finding suppliers that meet their environmental standards. By offering assistance and services, they aim to support suppliers in improving their sustainability practices and establishing a roadmap for decarbonization. This approach emphasizes the company's commitment to sustainability and willingness to collaborate with suppliers to achieve their shared environmental goals. In general, it is being highlighted the ongoing efforts required to maintain high standards throughout the supply chain. There is a continuous need for monitoring, supplier engagement, and adaptation to changing geopolitical and environmental circumstances.

Though Schneider is trying not to terminate its relationships with suppliers in case environmental concerns arise, it prefers supporting them while improving. One participant mentioned that while they have disengaged with suppliers for various reasons, including environmental issues, it was not the sole reason for termination. He emphasizes that trouble usually comes in a pack, indicating that environmental concerns were not the primary factor in the decision to end the relationship:

"(…) *the supplier was not at the level we wanted them to be, and they didn't want it to improve; it was not the only issue. So, they also had issues with delivery, quality, and finance. So, usually, trouble comes in a pack. And it was not only the CSR reason why we disengaged with the supplier, but it was because of multiple reasons (...) "(I6)*

Another participant mentioned disengaging with suppliers for reasons related to quality but did not mention environmental concerns as a factor for termination. This implies that while quality issues can lead to disengagement, sustainability reasons were not cited as a significant cause in their experience. These diverse perspectives indicate that terminating supplier relationships solely due to environmental concerns may be relatively rare or less pronounced than other factors, such as quality or broader operational issues.

The participant's statement reveals that while quality issues were cited as a reason for disengaging with a supplier, environmental concerns were not explicitly mentioned as a significant factor in their experience. This observation aligns with the broader literature, which acknowledges that supplier disengagement is often driven by a combination of multiple factors rather than being solely attributed to CSR or environmental considerations. In the literature, quality, delivery times, and reliability criteria have been identified as primary factors influencing supplier selection and termination decisions (Dickson, as cited in Xu et al., 2012).

Overall, various steps and initiatives are being undertaken by the company to enhance suppliers' environmental performance. These include collaboration, guidance, utilization of technology solutions, transportation optimization, and leveraging assessment platforms. The company's approach reflects a comprehensive strategy to drive sustainability improvements across the supply chain.

"No, in fact, we do, so what we are doing with our top 1,000 suppliers; we have what we call the Zero carbon project, where we are taking them into our journey to decarbonize by 50% of their operation. So, it's one of our biggest suitability projects (…) "(I10)

The participant mentions a significant Zero Carbon Project initiative targeting the top 1,000 suppliers. The project aims to collaborate with suppliers, assess their operations, provide audits, and guide them on areas for improvement to achieve a 50% decarbonization goal. This example showcases a comprehensive approach involving working closely with suppliers and providing guidance to reduce carbon emissions.

Collaboration with suppliers is recognized as an effective strategy for improving environmental practices, as Gimenez et al. (2012) highlighted. Through collaborative efforts with suppliers, companies can implement new environmentally friendly technologies and processes, leading to better environmental performance. This collaborative approach enables companies to identify and create multiple opportunities to reduce costs and environmental impact. One effective approach mentioned in the literature is the eco-design approach, which focuses on designing products and processes with environmental considerations. By integrating sustainable design principles, companies can reduce waste generation, energy usage, and other harmful environmental impacts throughout the product lifecycle. This approach aligns with the participant's mention of the Zero Carbon Project, indicating a shared recognition of the importance of implementing environmentally friendly practices to minimize carbon emissions.

In general, there are actions taken by the company to improve suppliers' environmental performance. Firstly, they strive to involve partners and utilize their energy management solutions to help suppliers reduce their carbon footprint and energy consumption. This approach can even be seen as a strategic move by the company to improve the environmental performance of suppliers and promote their own products and solutions. By actively engaging suppliers and offering their own energy management solutions, the company can showcase its products' effectiveness and value in driving sustainability. This approach aligns with the company's overall business strategy of selling solutions to improve energy management. It also allows suppliers to benefit from the expertise and technological advancements offered by the company.

Furthermore, by involving partners and promoting their products, the company can establish a closer and more collaborative relationship with suppliers. This collaboration can foster innovation, knowledge-sharing, and mutual growth in pursuing sustainability goals. It also allows the company to create a positive impact beyond their immediate operations by influencing the practices of their suppliers and encouraging the adoption of environmentally friendly technologies and solutions. By leveraging their products and solutions to support suppliers in reducing their carbon footprint, the company not only strengthens their position as a leader in sustainability but also contributes to the broader goal of achieving a more sustainable supply chain.

In addition, the concerns regarding the objectivity of the company's recommendations should be mentioned when promoting their products. Suppliers may question whether environmental considerations solely drive the company's suggestions or if there is an underlying motive to increase sales of their solutions. To address this, the company should ensure transparency, provide objective assessments, and offer various options that meet sustainability criteria, even if they are not their products. Overall, while leveraging its energy management solutions can be advantageous in promoting sustainability and driving environmental improvements, the company needs to maintain a balanced approach that considers suppliers' specific needs and circumstances, fosters collaboration with external partners when necessary, and ensures transparency and objectivity in their recommendations.

The last point discussed was the successful examples of environmental CSR initiatives in the supply selection process that the company has implemented.

"(..) we'll have the target in the supplier selection in the project is to use local for local if possible." (I3)"

The 3rd interviewee highlights the company's consideration of CO2 reduction commitments in the supplier selection process. They provide an example of actively moving suppliers from Asia to Europe to reduce CO2 emissions, prioritizing suppliers with a lower environmental impact even if their cost performance may differ slightly. Furthermore, the interviewee emphasizes the company's preference for using local suppliers whenever possible. This statement aligns with the findings of Govindan et al. (2018), which suggest that companies prioritizing CSR should support utilizing local suppliers. Choosing local suppliers over outside suppliers is considered a key factor in CSR practices as it supports the local community and contributes to its economic growth. The company's approach of considering CO2 reduction commitments and prioritizing local suppliers demonstrates its commitment to environmental sustainability and the local community. By actively moving suppliers to regions with lower emissions and supporting local suppliers, the company showcases its dedication to reducing its environmental footprint and promoting local economic development.

The participant's statement sheds light on the reality of the company's supplier selection process, acknowledging that despite the priority given to local suppliers, a significant portion of the parts ordered still come from suppliers based in China. This situation can be attributed to various factors, such as cost considerations and expertise in specialized technologies. Asian suppliers offer more competitive pricing and possess specialized knowledge and capabilities that benefit the company's needs. While the preference for local suppliers and the desire to reduce CO_2 emissions through shorter transportation distances are important principles, practical considerations such as cost-effectiveness and technical expertise also come into play in the supplier selection process. It is important to recognize that achieving a fully localized supply chain can be challenging, particularly in industries where certain regions have a comparative advantage in cost and expertise. Companies often need to weigh various factors, including cost, quality, expertise, and sustainability, to make informed decisions aligning with their business objectives.

In general, various examples were mentioned by the participants demonstrating Schneider's commitment to collaborating with suppliers who align with their environmental CSR goals. They prioritize partnerships that promote sustainability, circularity, and carbon reduction, reflecting their dedication to incorporating environmental considerations into their supply chain processes.

5. Conclusions

In this study, we aimed to understand the supplier selection process based on the environmental aspect of CSR within a multinational company. By exploring managers' insights and perspectives, we sought to uncover the key dimensions and factors influencing supplier selection decisions, focusing on environmental sustainability. By analyzing the data collected from ten interviews, we aimed to shed light on the company's approach to supplier evaluation and qualification, its strategies for managing supplier relationships, and the role of environmental aspects in shaping the supplier selection process. In addition, the research aimed to understand how the firm strategically balances cost implications, environmental objectives, supplier-related considerations, and quality and reputation concerns when making supplier selection decisions. The insights obtained from this research contribute to the existing literature on supplier management and sustainability practices, offering valuable implications for both theory and practice.

The application of Transaction Cost Theory has provided a valuable theoretical lens to analyze and comprehend the complexities of supplier selection in combination with implementing environmental practices within the firm. TCT emphasizes that firms evaluate their production and procurement activities based on transaction costs, which include discovering suitable business partners, negotiating agreements, and monitoring and enforcing compliance with agreements. The findings underscore the company's strong emphasis on fostering long-term relationships with suppliers and prioritizing alignment with their environmental requirements to minimize transaction costs. As is being proved by the firm, engaging with new suppliers involves significant challenges, including conducting audits, researching the supplier's environmental status, and collaborating with them to expand their knowledge and expertise in environmental practices, leading to hold-up costs. Instead, the company adopts a strategic approach by investing in its established base of 1,000 strategic suppliers who have demonstrated their environmental commitment through certifications and established track records. In addition, these suppliers have established track records and certifications. This strategy allows Schneider Electric to mitigate transaction costs, build more reliable and sustainable partnerships with suppliers and minimize monitoring costs. TCT emphasizes the importance of long-term relationships to minimize transaction costs. Investing in and maintaining relationships with 1,000 strategic suppliers reduces the need to frequently engage with new suppliers, thus lowering the costs associated with discovering new suppliers (Acquier et al., 2017).

In addition, as the company invests in the technologies of its suppliers and offers its sustainable solutions, the company encourages suppliers to participate actively in the CSR journey. By actively engaging with suppliers and providing them with the necessary tools and knowledge to improve their sustainability practices, the firm creates a collaborative environment that fosters trust between the company and its suppliers. This collaborative approach allows for greater coordination and cooperation, reducing the likelihood of opportunistic behaviour and information asymmetry between parties, which are sources of transaction costs, according to TCT (Acquier et al., 2017). For the company, investing in suppliers' partnerships leads to long-term benefits, and the company views environmental investments as long-term commitments rather than short-term costs.

For the company to measure and track the environmental performance of its suppliers, the use of the EcoVadis assessment as a key tool for evaluating sustainability practices reflects a comprehensive approach to environmental management by setting minimum requirements and expecting suppliers to achieve specific sustainability scores. The reliance on a third-party assessment aligns with Transaction Cost Theory, reducing transaction costs and enhancing transparency and credibility in supplier evaluation. In addition, relying on a third-party assessment, the company avoids developing and maintaining an individual assessment system, which can be costly and time-consuming.

The participants' diverse perspectives on cost savings and environmental objectives underscore the intricacies involved in supplier selection decision-making. While quality remains a primary focus, the growing recognition of sustainability as a key performance indicator (KPI) signals a shift towards greater consideration of environmental factors. The priority of criteria varies among the participants, with some emphasizing the equal importance of price and environmental practices, while others prioritize price as the primary factor. This variation highlights the complexity of decision-making in supplier selection, as different individuals and situations may prioritize these criteria differently.
The difficulty lies in finding an equilibrium between economic factors and environmental obligations, making it difficult to establish a definitive answer regarding the absolute priority of these criteria. The company's decision-making process may necessitate a case-by-case evaluation, considering the specific context and individual priorities to determine the most suitable supplier selection strategy. Managers prioritizing price as the most important criterion might be concerned about the immediate costs and expenses associated with supplier selection, negotiation, and transaction. On the other hand, those who highlight environmental practices as equally important may recognize that long-term benefits, such as improved reputation and reduced risks, can offset the initial investment required for sustainable supplier relationships. This aligns with TCT's focus on evaluating investments and their potential for economic compensation, which should be seen case by case.

5.1 Theoretical contribution

This study contributes to the field of supplier management and sustainability practices by applying Transaction Cost Theory as a valuable lens for analyzing the data gathered and comprehending the complexities associated with supplier selection process decision. TCT emphasizes on transaction costs, including those related to discovering suitable partners, negotiation, and monitoring the compliance of the agreements made. The findings underscore the importance of fostering long-term relationships with suppliers and aligning with their environmental requirements to minimize transaction costs effectively. By investing in established strategic suppliers who have demonstrated their environmental commitment through certifications and established track records, firms can mitigate transaction costs and build more reliable and sustainable partnerships. Furthermore, this approach reduces the need to frequently engage with new suppliers, effectively lowering the costs associated with discovering and evaluating new partners. In addition, this study highlights the role of third-party assessments, such as EcoVadis, in reducing transaction costs and enhancing transparency and credibility in supplier evaluation. By outsourcing the evaluation process to external experts, firms can optimize their monitoring costs and focus on strategic decision-making rather than the resource-intensive development of individual assessment systems.

In summary, this research provides a theoretical contribution by applying TCT to the study of supplier selection in the context of environmental sustainability. It offers insights into how firms can minimize transaction and monitoring costs, optimize supplier relationships, and achieve their sustainability objectives within a global supply chain. This theoretical framework enhances our understanding of sustainable supplier management practices and provides valuable guidance for future research in this area.

5.2 Managerial relevance

This chapter aims to translate the research findings into practical recommendations for managers in the field. Managers can effectively navigate these issues and optimize their sustainable procurement practices by understanding the complexities and challenges involved in supplier selection decisions. The managerial relevance of this research lies in empowering managers to make informed decisions that align with the company's environmental objectives and minimize transaction costs. At the same time, maintain reliable and sustainable supplier relationships.

The research highlights the significance of establishing and nurturing long-term relationships with suppliers. Managers are encouraged to invest in strategic suppliers who have demonstrated their commitment to environmental practices through certifications and established track records. This approach reduces the need for frequent engagement with new suppliers, thus minimizing transaction costs and supporting reliable and sustainable collaborations. By prioritizing long-term partnerships, managers can leverage asset specificity, ensuring suppliers possess unique assets aligning with the company's environmental goals. Given the hold-up costs and uncertainties associated with forming new partnerships, engaging with new suppliers can be challenging. Managers are advised to adopt a proactive approach by collaborating with existing suppliers to improve their knowledge and expertise in environmental practices. Managers can foster a collaborative environment built on trust and transparency by encouraging suppliers to actively participate in the company's CSR journey.

To measure and track suppliers' environmental performance, managers can rely on third-party assessments, such as EcoVadis. These assessments enhance transparency and credibility in supplier evaluation while reducing monitoring costs for the company. By outsourcing the evaluation process to external experts, managers can focus on strategic decision-making and avoid the time and resource-intensive process of developing an individual assessment system.

It is recommendable that managers are encouraged to strike a balance between economic considerations and environmental responsibilities, acknowledging that sustainable practices can lead to long-term benefits, such as improved reputation and reduced risks. Assess individual cases and context-specific priorities to make supplier selection decisions aligning with economic objectives and environmental responsibilities. Foster a culture of sustainability within the company that values long-term benefits and CSR initiatives.

The managerial relevance of this research lies in equipping managers with practical recommendations to enhance sustainable supplier selection practices. Managers can optimize supplier selection decisions by prioritizing long-term supplier partnerships, adopting proactive supplier engagement, leveraging third-party assessments, and striking a balance between economic considerations and environmental responsibilities. Implementing these recommendations will align the company's procurement practices with its environmental goals and lead to reduced transaction and monitoring costs, improved supplier relationships, and a more sustainable supply chain. By embracing these insights, Schneider Electric and other companies can achieve their sustainability objectives while contributing to a greener and more responsible global supply chain.

5.3 Limitations and future research

Despite the valuable insights this study provides, some limitations are worth mentioning. The research focused on the supplier selection process within a company. Thus, the findings may not fully represent the broader context of supplier selection practices in other industries or regions. Future research can expand this study to include a broader sample of companies across different sectors and continents to enhance the generalizability of the data. In addition, the scope of this study could be extended to incorporate suppliers' perspectives. The current research gathered valuable insights from managers within the focal company, including suppliers' perspectives, which would provide a more comprehensive understanding of the supplier selection process and how environmental considerations are perceived and integrated from both sides of the relationship.

Additionally, this study focused solely on the environmental aspect of CSR in supplier selection. Future research could expand the investigation to include other dimensions of CSR, such as social and ethical considerations. Understanding how different dimensions of CSR interact and influence supplier selection decisions could offer a more comprehensive view of sustainable supplier management practices.

In conclusion, while this study provides valuable insights into the supplier selection process and the integration of environmental sustainability practices within a multinational company, it also has certain limitations. Future research can address these limitations by broadening the scope to include a more diverse sample of companies and suppliers, using alternative data collection methods and considering multiple dimensions of CSR. By addressing these areas, researchers can further enrich our understanding of sustainable supplier management practices and provide practical recommendations for managers in various industries seeking to enhance their supplier selection decisions while integrating environmental sustainability considerations effectively.

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7. Appendix

7.1 Interview guide

<u>Introduction questions regarding CSR</u>

1. Can you briefly describe your role and responsibilities in the company?

2. What are the company's primary goals related to environmental sustainability in areas of energy & resource usage, waste & emissions reduction? Please give me more detailed examples.

3. How does the company measure and report on its environmental sustainability performance?

4. How has the company's commitment to addressing environmental concerns evolved over time? Please give me examples.

4a. What factors have contributed to this evolution?

5. In what ways does the company involve employees in environmental initiatives and decision-making processes regarding environmental practices? Please give me examples.

6. Can you provide an example of a challenge the company has faced in implementing its environmental practices?

6a. How were these challenges addressed?

<u>Specific questions on supplier selection (Acquier et al., 2015 / Perry et al., 2012)</u>

7. Who is involved in the supplier selection process? (Which departments/job titles)

8. Can you describe the decision-making process for selecting suppliers at the company? Please give me examples of the supplier selection stages.

9. What role do the different managers such as procurement managers, sustainability managers, and supply chain managers play in the supplier selection process? Please give me examples.
10. Can you describe the criteria used to assess a supplier's environmental CSR performance? Give me some examples please.

11. How do you communicate your company's environmental CSR expectations to potential suppliers? Give me an example please.

12. Have you ever encountered challenges in finding suppliers that meet your company's environmental CSR standards? If so, can you describe those challenges please?

13. How do you measure and track the environmental CSR performance of your suppliers? Give me an example please.

14. In your opinion, how has the emphasis on environmental CSR impacted the supplier selection process over the past few years? Give me an example please.

15. How do you balance environmental CSR considerations with other factors, such as cost and quality, when selecting suppliers?

16. Have you ever had to terminate a supplier relationship due to environmental CSR concerns? If so, can you describe the situation?

17. What steps is your company taking to improve the environmental CSR performance of your suppliers? Give an example please.

18. What measures does the company take to cooperate with suppliers to ensure the successful implementation of environmental policies? Give an example please.

19. What role do collaborative relationships with suppliers play in company's environmental practices sustainability? Give examples please.

20. How does the company measure the impact of supplier selection on the firm's environmental sustainability? Give an example please.

21. Do you have any suggestions for how the supplier selection process could be improved to better incorporate environmental CSR considerations? Give me some examples please.

<u>Questions based on the financial aspect VS. environmental CSR practices (Acquier et al., 2015 / Perry et al., 2012)</u>

22. Can you describe a situation where the company had to make a decision between cost savings and an environmental objective, and how did they prioritize the factors of price, product quality, suppliers' reputation etc.?

22a. What criteria are generally used to prioritize different factors in supplier selection? Please give examples.

23. How does the company measure and track its environmental sustainability performance in the supply chain, and what specific indicators such as carbon emissions, water usage, waste reduction, etc. are being used to assess performance?

24. How does the company measure the impact of environmental CSR on its reputation, brand name, and customer loyalty? Give an example please.

25. How does the company manage costs associated with forming partnerships with suppliers who have different views or levels of commitment to CSR? Please give examples.

26. How does the company manage its supply chain? Is it fully vertically integrated or completely independent? Vertically integrated = the company owns and manages all of the supply chain activities / independent company outsources most or all of its supply chain activities to third-party suppliers. Could you give me an example?

27. How do you ensure that the environmental policies are implemented throughout the supply chain, particularly when relying on third-party suppliers? Please give examples.

28. How does the company evaluate the potential transaction costs (=the costs for the implementation, monitoring, and reporting) of implementing environmental practices? Please give an example.

29. What criteria do you use to determine whether the benefits of implementing CSR practices outweigh the costs? Please give an example.

30. Have you ever experienced any conflicts between choosing a supplier based on CSR practices and choosing a supplier based on other factors such as costs? How were these conflicts resolved?

31. Can you describe any successful examples of environmental CSR initiatives in the supplier selection process that the company has implemented? Please give examples.

7.2 Sample Interview

Participant 6
05.05.2023, 49:44 minutes (This interview took place in Microsoft teams)

I = Interviewer, P= Participant

00:05
I: Okay, dear colleague, thank you very much for participating in this research. I really appreciate it. As you know, the subject is the process of supplier selection based on the aspect of environmental CSR. Let's kick off with the first question. Could you please briefly describe your role and responsibilities in the company?

00:27
P: Yes, thank you. Actually, I prepared with a quick slide, if you don't mind. Maybe it can be interesting for you for other topics as well. So, if you can see my screen, we had the company event last week and I was using this slide to present our team and our activities. So, my name is "...", I'm a procurement manager within sustainability and compliance. So, I belong to GSC procurement. And my boss is "..." is a Belgian guy based in France. He is the VP for sustainable procurement. And I have a team of eight. Today, all of them are environmental specialists, especially in environmental product compliance. So, we are in charge of collecting supplier certificates that prove that the parts and components we buy from them are compliant with the European regulations mostly with European specifically with REACH and ROHS. So, this is the restriction evaluation, authorization of chemicals and the other is Restriction of Hazardous substances. So, all is to do with chemicals inside the products we buy, there is a quiet strict rule and frequently changing,

evolving. And we need to make sure that we don't put on the market any product that contains any harmful substance, harmful to the people or to the environment. Then I have a site team, which is partially reporting to me partially to Bernard and Yvonne, they are working on conflict minerals. This is more CSR related, because this is based on the US law. Taking action to prevent financing, the groups of exploiting children in the were originally in the Democratic Republic of the Congo. So, in Central Africa, Congo is a very rich country in some materials, but unfortunately in the country, some armed groups have taken over with force the minus and they are exploiting people with terrible work conditions. And there is a global ban on that region and we are mapping our supply chain to find out if somebody is not willingly or unwillingly buying from those sources. If I move forward, I can show you the sustainable procurement framework. So, these are the main topics how we address sustainability in procurement with our suppliers, we have a very famous program the Zero Carbon Project. So, this is as you know, the CO2 impact of a company, I mean our company, the biggest portion is suppliers. So of course, we want to reduce our own operation, CO2 footprint as well. But still, the biggest part is with our suppliers. So, we have a program that we want to half our supplier CO2 emissions until 2025. So, for this, we have partnered with our top 1000 suppliers and basically first we are educating them how they can calculate this CO2 footprint and then what measures they can take first to reduce their energy usage. And then to improve and reduce the CO2 footprint. So how they can find alternative energy sources, which are less CO2 heavy. Next one is green materials. And this is mostly on plastics and metals. So how we can purchase and buy more environmentally friendly raw materials. And with plastics of course, it's also to do with more environment friendly composition, composition. But in metals, it's it's a tricky case, because you know, producing metals is very energy intense activity. And if they use coal to burn and heat the metals, it's it's very bad for the environment. So, instead, we are looking for sources who are using electrical furnace to reach to the same heat levels and things like that. So, this is how metal can become greener. The next one is sustainable packaging. So, we want to get rid of the single use plastic and use only recycled paper for our cardboard packaging. And yeah, I did not mention but you have these colorful symbols. These are basically the United Nations Sustainable Development Goals pictograms. So, we are aligning our goals to the UN Sustainable goals. And REACH and regenerators conflict minerals the scoba. This is what my team is focusing on. So, this is our main activity, I already mentioned the core of it, then we have decent work. And as you can see, so from environmental we are moving now to social then to governance part of the ESG pillars. So decent work, we want our strategic suppliers to provide decent work to their employees. So, we are checking the work conditions if they get decent salary, if they get their holidays taken off, paid leave, so on. And then social excellence program is just starting, and I'm not yet involved in it. So, I'm not able to tell you a lot about it. But then what can be interesting for you is the governance part, which is not that detail explained here, but one is the supplier approver module. So, whenever we have new suppliers coming into our supply base, we have an approval module which consists of different pillars from quality, price, sustainability, so we are examining them from different perspectives, we give them points. And this is how we decide if they can become a Schneider supplier or not. For sure we have sustainable development, environment, ethics, compliance terms and conditions. So this is the basic they need to accept our terms and conditions. We have quarterly business review with our suppliers where all the environmental and sustainability related questions are also discussed and reviewed. So it's not only hey, you need to give us better prices, or better quality but also they need to perform better in terms of sustainability. First line that everybody feels safe and can report any unethical business conduct. And yeah, procurement excellence system, supplier selection process. So maybe we will touch those on later questions. So these are splitting between environmental, social and governance. But we have also a huge initiative that cover all three domains. One is the ISO 26,000 initiative. Basically, we are doing this with an external third party called EcoVadis. It's one of the industry well known third party, and they are doing the work for us. So it's less us doing this. The goal there is to improve our sustainability profile, I mean the supplier sustainability profiles, and it's also covering work ethical practices, health and safety, environmental and sustainability pillars. And the focus is on strategic suppliers. So I don't know if you are aware, but in Schneider we have roughly 52,000 suppliers globally. And around 14,000 are direct suppliers, so production suppliers and out of the 14,000, roughly 10% so 1.400 are strategic suppliers where the spend is consolidated. So 90% of the spend is with strategic suppliers. This is why we focus mostly on them. Then next is duty of vigilance. So this is a program that was launched based on a French law but then other European countries have also started to implement and some some of them called the modern slavery Act. In France, it was the duty of vigilance. It's very similar to the ISO 26,000 we splited the program into two, we do on site audit of our suppliers with the high risk suppliers. And we rely on a third party called responsible business alliance. So we give them the list of our suppliers, and they do a risk assessment on each plant. So an elementary dance level, let's say, you know what it is. And with the high risk suppliers, we send our own auditors on site, they conduct interviews with the, with the employees, because you know, sometimes the management can say what they want. But if we ask the the employees, maybe they will tell us that, no, they haven't been on holidays for two months, or if the overtime is not paid fairly, and things like that. So this is how we spot these non compliances. And then with the less risky suppliers, we ask them to complete remote self assessment answering questions. And if we spot something critical in their questions, then they are a good candidate for an on site audit. And, yeah, last but not least, supplier code of conduct is the most fundamental requirements from Schneider. So it's the base document that we send them and they need to accept and abide to. So where all our expectations and aspirations are written down. Some of them are fulfilling all the requirements, some of them are still need to improve. But these are this is the overall procurement framework. So yeah, I will not go into more details, because it's just maybe too much for you. Interesting picture I might share with you. So back to conflict minerals, the different products that we use in our daily life, which may contain one or more of the conflict minerals. And this is for Americans, but I don't think is very much different for for the European users as well. Okay, so yeah, that's it. It was not so short, but at least you have a overview of what we're doing. Yeah.

12:26
I: I think you have already answered my second question. I think I could move to the third one. How does a company measure and report on its environmental sustainability performance?

12:39
P: Okay, so I was preparing our sustainability report I will bring you into the picture. Let me zoom in. So long term commitments, and how do we measure so we know we have KPIs. We have internal measurements, external audits, and external third parties who are validating our KPIs. But our most important programs are the Schneider sustainability impact and the Schneider sustainability essentials. These are related to non financial activities. So it's a non financial report that Schneider is publishing every year. And I mean, it was already awarded several times let me just come. Okay, I will not scroll just like crazy. But basically, that's the that's the answer. We have internal KPIs that are validated by external parties like the DDOT, KPMG. They are auditing our reports. And we also publish both results on the SSI and the SSE. Yeah, I think that's the that's the answer to this question.

14:13
I: How has the company's commitment to addressing environmental concerns evolved over time? And could you give me some examples? And what are the factors that have contributed to this evolution?

14:26
P: So, Schneider was one of the first companies who decided to take sustainability really seriously, even when other companies were thinking that it's, it costs a lot, and maybe it's not worth to invest in it. But our management had a strong vision that sustainability is the future. So that was one of the drivers and the other. I mean, maybe there are three one is the internal, let's say, drive, then we have regulatory requirements. So regulations over the world change really fast. And we need to make sure as a global company, we are compliant in all the markets. So we have a rule that we take the most strict regulation applicable worldwide. So meaning, if a product does, it's not allowed to contain some harmful substance in Europe, the solution is not this, that we sell it in Asia, that, then we will ban it worldwide. So we applied the strictest rules. And this applies for all our activities. And then third pillar is our customers. So our customers are becoming more demanding. We have very interesting requests coming from them. Some of them want to make sure

the products that they build in their homes and offices are sustainable, they can measure the environmental footprint, or they want to make sure that the product and the supply chain is not exploiting children, for example. But on other end, there are external certifications, which have strict requirements. So just thinking of office building, we have this leads certificate, and we have different levels. So, in order to achieve that, we need to be able to provide a lot of transparency in for our products. And in the meantime, I just find the Schneider sustainability impact list. So, we have this 11 plus one commitment. And then the Schneider sustainability essentials, which is 25. So, 24 plus one commitment. And these are also linked with the United Nations sustainability, Sustainable Development Goals.

17:01
I: Great, in what ways does the company involve employees in environmental initiatives and decision-making processes regarding environmental practices? Do you have some examples?

17:13
P: Yes. So, the good thing is that what I feel from my colleagues, sustainability and environmental consciousness is part of everyone's mindset. So even if people are not working in such job, they already think about it. Our bonuses are also linked to our sustainability performance. So for example, 20% of the so called short term incentive plan, the annual bonus is coming from the performance of the Schneider sustainability impact. So, depending how we, well, sustainability people do their job in Schneider, this can have an impact on other people's salary or bonuses as well. So, everybody is motivated to have these initiatives, even if it's not part of their job description. And we have continuous challenges going on. So right now in the Budapest office, we have so called make your workplace greener challenge, which is lasting for one month. And we have every week different initiatives to get people engaged, become more sustainable, more environmental conscious, like just trying to reduce our everyday waste, waste of energy, waste of products, be more Eco friendly with our transportation not to go by car if we are traveling only alone. And you know, I could continue. So, there are plenty of initiatives where people got engaged in the in the topic.

19:02
I: Great! Can you provide an example of a challenge that company has faced in implementing its environmental practices and how they were addressed, these challenges?

19:13
P: Yeah, so for, for example, now the biggest buzz is around the Zero Carbon Project. So where we want our suppliers to reduce their CO2 impact, basically to half their CO2 impact in five years. And it's a very ambitious target. You know, it's easy to come up with such an idea that yeah, I tell you that you need to cut your CO2 in to two, but then how to do it? So many of our suppliers have not been exposed to such initiatives. So first, we need to teach them how they can at least measure their current CO2 emissions because that is the first step we need to measure we need data and then the best saving is the energy that we don't consume. So we need to help them reduce their current energy usage. And after that, to try to help them become more green to to switch to a more greener energy source. So that's a challenge, I can tell you. Let me just move there, decarbonizer operations. No, that's not that one, I will find the Zero Carbon Project somewhere here. I don't know which number it is, but it's somewhere here. So the thing is that we need not only to ask and demand from our suppliers, we need to advise them. And then of course, because we are in a very good situation with our products, we can also tell them that by using some of the Schneider solutions, they can already make some improvement. So it's, it's a win win, you know, it's good for the environment, good for our company and we are driving it. So, my boss is frequently traveling and giving speeches and different conferences and usually the feedback is from from the audience, that they are amazed of how Schneider is leading these initiatives. And the most frequent question is that how we come up with all these goals and targets like who is deciding what to set as a goal and usually is just thinking whatever we want,

you know, to make a bolt commitment, and the important is to start the action on it. So not to think too for too long, because time is flying and if we are just thinking how we can be more sustainable, it will not help we start step by step and we implement and adjust our actions according to the circumstances and to the to the environment.

22:10
I: Who is involved in the supplier selection process which departments, job titles?

22:20
P: Okay, so supplier selection is mainly a procurement activity. Within procurement, we have plenty of different teams. But I mentioned at the very beginning, we have a famous supplier approval module, which was built with the inputs of all procurement teams. So quality, sustainability, category teams, regional teams. So, everybody basically was listing their requirements towards what they would consider as a good supplier. And we have different levels and points as well associated to those levels. And depending on what supplier can fulfill in the first round, we can say okay, you can become a Schneider supplier, but on this level, you are not allowed to get to big portion of the business because you need to improve further. And as they are evolving on that, on that path, we might grant them more business opportunities. And of course, the goal is not to get rid of suppliers, but is to improve their performance in all the areas. So, we have quarterly business reviews, and basically all teams from procurement are there and reviewing their specific area. And this is how suppliers get promoted or demoted. We have different supplier categories, the biggest and the most appealing is the strategic supplier one. So, as I mentioned 90% of the spend is concentrated with them. So, for sure suppliers want to become strategic for us. But that's not easy. And you know, actually the timeline was slightly different because Schneider already had a bunch of suppliers even before we had so strict requirements for them. So earlier days, it was easier to become a Schneider supplier but nowadays is much more difficult. And the existing suppliers are also challenged continuously so they keep the good categorization.

24:39
I: Could you please describe the decision-making process for selecting suppliers at the company? And could you also give me examples of the selection supplier stages?

24:51
P: Well, I'm only able to talk from the sustainability point of view and maybe a little bit from quality. So, first suppliers need to sign our procurement framework document. So, the dimension that we have, the baseline or the criteria that we list for them they need to fulfill and after that, of course, usually the need for a supplier to become a Schneider supplier is coming from the product side. So, we realize that they have some product component that might be interesting for us. So, next step is to discuss the quality aspects of it. So if they can fulfill all the requirements from quality point of view, and if quality people say okay, they are okay from quality side, then there is a supply chain evaluation, if they can agree with our terms of purchasing, if they can deliver the needed quantities in the timeframe that we need, then there is the sustainability aspect of it, if they can give for their products, the certifications, what we need in order to be able to put that product on the market, then there is a financial assessment as well if this supplier is reliable enough, and we can trust in them and they will not go bankrupt in a short term, short term. So, this is what I can see from our selection process. Maybe there are other steps as well. But this is what I can tell you now.

26:37
I: What role do the different managers such as procurement, sustainability managers and supply chain managers play in the supplier selection process? Do you have some examples?

26:48

P: So basically, the managers are defining the rules, but they are not always involved in the actual supplier selection, because those are being done by the people on the field. So, managers decide on the framework and team members, are making sure that everyone is playing by those rules. If I do if I want to put it simple.

27:18
I: Great. Can you describe the criteria used to assess suppliers environmental CSR performance? And do you have some examples?

27:26
P: Yes and no. So, for this, I would need to search for the SAM: the supplier approval module. Basically, process description, because there is very clearly defined how we are scoring our suppliers, depending on their performance and the documentations and our analysis, what score we give to them. But it's basically coming back to one of the previous questions. So, we have these different pillars on supply chain, quality, sustainability, finance. So it's all linked to that.

28:11
I: How do you communicate your company's environmental CSR expectations to protect to potential suppliers?

28:19
P: So, this is in our base document that I mentioned at the very beginning. It's the supplier code of conduct. And generally speaking, if there is any change, well, first, it's available on Schneider website. But we have a so-called Schneider supplier portal supplier relationship management portal, which is the platform where we are communicating with our suppliers and usually if we have any new initiative, that's the platform where we engage with our suppliers. So last year, we were managing cyber security initiative so we wanted our suppliers to accept our updated terms and conditions with a bit stricter cyber security rules. So, we created the document on the portal communicated via the portal and suppliers have their login and they can accept or give any comments there.

29:23
I: Have you ever encountered challenges in finding suppliers that meet your company's environmental CSR standards? If yes, can you describe those challenges?

29:33
P: Yes. So, first of all, if we do the supplier approval module and some suppliers cannot fulfill all our requirements, then there is a hard stop there. So, we don't proceed with the with the onboarding of the supplier. But we have existing suppliers who might also face challenges in complying with our more stricter and stricter requirements. Just to tell you an example, conflict minerals. Originally, it was focusing on the Congo area. But now with the Russia - Ukraine war, there was a central decision that all the Russian smelters are forbidden to be used. So they are not very welcome to be seen in the supply chain. And for sure, maybe our suppliers have no direct relationship with Russians matters. But deep dive deep down in Tier 2,3,4. So our suppliers suppliers supplier might source some of its raw materials from Russia. And of course, we want to stop this. So, we are pushing all our suppliers to try to find alternative sources to make sure that we are not directly or indirectly financing armed conflict.

30:58
I: How do you measure and track the environmental CSR performance of your suppliers? Do you have some examples?

31:05

P: Yes. So, for example, the EcoVadis assessment, which is linked to the ISO 26,000 program, there is a very clear let's say evaluation of at what level what points our suppliers can get. And we have a minimum level that all our strategic suppliers need to meet. And we do the same thing for our customers as well. So you know, sometimes our suppliers are also our customers, especially the bigger ones. And they need us to do the same thing. So Schneider is doing the EcoVadis assessment as well. And good news is that we are in the top 1% of the companies in terms of our results. And this is thanks also to our suppliers, because if we would have a poor supply chain, we could not deliver those results and points for our own assessment. So yeah, EcoVadis assessment is the best example for this.

32:11
I: In your opinion, how has the emphasis on environmental CSR impacted the supplier selection process over the past few years? Do you have some examples?

32:21
P: Yeah, so the process is evolving constantly. And as the environmental regulations and the CSR related regulations are evolving, we are implementing them in parallel. So basically, suppliers and not It's not only the supplier selection process, because we already have a big, huge amount of suppliers, and we need to work on them already. So they need to become better every year. So, as I mentioned earlier, maybe it was easier to become a Schneider supplier 10 years ago, but now they need to fulfill more in order to be at the same level.

33:06
I: How do you balance environmental CSR considerations with other factors such as cost and quality when selecting suppliers?

33:14
P: It's equally taken into consideration. That's the good news. So, there is no situation like, okay, they are using children work, but they are very cheap. So that's, that's not something can happen in Schneider. Basically, in all aspects of the supplier approval module, if they fail for one of the areas, we cannot proceed with them. So, it's very simple.

33:47
I: Have you ever had to terminate a supplier relationship due to environmental CSR concerns? And if yes, could you describe the situation?

33:56
P: Hmm, yes, and no, I would say because during our duty of vigilance assessment, so we did on site audits and remote assessment. And usually when we found anything very critical, where the supplier was not at the level we wanted them to be, and they didn't want it to improve, it was not the only issue. So they also had issues with delivering, with quality, finance. So usually, trouble comes in a pack. And it was not only the CSR reason why we disengaged with the supplier but it was because of multiple reasons. But yes, we had these type of examples as well. Yeah.

34:48
I: What steps is your company taking to improve the environmental CSR performance of your suppliers? Do you have examples?

34:57
P: Yeah, again is back to the Ecovadis, and also the duty of vigilance. So, there are very clear requirements shared with our suppliers and they know what they need to achieve in order to stay in the selected supplier

category. So, if they want to stay strategic supplier, they need to improve year by year. And EcoVadis is giving them all the documentation and supporting platform where they can do this.

35:34
I: What measures does a company to take to cooperate with suppliers to ensure the successful implementation of environmental policies?

35:43
P: Yeah, well, first of all, we lead by example, I would say. So, Schneider is considered as a leading company in terms of sustainability and CSR compliance. So already sharing our way of doing things how we became you know, we won the most sustainable company award last year. So, we are sharing what we doing. And companies can learn from this. And we have really close partnership with some of our top suppliers. So, we have workshops together and exchanging experiences. So, for example, sometimes we are also a bit lost when the new regulation comes in, then we sit together with our strategic partners and discuss how would you approach this topic and what are you planning to do? For example, IBM is a really good partner when it comes to conflict minerals as a US company, they have a better overview of the US regulations, so they can sometimes help us and this is the same vice versa. So sometimes we are in a better position and we can help.

36:59
I: What role do collaborative relationships with suppliers play in companies environmental practices sustainability?

37:06
P: Well, maybe the good example for this is the Zero Carbon Project. So, Schneider is already decarbonizing its own operations, we have the so-called Eco structure system that is one of our own developments is helping for example, the energy advisor parties, helping our own plants, but also customer brands to decarbonize and reduce energy usage in supplier plants. So, within the Zero Carbon Project, we give advice we, we have created a network where our suppliers can exchange ideas between themselves even without Schneider being involved, but we offered them the platform to do so. And finally, the Schneider solutions that can also contribute to achieve this this goal.

38:04
I: How does a company measure the impact of supplier selection on the firm's environmental sustainability? Do you have some examples?

38:13
P: Well, it's a good question. Maybe it's a bit harder to tell. Again, I can only answer from the knowledge I have. But the EcoVadis assessment is one of the good examples for this because we measure the average score of our strategic suppliers and in order to be able to report a better supplier score, we need to work with them. So, everybody can improve step by step and this is how we are able at the end to submit our own evaluation about our own performance.

38:56
I: Do you have any suggestions how for how the supplier selection process could be improved to better incorporate environmental CSR considerations? Do you have some examples?

39:07
P: Yes, we are continuously working on this. So supplier approval module is developed always and I was involved last year in the in the discussion as well. We have suppliers splitted into direct and indirect

suppliers and in some cases, not all the evaluations were mandatory for all of the suppliers. So there were cases when they could skip being evaluated under some of the pillars. And now we are working on a more robust assessment system where we make sure that everybody is fairly assessed and they need to fulfill all the requirements they not cannot keep it because saying okay, we are an indirect supplier so we don't need to tell you about quality, because at the end still they can, there can be issues with their quality as well.

40:08

I: Can you describe a situation where the company had to make a decision, between cost savings and environmental objective and how did they prioritize the factors of price, product quality, supplies reputation? And in general, what are the criteria used to prioritize different factors in supplier selection?

40:33

P: Okay, well, it's can be easy and hard at the same time. I can tell you that sustainability and CSR aspects are more important than price. Because of the consequences, so it's really easy if we miss to fulfill some of our promises that we made to our customers, they can come back later with their complaints, and we need to recall a product from the market. So it will cost more than, you know, swallowing the initial incremental in the cost. And it's also very bad for our reputation. So as one of the most sustainable companies, we cannot allow for us to do such thing. So it's never compromised, either I can say.

41:30

I: How does the company measure and track its environmental sustainability performance in the supply chain, and what specific indicators such as carbon emissions, water usage, waste reduction are being used to assess performance?

41:45

P: So, with carbon, this is the zero carbon projects, we help our suppliers to measure their CO2 footprint, we have developed a portal where they can simply input their energy usage, size operations, number of employees so they can get a rough estimate on it. If it's not carbon related, then it's again the EcoVadis because they have also the environmental pillar of the assessment, which is covering the water usage, energy usage and maybe other aspects of the of the spectrum as well.

42:22

I: How does the company measure the impact of environmental CSR on its reputation, brand name and customer loyalty? Do you have some examples?

42:31

P: Oh, it's more interesting to answer this, actually in terms of reputation, there is a so called. Let me try to remember what was the name? So, it's, again with EcoVadis. When they are doing an assessment about the company about us, for example, they also look into the newspapers, what bad news came out about the companies if there were any breaches of laws, or if there was a protest in one of our plans. So, they take it also into account when giving the final score. So, if there is anything publicly, publicly available, it is counted in and we cannot say that oh, no, no, it did not happen.

43:25

I: How does a company manage costs associated with forming partnerships with suppliers who have different views or levels of commitment to CSR?

43:35

P: Well, that's again, a good one. As I mentioned, we were one of the first companies to embrace sustainability. And we know that it's not basic understanding for everybody, all of our suppliers. So first of all, we try to share the information and our suppliers can see where Schneider started, and where we are today with our approach. And we have Schneider supplier days when we exchange in more details about how they are contributing to our sustainability, performance. And usually suppliers leave very engaged, and they want to be part of this whole journey because they see the success of Schneider and they see that we could do it. We could become more sustainable, not compromising on the profits actually even contributing to our profits because today Schneider revenue, 75% of Schneider revenues are made of green premium products, which are the industry leaders in terms of sustainability and transparency. So, we show that this can be done and If somebody's really neglecting it and don't want to participate in it, most probably they wont to be a Schneider supplier on the long term.

45:10
I: How do you ensure that the environmental policies are implemented throughout the supply chain, particularly when relying on third party suppliers? Do you have examples?

45:22
P: Well, maybe not, maybe I don't have examples for this. So environmental policies are created and implemented also in the supplier selection process. And during the evaluation of the quarterly business review, usually we can spot if somebody's not aligned to these requirements. And then it's the time to make actions to improve or to get rid of the partner or supplier.

45:56
I: How does a company evaluate the potential transaction costs, the costs for the implementation, monitoring and reporting of implementing environmental practices?

46:07
P: So, I'm afraid this is something that I don't have an overview on it. For sure, at some level people in the company are matching the sustainability related cost to the overall costs and benefits. But unfortunately, I have no access to this data.

46:31
I: What criteria do you use to determine whether the benefits of implementing CSR practices outweighed the costs?

46:39
P: Well, easy approach is asked from ourselves, what would happen if we don't do it? So, we can imagine just simply saying that what would have happened if Schneider did not start the sustainability journey, and we can all realize that we would be in a far worse position compared to today. And, and actually, our customers are also pushing us to be always in the front of the pack. So, it's not a question. It's never a question that we need to embrace all sustainability initiatives.

47:18
I: Have you ever experienced any conflict between choosing a supplier based on CSR practices and choosing suppliers based on other factors such as cost? And how were these conflicts resolved?

47:32
P: Yeah, I think there was a similar question on this already. And it's easy, so there is no compromise on it. If they are not able to fulfill our requirements on CSR or environment, they simply cannot become our supplier. So no, no indifferent of costs.

47:53
I: Can you describe any successful examples of environmental CSR initiatives in the supply selection process that the company has implemented?

48:04
P: Again, maybe it starts with the supplier selection, because it's with existing suppliers. But Hankel are one of our big suppliers and one of our big customers as well. They like so much the Schneider sustainability and CSR initiatives, they have created their own program built on the knowledge and experiences we gained. And now we have a really strong partnership with them, sometimes delivering presentations together on how we have joined efforts. And we are helping each other to proceed on the journey. So, you know, they are making a lot of chemical related products like glues and things like that. And as the regulations are evolving really fast, they also need to adapt really fast. But we are using a lot of their products. And if they wouldn't be compliant to all these new regulations, they would simply fall out of the business, they could not keep their market position. So sometimes it's very obvious what you need to do. And I think Hankel is a good example of this kind of partnership.

49:25
I: Great, thank you very much. That was my last question. Thank you for your participation. Would you like to add something?

49:33
P: Oh, no, I think I've shared a lot of details with you, but let me know if later anything else comes to your mind. I will be happy to do my best to answer.

49:44
I: Okay, thank you.

7.3 Abstract

This master's thesis explores the complex process of supplier selection with a specific focus on the environmental aspect of Corporate Social Responsibility (CSR) within a multinational company. The study aims to gain a comprehensive understanding of the key dimensions and factors that influence supplier selection decisions in the context of environmental sustainability. To achieve this goal, a qualitative research approach was adopted, and data was collected through ten semi-structured interviews with managers involved in supplier selection process.

In line with Transaction Cost Theory (TCT), this research demonstrates how the firm strategically balances cost implications, environmental objectives, supplier-related considerations, quality, and reputation concerns in supplier selection decisions. By applying the theoretical lens of TCT, the study reveals the company's efforts to minimize transaction costs, monitoring costs, and hold-up costs while effectively managing supplier relationships and ensuring sustainable practices.

The research findings highlight the company's strategic approach to supplier evaluation and qualification, prioritizing long-term relationships with suppliers who align with their environmental requirements. By investing in the technologies and capabilities of these established strategic partners, the firm fosters a collaborative environment that reduces transaction costs and promotes sustainable practices throughout the supply chain.

Diese Masterarbeit erforscht den komplexen Prozess der Lieferantenauswahl mit einem speziellen Fokus auf den Umweltaspekt der Corporate Social Responsibility (CSR) innerhalb eines multinationalen Unternehmens. Die Studie zielt darauf ab, ein umfassendes Verständnis für die wichtigsten Dimensionen und Faktoren zu gewinnen, die die Entscheidungen zur Lieferantenauswahl im Kontext der Umweltschutz-Nachhaltigkeit beeinflussen. Um dieses Ziel zu erreichen, wurde ein qualitativer Forschungsansatz gewählt, und die Daten wurden durch zehn halbstrukturierte Interviews mit Managern, die am Prozess der Lieferantenauswahl beteiligt sind, gesammelt.

Im Einklang mit der Transaktionskostentheorie (TCT) zeigt diese Forschung, wie das Unternehmen strategisch Kostenimplikationen, Umweltziele, lieferantenbezogene Überlegungen, Qualität und Rufaspekte in den Entscheidungen zur Lieferantenauswahl ausbalanciert. Durch die Anwendung der theoretischen Perspektive der TCT enthüllt die Studie die Bemühungen des Unternehmens, Transaktionskosten, Überwachungskosten und andere Kosten zu minimieren, während es gleichzeitig Lieferantenbeziehungen effektiv managt und nachhaltige Praktiken sicherstellt.

Die Forschungsergebnisse heben die strategische Herangehensweise des Unternehmens an die Lieferantenbewertung und -qualifikation hervor, wobei langfristige Beziehungen zu Lieferanten priorisiert werden, die ihren Umweltanforderungen entsprechen. Durch Investitionen in die Technologien und Fähigkeiten dieser etablierten strategischen Partner fördert das Unternehmen eine kooperative Umgebung, die Transaktionskosten reduziert und nachhaltige Praktiken in der gesamten Lieferkette fördert.