

Annette Korin

EXPLORING HOW SUSTAINABILITY RATINGS AND CERTIFICATES ARE UTILIZED

A case study in the Finnish manufacturing industry

Master of Science Thesis
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Examiners: Senior Research Fellow Ulla Saari
Tenure Track professor Tuomas Korhonen
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ABSTRACT

Annette Korin: Exploring how sustainability ratings and certificates are utilized – A case study in the Finnish manufacturing industry
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As the pressure for reporting sustainability has increased new reporting tools have emerged and become more common. Ratings and certificates are few of these tools providing measures and ways of analysing a company's sustainability performance. Yet, there is a lack of understanding how sustainability ratings and certificates can support companies in their sustainable development and decision-making. Therefore, this study aims to understand the opportunities ratings and certificates can provide for manufacturing companies aiming to improve their sustainability.

To address the research gap and lack of empirical research on sustainability ratings and certificates the study employs an explorative multiple-case and cross-sectional study. The case selection used purposive sampling initiated by recognizing potential companies in the manufacturing industry. The aim was to select cases that represent both similar and different views and stages of the process of obtaining, maintaining, and utilizing reporting tools. The final cases were constituted of companies with no ratings or certificates and companies with ratings and certificates as well as an external assessment body. The primary data was gathered by interviewing directors, managers and specialist from nine manufacturing companies and one consulting company. A comprehensive literature review on research of sustainability ratings and certificates was also conducted. The study uses an abductive research method, where existing theory on sustainability ratings and certifications is used as a guideline, enriched by gathered data, and analysed qualitative data.

The findings reveal that sustainability ratings and certificates are convenient tools for providing support for finding deficiencies in operations and discovering current trends within responsibility and sustainability aspects. The findings suggest that the sustainability ratings and certificates provide opportunities to improve a company's sustainability and competitive advantage, while indirectly steering a company's decision-making. However, challenges with the certification and recertifying processes such as prohibitive costs, laborious work and lack of resources can discourage companies from participating in ratings and certificates. The comparison analysis shows that there are no notable differences between bigger and smaller companies when it comes to the process of obtaining or maintaining a rating or certificate. However, smaller companies can face prominent challenges due to lack of resources and high costs.

The study fills an important gap in understanding the value of sustainability ratings and certificates and how they can support a company's sustainable development and competitiveness. Companies are given a tool for understanding their sustainability performance, development needs and future trends. The ratings and certificates can also function as communication tools for improving reputation, attract funding and employees. The findings of this study can also support companies in gaining an initial understanding of what level they might currently be on in terms of utilizing sustainability reporting tools. In the future, the impact of new regulation and legislation should be investigated and how they impact different sustainability reporting tools and their future.

Keywords: Sustainability rating, sustainability certificate, sustainable development, decision-making, competitive advantage

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

TIIVISTELMÄ

Annette Korin: Tutkimus kestävyysluokitusten ja sertifikaattien hyödyntämisestä – Tapaustutkimus suomalaisessa valmistavassa teollisuudessa.

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Kestävän kehityksen raportointiin kohdistuvan paineen kasvaessa on syntynyt uusia ja yleisyyttä raportointivälineitä. Luokitukset ja sertifikaatit ovat muutamia näistä välineistä, jotka tarjoavat mittareita ja tapoja analysoida yrityksen kestävyys suorituskykyä. Mutta ymmärrystä siitä, miten kestävyysluokitukset ja kestävyysertifikaatit voivat tukea yrityksiä niiden kestävässä kehityksessä ja päätöksenteossa ei vielä ole. Tämän vuoksi tässä tutkimuksessa pyritään ymmärtämään, millaisia mahdollisuuksia luokitukset ja sertifikaatit voivat tarjota valmistavalle teollisuudella, jossa yritykset pyrkivät parantamaan kestävyytään.

Tutkimuksessa käytetään eksploratiivista monitapaus- ja poikkileikkaustutkimusta kestävyysluokituksia ja sertifikaatteja koskevan empiirisen tutkimuksen puutteen täyttämiseksi. Tapausten valinnassa käytettiin tarkoituksenmukaista otantaa, joka aloitettiin tunnistamalla potentiaalisia yrityksiä valmistusteollisuudessa. Lopulliset tapaukset koostuivat ulkoisesta arviointilaitoksesta sekä yrityksistä, joilla ei ollut luokituksia tai sertifikaatteja, ja yrityksistä, joilla oli luokituksia ja sertifikaatteja. Ensisijainen aineisto kerättiin haastatteleamalla johtajia ja asiantuntijoita yhdestä teollisuusyrityksestä sekä yhdestä konsulttiyrityksestä. Lisäksi kestävyysluokituksia ja -sertifikaatteja koskevasta tutkimuksesta tehtiin kattava kirjallisuuskatsaus. Tutkimuksessa käytettiin abduktiivista tutkimusmenetelmää, joka soveltaa olemassa olevaa teoriaa kestävyysluokituksista ja sertifikaateista ja täydentää sitä kerätyllä aineistolla sekä laadullisesti analysoidulla datalla.

Tuloksista käy ilmi, että kestävyysluokitukset ja sertifikaatit ovat käteviä välineitä yrityksen toimintojen puutteiden löytämiseen sekä vastuullisuuden ja kestävyden trendien tunnistamiseen. Tulokset viittaavat siihen, että kestävyysluokitukset ja -sertifikaatit tarjoavat mahdollisuuksia parantaa yrityksen kestävyttä ja kilpailuetua ja ohjaavat samalla epäsuorasti yrityksen päätöksentekoa. Haasteet sertifiointi- ja uudelleensertifiointiprosessissa, kuten liian korkeat kustannukset, työläs työ ja resurssien puute, ovat kuitenkin joitakin niistä haasteista, jotka estävät yrityksiä osallistumasta luokituksiin ja sertifikaattien hankkimiseen. Vertailuanalyysi osoittaa, että luokituksen tai sertifikaatin hankkimisessa tai ylläpitämisessä ei ole merkittäviä eroja suurempien ja pienempien yritysten välillä. Pienemmät yritykset voivat kuitenkin kohdata huomattavia haasteita resurssien puutteen ja korkeiden kustannusten vuoksi.

Tutkimus täyttää tärkeän aukon, joka liittyy kestävyysluokitusten ja -sertifikaattien arvon ymmärtämiseen ja siihen, miten ne voivat tukea yrityksen kestävästä kehitystä ja kilpailukykyä. Käytännön näkökulmasta katsottuna ne antavat yrityksille työkalun, jonka avulla he voivat ymmärtää kestävä kehityksen suorituskykyään, kehitystarpeitaan ja tulevia suuntauksia vastuullisuudessa. Kestävyysluokitukset ja sertifikaatit voivat myös toimia viestintävälineinä maineen parantamiseksi, rahoituksen ja työntekijöiden houkuttelemiseksi. Tämän tutkimuksen tulokset voivat myös auttaa yrityksiä saamaan alustavan käsityksen siitä, millä tasolla ne ovat tällä hetkellä kestävä kehityksen raportointivälineiden hyödyntämisessä. Tulevaisuudessa olisi tutkittava uuden sääntelyn ja lainsäädännön vaikutusta ja sitä, miten ne vaikuttavat erilaisiin kestävä kehityksen raportointivälineisiin ja niiden tulevaisuuteen.

Avainsanat: Kestävyysluokitus, kestävyysertifikaatti, kestävä kehitys, päätöksenteko, kilpailuetu

Tämän julkaisun alkuperäisyys on tarkastettu Turnitin OriginalityCheck –ohjelmalla.

PREFACE

The completion of this master's thesis marks the end of a challenging yet immensely rewarding academic journey. This work represents countless hours of research and reflection, and the support of many individuals who have played an integral role in its development. After many bumps and turns, I am filled with a sense of accomplishment and excited for all the new knowledge gained.

Undertaking this thesis would not have been as great of an experience without the unwavering support and encouragement of my academic advisor, Ulla Saari. Her guidance, expertise, and commitment to academic excellence have been key in shaping this research. I am grateful for their patience and invaluable feedback, which pushed me to refine and elevate my work. Additionally, I want to thank Tuomas Korhonen, whose contribution of different perspectives and new suggestions have added valuable dimension to this work. I also want to express my gratitude to my colleagues at VTT, who helped me throughout the process with great support and valuable insights. And of course, friends and family, who have been an unwavering support and provided helpful and valuable feedback when in need.

As this thesis marks the culmination of my master's degree, I am both delighted and sad that my studies at Tampere University will come to an end. These four and a half years have included many interesting courses, projects, and fantastic people. However, now it is time to take on new challenges and utilize the knowledge learned during my academic endeavors.

Helsinki, 18 December 2023

Annette Korin

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LIST OF SYMBOLS AND ABBREVIATIONS

| | |
|------|--|
| CSR | Corporate Social Responsibility |
| CSRD | Corporate Sustainability Reporting Directive |
| ESG | Environmental, Social, and Governance |
| ESRS | European Sustainability Reporting Standards |
| GRI | Global Reporting Initiative |
| KPI | Key Performance Indicator |
| SDG | Sustainable Development Goals |
| TBL | Triple-bottom-line |

1. INTRODUCTION

1.1 Background of the study

As sustainability has established itself in corporate functions, structures and supply chains, the expectations and pressure of demonstrating commitment to sustainable value creation incorporating economic, social, and environmental aspects as a long-term goal has increased (BDO 2021; Saxena et al. 2021). Organizations have a desire to implement more sustainable designs, processes, and operations within their own means and sustain resources without affecting the quality and well-being of future generations (WCED 1987) while adding value to increase competitiveness (Murad et al. 2021). Sustainability encourages manufacturers to implement and conduct their business in a way that considers the triple-bottom-line (TBL) introduced by Elkington (1997), which comprehends the environmental, social, and economic aspects. It is important to assess, measure and examine where a company stands in terms of sustainability to systematically include sustainability criteria as part of a company's business and operations (Gladwin et al. 1995) and thus improve the company's contribution to sustainability. To gain competitive advantage, respond to pressures from stakeholders to change company operations, and to change how success or failure of sustainability is assessed requires appropriate sustainability measures, indicators, ratings, and practical tools that support decision-making (Murad et al. 2021; Pihkola 2021). Sustainability certifications and ratings can be helpful with the assessment since they consider and evaluate the three dimensions of sustainability (Diez-Busto et al. 2022). Furthermore, when they are done by external experts accordingly with certain criteria required for the certification giving an external overview of the status of these dimensions, they can be trustworthy (Boiral et al. 2019; Patara & Dhalla 2022).

Currently, industries face several sustainability standards, metrics, performance indicators, indexes, rankings, ratings, and reporting methods creating a fragmented and crowded set for evaluation and assessment. Furthermore, these standards, indicators, and reporting methods are everchanging and some are only company specific and can thus be difficult to follow, understand and implement. (BDO 2021; Saxena et al. 2021) In assessing a company's sustainability across various dimensions, performance is typically measured using key performance indicators (KPIs), metrics, and standards. These measurements are subsequently conveyed to stakeholders through reports, ratings, and

rankings. Despite the existence of metrics and KPIs, there is a notable absence of compulsory standards governing these practices. As a result, the evaluation of sustainability is still in its early stages. (Patara & Dhalla 2022; Boiral et al. 2019)

Sustainability, a multifaceted concept, varies in interpretation across individuals and organizations, leading to a proliferation of diverse KPIs and a blurred landscape for evaluation. For instance, environmental, economic, and social dimensions each possess unique metrics, contributing to over 500 varied reporting practices influenced by industry, location, and specific issues. (Aras & Crowther 2009; BDO 2021; Saxena et al. 2021) This lack of standardization and consistency in corporate sustainability reporting has resulted in conceptual ambiguity and inaccuracies, as identified by various researchers (Montiel & Delgado-Ceballos 2014; Pihkola 2021; Patara & Dhalla 2022).

Although sustainability reporting has gained momentum in the 21st century, studies primarily focus on key performance metrics and their implementation in sustainable manufacturing (Ahmad & Wong 2018; Murad et al. 2021). Existing research often discusses the benefits of reporting in terms of reputation and communication, relying on secondary data sources and established frameworks like the GRI sustainability reporting framework and indices such as Dow Jones Sustainability Index (Pihkola 2021). However, there is a lack of exploration regarding the factors influencing the choice of reporting frameworks or certifications, a gap this study aims to address by dive deeper into companies' considerations when opting for sustainability certification.

As the sustainability awareness has increased, it has inflicted more communication on greenness and sustainability from companies (Flagstad et al. 2022). Sustainability certifications can be seen as reporting tools (Patara & Dhalla 2022), which has initiated discussion in literature about the benefits of certifications (Carlos & Lewis 2018). Recent empirical studies researching the relationship between sustainability reporting and performance of the company have resulted in both positive and negative relationships (Monteiro & Aibar-Guzmán 2010). Most commonly certifications are used to enhance reputation, since most investors and stakeholders see inclusion as a positive signal. However, some companies merely use environmental certification to improve their green image and environmental legitimacy (Heras-Saizarbitoria et al., 2020; Flagstad et al. 2022). Studies have also recognized that some companies leave their internal practices unchanged when conducting sustainability reporting, thus having no or close to no effect on the environmental performance of the company (Christmann & Taylor 2006; Flagstad et al. 2022). Thus, this thesis will study how certifications and ratings can be used as part of business development, implementing sustainability and decision-making. This

aims to create understanding how certifications can truly be used to enhance business performance along reputational aspects.

In manufacturing, sustainability can be seen in all phases of the process from product design to disposal. Yet, in both literature and the manufacturing industry there is still a scarce understanding of the advantages and benefits of sustainability ratings and certificates. In Finland, the sustainability targets are ambitious as they are aiming to prematurely reach carbon neutrality by 2030. The rest of the European Union is aiming to be carbon neutral by 2050. This requires a lot of actions from companies. (Ministry of Economic Affairs and Employment 2022). Some manufacturers have already taken huge actions, and some are competing for becoming the most sustainable company in Finland (Stora Enso 2021; Kone 2023).

There has been an increase in sustainability reporting and requirements to be more responsible and sustainable. Therefore, this study aims to understand the opportunities ratings and certifications can provide as support and tools for companies aiming to improve their sustainability and sustainable development. This study is looking into how sustainability ratings are chosen, implemented, and utilized within Finnish manufacturing industry and especially within the mechanical engineering and machinery. The achieved advantages and benefits are also discussed. The study will mostly focus on internal aspects such as the requirements companies are facing and not the requirements the companies themselves demand from others in the supply chain such as declaring scope 3 emissions.

1.2 Research objective, questions, and scope

To address the research gap and lack of empirical research on certifications and ratings, this study employs an explorative mixed method study to create a better understanding on how sustainability certification and rating are used within the manufacturing industry. Along with creating understanding of the sustainability assessment methods the study aims to provide helpful tools to understand the manufacturing companies' situation in utilizing sustainability ratings and certificates. There are yet few studies on the topic of utilizing sustainability ratings and certificates and how to choose the best ones to support development. On the other hand, secondary data sources have dived more deeply into the subject such as companies and consulting houses comparing different reporting models as well as different ratings and certificates. Therefore, this study will help with understanding the subject more deeply and provide a base for future research within the area. Additionally, the study aims to provide insights on how companies should approach

obtaining and maintaining ratings and certificates. The research objectives are approached and discussed through three research questions.

Fundamentally, a general understanding on how companies within the manufacturing industry currently manage and utilize their sustainability information, certifications, and ratings as part of their business operations is needed. As introduced above, there are numerous available voluntary informal and formal indexes and ways of measuring and reporting sustainability, which has caused inconsistency in assessing and managing sustainability (Montiel & Delgado-Ceballos 2014; BDO 2021; Pihkola 2021; Patara & Dhalla 2022). To provide tools for companies within the manufacturing industry we need to initially understand how sustainability data and information are currently used for supporting decision-making and business development. When an overall understanding of the situation has been achieved, it is easier to dive deeper into various aspects. Thus, the first research question is formulated followingly:

RQ1: How do manufacturing companies currently utilize sustainability ratings and certificates?

After mapping the current state of the utilization, the second research question aims to study the prerequisites and requirements companies face when deciding if participating in rating and certificates is valuable. Understanding the requirements might help companies find the most appropriate certifications and ratings as well. Many scholars have mentioned the difficulties of choosing the sustainability indices and metrics that add more value, are compatible with each other and flexible enough from numerous available methods and indicators to meet the expectations and needs from internal and external sources. (Gladwin et al. 1995; Pihkola 2017; Murad et al. 2021) Thus, this study aims to understand which factors impact the choice of reporting tools or measures to create better understand the process of obtaining sustainability ratings and certificates in the manufacturing industry. The study examines which factors have enabled companies obtain certifications and ratings and find the most suitable ones for their business and what the requirements are they must fulfil to obtain that certification or rating. Additionally, how companies choose different ratings and certifications can have an impact on how a company manages its sustainability and affect decision-making. The ratings and certificates measure certain things and if decisions are made based on the data gained from these reporting tools, they can impact the decision-making. Therefore, the second research question dives deeper into the requirements guiding companies to select the most relevant certifications and ratings. The second research question is formulated followingly:

RQ2: What are the requirements guiding companies to choose the most relevant ratings and certificates?

Next, there is a need to understand if there is value in utilizing sustainability ratings and certificates for decision-making and sustainable development. The hypothesis of this study is that sustainability certifications and ratings can help companies in implementing sustainability and can be used as part of their decision-making (Operan-Stan et al. 2020). Furthermore, the study aims to explore how the utilization of certifications and ratings can be improved from the current state into more comprehensive and supporting part of the business. When an understanding of the utilization opportunities has been established, companies can examine, if these opportunities can be realized by them. Thus, this study aims to clarify how certifications and ratings and their data can be utilized to improve a company's sustainability and be incorporated in the strategic decision-making processes. The third research question is formulated followingly:

RQ3: How can sustainability ratings and certificates support decision-making and incorporating sustainability into business development?

Through answering the three research questions presented above, the study will improve the understanding of utilizing sustainability data in form of certification and ratings. The study aims to help companies understand how these can be implemented as supporting tools and as part of a company's sustainable development and decision-making.

This study contributes to a joint research program named Data Asset – Sustainable data-based decision-making, which aims to help manufacturing companies integrate sustainability in their core functions. The Data Asset co-innovation project jointly funded with Business Finland aims to make sustainability a crucial part of operational excellence and data supported service business in manufacturing. As part of the Data Asset project, this research investigates how sustainability certifications and ratings can be part of a sustainable data-based toolbox for manufacturing companies, which enable them to improve their sustainable development.

1.3 Structure of the study

The introductory chapter introduces the background and the objectives for this study. The introduction also demonstrates the relevance of the research on sustainability certifications and ratings in terms of both academic and practical implications. Additionally, the chapter covers the research questions, scope, and outlines the structure of the thesis.

The first chapter is followed by the literature review on sustainability ratings and certifications, which discusses the theoretical background of the study providing insights from earlier research and literature on sustainability assessment, reporting, certifications, and ratings. The theory chapter discusses the concepts of sustainability assessment and measuring and provides a base for understanding the current situation of utilizing sustainability ratings and certificates in the manufacturing industry. Next, the chapter covers the requirements and motivations for obtaining a certification or rating along with requirements enforced by regulations and legislation. Furthermore, the literature review examines how certifications and ratings are utilized by companies and support their sustainable development and competitive advantage. Lastly, the chapter explores the challenges and barriers currently faced by companies in the manufacturing industry according to previous research.

The theory chapter is followed by the descriptions of the research methodology utilized in this study. The third chapter explains and reasons the methodological choices and discusses how they support the objectives and research questions of the study. A case study is used as the research strategy to understand the real-life contexts of the researched area and primary data was gathered through interviews with Finnish companies.

In the fourth chapter the empirical research findings are presented by shedding light on the current situation of the understanding and utilization of sustainability ratings and certificates in the Finnish manufacturing industry. The next subchapter discusses the external and internal drivers for obtaining and maintaining a rating or certificate followed by the factors impacting the choice of obtaining one. Next, the resources and requirements needed to implement ratings and certifications are discussed as well as the challenges and barriers companies might face. Lastly, the benefits and advantages generated by ratings and certifications are covered.

In chapter five the key findings are discussed by analysing and comparing existing literature with the findings from the interviews. The chapter is divided by the research questions and the discussion aims to answer them primarily with the findings from the interviews. The findings are also compared with literature to understand similarities and differences. The discussion also uses triangulation to understand the findings better and form a cohesive understanding of the research.

Finally, chapter 6 concludes the key findings by discussing the theoretical contributions of the study. Further managerial implications are proposed as well as implications for further research. Chapter 6 will also assess the quality and validity of the research.

2. LITERATURE REVIEW ON SUSTAINABILITY RATINGS AND CERTIFICATES

2.1 Ratings and certificates as tools of sustainability reporting

Sustainability is a broad and complex concept and can be analysed from several different perspectives. This can be seen in the substantial number of different definitions, viewpoints, and applications and has resulted in several KPIs and a vague landscape of evaluation methods. Due to its complexity, the meaning and representation of sustainability varies depending on the person, organisation, and industry (Aras & Crowther 2009; Escrig-Olmedo et al. 2019). For example, each of the three sustainability dimensions environmental, economic, and social have their own sets of metrics such as energy and water usage, emissions, health, and safety of employees (Saxena et al. 2021).

In the current literature the terms used within the subject of sustainability measurement and assessment are not used in a standardized way and needs to be clarified before the concepts are addressed further (Murad et al. 2021). For this study, the clarification of the concept is necessary since some sustainability terms including measurement and assessment are used interchangeably causing ambiguity. The abundance of terms has caused confusion in literature, industries, and amongst stakeholders and therefore there is a need to clarify and minimize the number of terms used. For example, sustainability reporting has also been called environmental reporting, corporate reporting, corporate social responsibility (CSR) reporting and ESG performance reporting (see e.g., Aras & Crowther 2009; Rego et al. 2017; Oprean-Stan et al. 2020; Patara & Dhalla 2022). These terms all scrutinize the same idea with slightly differing perspectives, thus causing confusion (Patara & Dhalla 2022) in understanding the concept of sustainability measurement and assessment.

Already in the 90s Gladwin et al. (1995) called for a systematic evaluation method of sustainability in products and processes. Additionally, the article called for changing the objective from a mere process focused view such as pollution reduction into focusing on long-term outcome objectives such as assuring health and integrity within ecosystems and socioeconomic systems. In other words, Gladwin et al. (1995) wanted to shift the mentality and objective to sustainability and realizing the good instead of merely reduce the bad outcomes with “greening” tools that do not inform how to realize the goal of sustainability. According to Mura et al. (2018) and Murad et al. (2021) there is still a need for improvement, conceptualization, and consistency in measuring of sustainability in

manufacturing to truly create reliable sustainable reporting within the industry. In this study, the concepts of sustainability measurement and assessment are divided into four levels which are portrayed in Figure 1 to simplify the usage of terms and to understand the connections between them.

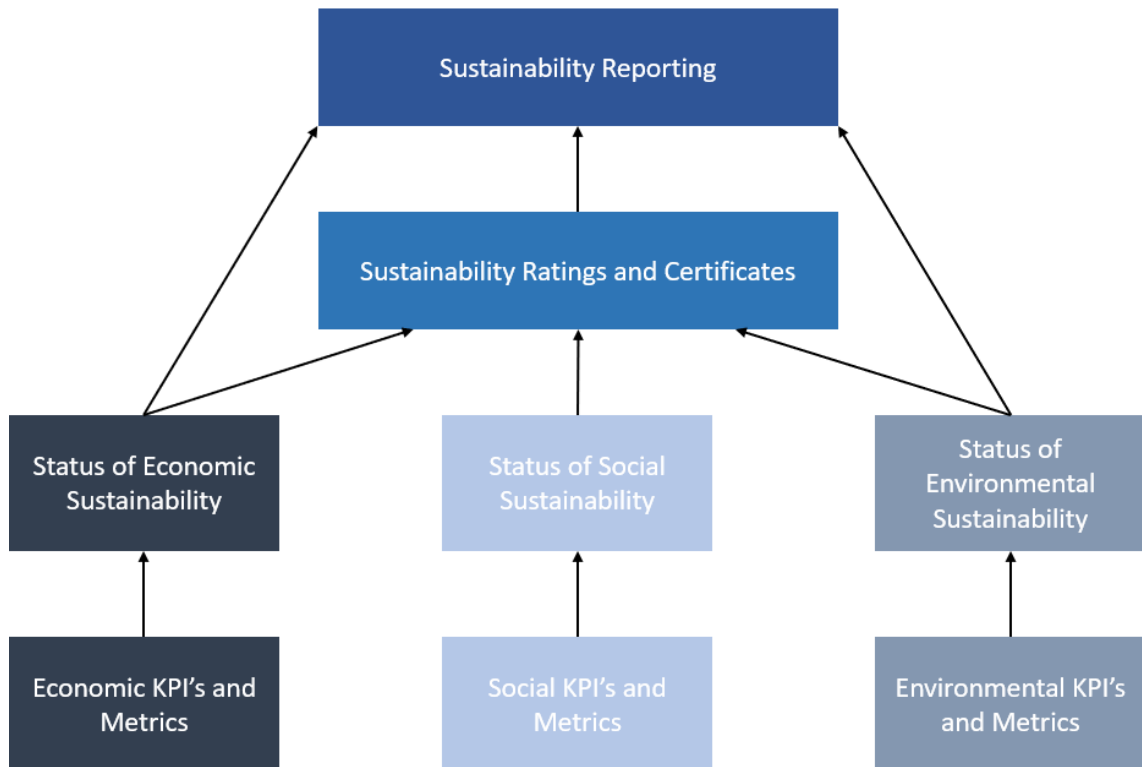


Figure 1. *The four levels of sustainability assessment and measuring.*

Sustainability assessment or measuring starts with recognizing different KPIs and metrics (Diez-Cañamero et al. 2020; Murad et al. 2021). Usually, the purpose of these metrics and indicators is to measure the status of a certain sustainability dimension. Each of these dimensions have their own set of metrics that measure various aspects of the company's sustainability performance and responsibility (Murad et al. 2021; Pihkola 2021). The metrics and indicators are quantifiable and can be used to measure various aspects of the companies processes and practices such as the carbon footprint and absences of employees (Pihkola 2021; Saxena et al. 2021). Therefore, the results depend on what metrics are used and what is measured.

Sustainability reporting is defined as “the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development” (GRI 2006, p. 3). It aims to build a comprehensive understanding on how sustainability is measured and assessed within a company. The purpose of sustainability reporting is to measure and disclose a company's social, environmental and governance performance. Furthermore, it is a way for the

company to communicate their values, strategies, and action plans within the different sustainability dimensions to stakeholders and being accountable for moving towards sustainable development. (GRI 2006; CPA Canada 2015, Cho et al. 2020) Sustainability reporting has been recognized as an important driver of enhancing sustainability in business (Lozano 2013). It has been researched quite extensively with many scholars concentrating on the Global Reporting Initiative (GRI) reporting, which has become the most common reporting framework (Oprean-Stan et al. 2020; Dye et al. 2021). Sustainability reports use the data gained from measuring the status of different sustainability dimensions. The reports can also utilize sustainability ratings and certificates as support or enhance the reliability of the report.

Sustainability reporting is not a new initiative, but during the 21st century there has been a tremendous increase in sustainability reporting, standards, and frameworks (Carini et al. 2017; Boiral et al. 2019; BDO 2021), which can also be seen in the number of studies that have been implemented on sustainability measurement and assessment (Mura et al. 2018). Most of these studies have focused on the key performance metrics on various levels within a corporation and how to efficiently measure sustainability and implement sustainable manufacturing which has led to the numerous available measures, tools, and guidelines (Pihkola 2021). Scholars and companies have recognised, that certifications provide a relevant tool for committing and achieving sustainable development goals (See e.g., Ferreira Quilice et al. 2018; Fonseca et al. 2022; Silva et al. 2022). However, studies that have researched sustainability reporting have mostly discussed its usefulness and advantages in terms of reputation and communication.

Furthermore, sustainability reporting is predominantly a voluntary practice (Lozano 2013; Patara & Dhalla 2022), which gives companies the possibility to selectively disclose information and only report metrics that will portray them in a positive light while minimizing the negatives. This practice is referred to as greenwashing. (BDO 2021; Patara & Dhalla 2022) One of the possible reasons behind the emergence of several new reporting tools such as indexes, rankings and ratings are the challenges with the self-reporting tools (Sadowski et al. 2010; Patara & Dhalla 2022).

Sustainability certifications and ratings, of which the latter is also known as indexes, also use KPIs and metrics when measuring the sustainability performance of a company. Some scholars, and rating and index providers use the terms rating and index interchangeably (see e.g., Patara & Dhalla 2022). Therefore, this study will use the term rating for both index and rating to simplify the usage of terms. Moreover, sustainability reporting is sometimes used when discussing ratings and certifications. Patara and Dhalla (2022) compile ratings, rankings, standards, indexes, certifications, and other

instruments measuring a company's sustainability performance under the term of sustainability reporting tools.

Certifications and ratings have originally been used in conventional business, but during the last decade new ones have been developed to be used in sustainability matters. Both certifications and ratings are used to evaluate a corporate's sustainability performance and attributes within the different sustainability dimensions. Thus, they can be seen as a more general set of indicators and metrics as they usually include one or more of the sustainability dimensions (Murad et al. 2021). They aim to find if the company is aligned with sustainable development and the leading indicators (Fowler & Hope 2007).

The process for acquiring certificates and ratings is both called certification, but the result is slightly different. Ratings usually provide a grade or a letter for the performance within a specific scale whereas certifications provide more of a general verified stamp or paper that exclaim that the business or operations fulfils certain requirements. For example, a company is given a rating, usually an alphanumeric score, when its performance is scrutinized against a set of criteria and fulfils at least a minimum. Common sustainability ratings are Dow Jones Sustainability Index (DJSI), MSCI ESG Rating, FTSE4Good Index, and ISS ESG Rating. Standards or certificates include for example the ISO Standards. Furthermore, usually certifications concentrate on evaluating a specific process or a unit or part of the company whereas ratings evaluate more broadly the corporate's entire sustainability performance in the different dimensions. Table 1 below depicts the most used and well-known sustainability ratings and certificates at the moment in alphabetic order. The table presents the names, launch year, evaluation theme, brief description, and the rating scale along with if the answering or filling in questionnaires is done internally within the company or externally by the rating company or agency.

Certifications and ratings are also subject to external evaluations conducted by authoritative institutional actors or external third-party actors. These actors evaluate companies' sustainability performance by assessing if the organization meets a set of criteria or a standard outlined in the aspired certificate. An authoritative endorsement can provide assurance for stakeholders that the organization implements or engages in sustainable action outlined in the certificate. (Carlos and Lewis 2018)

Table 1. Overview of the most common sustainability ratings and certificates.

| Rating / Certificate | Launch year | Evaluation theme | Description | Internal / external assessment | Rating scale |
|--|-------------|-------------------------------------|--|--------------------------------|---|
| B Corp Certification | 2006 | Sustainability | B Corp is a third-party certification focusing on social and environmental performance, accountability, and transparency. The aim is to balance profit with purpose, demonstrating commitment to sustainability and ethical business practices. (B Corporation 2023) | Internal | 0-200 points |
| Carbon Disclosure Project (CDP) | 2002 | Climate Forest Water security | CDP is a non-profit organization. It measures a company's carbon emissions, climate-related risks, and efforts to reduce carbon footprint and manage climate change impacts. (CDP 2023) | Internal | D- to A |
| S&P Dow Jones Sustainability Index (DJSI) | 1999 | ESG | DJSI consists of several stock market indices that evaluate sustainability performance based on various ESG criteria. (S&P Dow Jones Indices 2023) | External | Bronze Silver Gold Sector Mover Sector Leader |
| EcoVadis | 2007 | Sustainability | Ecovadis assess the sustainability performance of companies. It provides ratings and scorecards to help companies make informed decisions about their suppliers. (EcoVadis 2023a&b) | Internal | Bronze Silver Gold Platinum |

| | | | | | |
|---------------------------------------|------|--------------------------|---|----------|---|
| FTSE4Good | 2001 | ESG aligned with SDGs | FTSE4Good is an ESG index series, that assess a company's operational, and product related on ESG risks and opportunities. (FTSE RUSSELL 2023) | External | 0-5 |
| ISO 14001 | 1996 | Environmental Management | ISO 14001 is an internationally recognized standard for Environmental Managements systems. It provides a framework for managing and improving environmental performance. (ISO 2023) | Internal | Gaining a certificate/standard |
| ISS ESG Rating | 2019 | ESG | The rating measures a company's ESG performance and risks. (ISS 2023) | External | D- to A+ |
| MSCI ESG Rating | 2007 | ESG | Measures a company's ESG performance across a vast range of factors. (MSCI 2023) | External | CCC to AAA |
| Sustainalytics ESG Risk Rating | 2018 | ESG | Sustainalytics is an ESG research rating agency providing ESG risk ratings for companies. It measures a company's exposure to ESG risks. (Sustainalytics 2023) | External | Negligible 0-10 Low 10-20 Medium 20-30 High 3-40 Severe 40+ |

Even though certifications and ratings are recognized as sustainability reporting tools (Patara & Dhalla 2022) they have not been as scrutinized in literature compared to sustainability reporting and its frameworks. Other aspects such as indicators and metrics used to assess and evaluate a company's sustainability have been more extensively researched by scholars (see e.g., Rahdari & Rostamy 2015; Barni et al. 2022). Some studies have concentrated on only one sustainability dimension and others have incorporated all dimensions as part of their study on metrics and reporting.

2.2 Requirements for sustainability ratings and certifications

It is reasonable, that in order to obtain a sustainability certification a company needs to have sustainable practices and operations. But since reporting and certification are still voluntary (Cho et al. 2020), there are certificates that can be obtained by the company itself without any external auditing processes. Without an external auditing process companies can choose certificates that align with their practices, which shows a tactically created sustainable side to the public that relies on greenwashing. Currently, there are some changes occurring in Europe as the new Corporate Sustainability Reporting Directive (CSRD 2023) entered into force in early 2023 as well as the EU taxonomy.

In literature different sustainability KPIs within the three dimensions have been researched extensively (see e.g., Barni et al. 2022; Barletta et al. 2021). These can also be seen as a guide or base for certification and rating questionnaires and assessment processes (Diez-Cañamero et al. 2020). An article discussing the auditors' point of view recognized that different ratings and certificates have different sets of usually labor-intensive questionnaires (Escrig-Olmedo et al. 2019). A company might be required to fill out several questionnaires for different ratings and certificates with each having different questions if customers or stakeholders demand different ratings and certifications (Diez-Cañamero et al. 2020). Usually, each rating agency has their own methodology that the companies need to understand and follow when filling out the questionnaires, but the lack of understanding can hinder performance improvements (Oprean-Stan et al. 2020). This can be difficult to execute if the company does not have the resources available to fill in all required questionnaires and study the methodology used by the rating agency.

To become sustainability certified or rated companies need to implement sometimes expensive virtuous practices to reduce unfavorable ethical and environmental impact. Carini et al. (2017) points out, that companies involved in harmful or less sustainable activities might have to bear higher costs that reduce the profitability while adopting and implementing more sustainable practices in the organizational structures to meet the requirements of the certifications. Thus, it can be seen as easier for companies to get

certified if they are less involved in potentially harmful activities or already have implemented sustainable practices that are aligned with the requirements from certifications. (Carini et al. 2017). One article also highlights that common factors in evaluating companies for ratings and certifications are the economic and stock market criteria. These can compensate for other more sustainability-related factors, even though sustainability is being evaluated. (Diez-Cañamero et al. 2020) If one dimension can be compensated by another, it can be questioned if the rating is accurate and truthful in evaluating a company's sustainability performance.

According to Alam et al. (2022) and Diez-Busto et al. (2022) the B Corp certification process inspect a company's community impact, customer and employee relations, environmental impact, and governance as well as ability generate returns and create value for stakeholders. To get certified, a company needs a minimum score of 80 out of 200. The holistic assessment is dependent on the sector, scale and location, and the importance of each question is weighted in relation to the intended goal. Furthermore, in this certificate the companies must apply for recertification every three years and be ready for randomly held audits every two years. (Alam et al. 2022; Diez-Busto et al. 2022) The scholars do not discuss in more detail what exact measures, data, or practices are used in the assessment process and what a company needs to meet in more detail in order to fulfil the requirements regarding the areas such as community impact and environmental impact.

Diez-Busto et al. (2022) also lists two other requirements that a company must fulfill in order to obtain a B Corp certification in addition to the performance requirements mentioned above. The second requirement is complying with the legal requirements such as including stakeholders in the bylaws and assuring they are part of the decision-making process. Diez-Cañamero et al. (2020) also highlights the collaboration with stakeholders for sustainable development as a requirement for certifications. The third requirement includes an annual fee, signing of a term sheet specific to the certification and a Declaration of Interdependence (Diez-Busto et al. 2022). As the B Corp certification articles show, companies aiming for a certificate must fulfill several requirements within their business practices and operations, stakeholder relations and governance.

Literature has recognised what motivates companies to obtain certificates and ratings which will be discussed later in this thesis. The issue is that the requirements a company needs to fulfil to successfully obtain a rating or certificate has been less discussed. Furthermore, studies are not targeting the manufacturing industry either, thus causing a gap in research in the subject. Only a few articles from the identified literature discuss shortly or mention some of the requirements needed to obtain a certification. Two of these

articles examined the B Corp certification and specifically its requirements (Alam et al. 2022; Diez-Busto et al. 2022). The reason for lack of deeper examination and comparison of certificates and their processes can be due to lack of available information and the vast differences in certification methodologies, metrics, and measures.

As very few scholars have researched what a certification or rating requires from a company when they are considering pursuing or maintaining one this study will try to increase the understanding in the subject. A deeper understanding of the requirements can help companies understand what is required from them in terms of sufficient sustainability performance to become certified and how it can help their overall business and sustainable development efforts.

2.3 Regulatory inputs on reporting, ratings, and certifications

Sustainability certifications and ratings are voluntary practices. Thus, if companies decide to withhold their certifications as Carlos and Lewis (2018) discussed in their article, it could negatively affect the transparency and reliability of utilizing certifications and ratings. If companies were obligated to publicize their certifications and ratings it could reduce the risk of greenwashing as the audience might become more experienced in detecting misalignments between actions and certifications.

There are currently changes happening in how companies are obligated to report their sustainability. The EU taxonomy and the new directives such as the Corporate Sustainability Reporting Directive (CSRD) bring novel changes in how companies are required to disclose their sustainability. (EU 2022) The CSRD requires companies to provide third-party audited reports describing their sustainability and how it is considered within the business and how it affects the environment and people. Companies must disclose information on sustainability matters affecting the company including for example strategies regarding sustainability risks and plans aligning with the global warming targets. (EU 2022) The CSRD is aimed to replace an earlier Non-Financial Reporting Directive from 2014, which has required companies to provide nonfinancial disclosure documents also known as sustainability reports. The purpose is to ensure stakeholders such as investors access to needed information on climate change risks and other sustainability issues. The directive entered into force on 5 January 2023 and companies are required to apply to the rules in the 2024 fiscal year. These rules apply to large companies and listed companies including listed SMEs. (EU 2022)

Another directive affecting reporting is the European Sustainability Reporting Standards (ESRS) which aims to reduce double disclosure efforts by making reporting standards

interoperable. It also establishes guidelines on topics and indicators companies should include in their sustainability reports such as climate change, biodiversity, and human rights. The ESRS also expands the company's reporting boundary to the entire value chain through a new concept of double materiality. (EU 2023a)

Currently, there are a lot of new directives and regulations coming up regarding sustainability reporting in addition to those discussed above. For example, the Green Claims directive which is currently discussed in the EU aims to eliminate greenwashing among companies (EU 2023b). However, it is not yet known how the new regulations and legislation will affect sustainability ratings and certificates. There is not yet discussion in literature on the effects, since the regulatory changes are yet very recent.

2.4 Motivations for sustainability ratings and certifications

Patara and Dhalla (2022) and Bassen and Kovacs (2008) argue that there are several drivers motivating companies to obtain sustainability certifications and ratings and to publish sustainability reports. The reasons for incorporating sustainability practices and reporting tools can include both internal and external motivators, positive and negative (Ferreira Quilice et al. 2018). Improving the company's image, relations, gain recognition from the society, responding to global trends, improve employee solidarity, develop sustainable business environment, and tax efficiency are all internal motivators recognized by Murad et al. (2021). External motivators include the realization of ethics and supporting charities (Murad et al. 2021) and pressure from customers and investors (Diez-Cañamero et al. 2020; Patara & Dhalla 2022).

One of the reasons behind the rise of sustainability reporting practices have been the shift from only assessing financial performance and its value to assessing the performance of environmental and social dimensions and their impacts on the business as well (Patara & Dhalla 2022). Ferreira Quilice et al. (2018) also mentions similar market movements and changes behind the increasing desire to issue sustainability reports. Furthermore, companies face increasingly more pressure from investors, shareholders, customers, governments, and competitors to implement sustainable practices, which has increased the motivation for obtaining a certification or rating measuring sustainability performance (Diez-Cañamero et al. 2020; Patara & Dhalla 2022). Others hope to use sustainability reports and certificates to become more transparent and credible (Boiral et al. 2019), to embrace the changes and add sustainability as a part of the business strategy or to ensure sustainable practices due to probable future legislation requirements (Waddock 2008). Some stakeholders require assurance and proof of sustainability performance in form of certifications and reports to explicitly see how the company performs

in terms of sustainability. Therefore, the certification is used as an enhancement of credibility, transparency (Boiral et al. 2019), obtain proof of quality (Flagstad et al. 2022), to meet stakeholder expectations, compile with sustainability principles and practices (Wang & Chen 2017), improve organizational results (Fonseca 2015) and practices, gain external validation and legitimization, and differentiate from companies greenwashing their business (Alam et al. 2022).

In literature the most discussed reasons behind reporting sustainability practices or obtaining certificates and ratings are reputation and other benefits stemming from improved reputation (See e.g., Boiral et al. 2019; Ikram et al. 2021; Alam et al. 2022; Diez-Busto et al. 2022). Diez-Busto et al. (2022) have recognized in their literature review some motivations that drive companies to obtain a B Corp certification, an example of environmental certification that is increasingly used in different industries. Most of them relate to the aspects of enhancing the company reputation which is pursued by increasing the transparency and credibility of the business, also recognized by Boiral et al. (2019). For example, the motivations regarding transparency and reputation include increasing the visibility of the company's commitments to environmental and social aspects, enable customers to identify the company's commitment to sustainability and attract new talents (Diez-Busto et al. 2022). According to Wang and Chen (2017) being part of a rating is seen as a "positive promotional tool", which can help with enhancing the reputation of a company. That is also the reason for companies wanting to become part of a rating according to the authors. Scholars have also agreed that implementing social responsibility and fulfilling stakeholder expectations have higher economic benefits and can achieve positive differentiation (Fonseca et al. 2015), which can also be a driver for obtaining certificates and ratings. Therefore, the aim of improving financial performance can also be a motivator since sustainability practices can enhance it by influencing other companies to join and gain trust from investors (Murad et al. 2021).

Diez-Busto et al. (2022) also recognized that differentiating the business from traditional profit-oriented companies by considering other aspects of business was seen as a motivational factor. As companies include corporate social responsibility and sustainability as part of their business strategy, more companies want to follow and pursue a certification (Alam et al. 2022). In some cases, the actions of others in the vicinity can influence the choice of certification (Fonseca et al. 2022). Thus, the societal influence plays a role when companies are more likely to become certified if others in their vicinity become certified. In addition, Alam et al. (2022) also mentioned the aspiration for differentiation to be a reason for pursuing sustainability certifications. Thus, the certification can be used by companies as a tool to distinguish themselves from the mass and truly show the

extent of their sustainability performance. This can also help customers and investors to distinguish truly sustainable businesses.

Monteiro and Aibar-Guzmán (2010) also discussed that companies in more environmentally sensitive industries face greater pressure to disclose sustainability information, thus acting as a driver for sustainability reporting and certification. Otherwise, if the companies do not disclose their sustainability practices, it can be interpreted as poor sustainability performance and thus harm their reputation. Furthermore, these companies usually face more rigorous requirements due to a wider range of regulations. (Monteiro & Aibar-Guzmán 2010).

Other mentioned motivations by Diez-Busto et al. (2022) were to utilize the certification to attract investors and financing, self-assess practices and thus enhance continuous improvement of operations, help achieve the Sustainable Development Goals (SDGs) and the Agenda 2030. Another factor affecting the likeliness of reaching certifications is how the already existing values, mission, purpose, or identity of the company aligns with the ones of the certification (Alam et al. 2022). In other words, it is more likely for a company to obtain a certification that aligns with their values and goals.

Disclosing sustainability practices is not standardized globally due to different standards, cultures, norms, environmental values, and legislative requirements between countries (Monteiro & Aibar-Guzmán 2010; Ika et al. 2022). As Flagstad et al. (2022) pointed out, the expansion to new markets can be a driver for obtaining certificates. According to Ika et al. (2022), multinational corporates tend to be more transparent about their sustainability practices, thus disclosing more information compared to domestic companies.

The motivations and drivers can also direct companies to choose specific certificates and ratings. For example, pressures from regulation, the company's competitive position, stakeholders' wishes, and other pressure groups can impact the decision of certificate or rating (Escrig-Olmedo et al. 2019).

2.5 Utilization and benefits of ratings and certificates

In contrast to what requirements companies face when obtaining certifications, the benefits and advantages have been discussed more in literature. Yet, the literature focusing on certifications and ratings in the manufacturing industry is still scarce compared to other industries such as forestry and agriculture (Oprean-Stan et al. 2020). Industries like agriculture, forestry, and construction are more regulated industries, which can be the reason behind the more extent use of sustainability disclosures (see e.g., Gather & Wollni 2022; Ho et al. 2022; Jacobi et al. 2022; Malek & Abdul 2022). Therefore, as

Monteiro & Aibar-Guzmán (2010) recognized in their article, the extent of sustainability disclosures differs between industries. Thus, the industry a company is part of can influence the level of the environmental disclosures (Monteiro & Aibar-Guzmán 2010) and therefore also the understanding and use of ratings and certifications.

Studies have recognized several drivers motivating companies to apply for ratings and certifications as discussed above. In current literature the reasons for obtaining a rating or certification are somewhat known, but research on using them to enhance sustainability and emphasizing sustainability measures is yet scarce. There is a gap in understanding how certifications and ratings are used as a part of a company's processes, corporate structures and implementing sustainable practices and thus realizing the benefits from them. As discussed earlier, in literature the main recognized purpose of certifications and ratings is to measure a company's sustainability and communicate it to stakeholders, which gives assurance of the practices (Carlos & Lewis 2018; Patara & Dhalla 2022). Other scholars have also recognized that companies use ratings to measure corporate sustainability and responsibility. However, according to Diez-Cañamero et al. (2020) ratings are usually based on the SDGs that utilize a macro level approach, which can be difficult to implement on corporate level. Thus, it can be difficult to evaluate and measure the real contribution to sustainable development with ratings (Diez-Cañamero et al. 2020). Still, according to Cho et al. (2020) stakeholders use ratings and especially sustainability reports as support in decision-making. The article does not further open how the ratings and reports are supporting decision-making. Instead, studies have been more focused on the impacts and quality of sustainability disclosures, whereas the actual implementations of certification schemes and how they pose changes to sustainability practices have not yet received as much attention (Flagstad et al. 2022).

Overall, literature has found some ways to utilize sustainability ratings and certifications. The most common one is to use the ratings and certifications to communicate results with stakeholders and increase reputation as a reliable and sustainable company. Some use them to defend themselves against reputational threats. (Carlos & Lewis 2018) Some articles have identified that ratings and certifications can help to improve business and increase competitive advantage. Especially, as green consumerism has increased the ratings and certifications have indicated of being valuable and rare resources for gaining competitive advantage. (Silva et al. 2022) New resources and better understanding of sustainability can also help in exploiting new markets and implementing more sustainable practices and products for customers (Silva et al. 2022).

The main findings from literature regarding utilizing certificates and their benefits are summarized in Table 2. The summarization gives an overview on how certifications and

ratings are used in terms of helping the processes of companies and implementing more sustainable practices according to literature.

Table 2. *Benefits and support for competitive advantage identified in literature.*

| Authors | Focus | How ratings and certifications generate benefits and support competitive advantage |
|---------------------------------|------------------------|---|
| Alam et al. 2022 | Certification (B Corp) | Attract new customers Improve impact by shaping goals, mission, and vision Track performance and progress Give recognition Sense of purpose Understanding requirements and how to improve business |
| Diez-Busto et al. 2022 | Certification (B Corp) | Include stakeholders in decision-making Access funding |
| Silva et al. 2022 | Certification (B Corp) | A tool for discovering methods to incorporate social values in business and market Identifying improvements |
| Paeleman et al. 2023 | Certification (B Corp) | Unique financial advantages |
| Carini et al. 2017 | Certification Ratings | Gain better long-term performance |
| Carlos & Lewis 2018 | Certification | Gain social approval |
| Ikram et al. 2021 | Certification | Recognition Competitive advantage Provide productivity Cost reductions Reduction in customer complaints Increase in customer satisfaction |
| Carvalho et al. 2022 | Certification | Increases understanding on sustainability transformation Shows what needs to be improved Enables strategy building to improve sustainability performance |
| Flagstad et al. 2022 | Certification | Unique opportunities Entry to new markets Increased prices and competitive advantage |
| Patara & Dhalla 2022 | Ratings | Reputational benefits influencing investments, product, career choices, attracting new employees and strengthen current employee engagement |
| Wang & Chen 2017 | Ratings | Enhance the reputation Strengthen brand and image Improve the profile of the company and corporate identities Signal positive commitment |

Sustainability performance measurement can provide valuable and necessary information for decision-makers, help enhance a company's sustainability monitoring,

communication, identifying issues and solving sustainability related problems. Thus, it can be seen as the company's sustainability performance measurement and its process can help direct decision-making towards sustainability and responsibility. (Ahmad & Wong 2018) The connections between decision-making and utilizing sustainability assessment and measurement methods as support are still lacking discussion and research. When understanding the connection and how to utilize the assessment methods and their results in a supportive and relevant way it could help the decision-making as discussed in Ahmad and Wong's (2018) article. However, the utilization and realized benefits can also impact future certification processes. Flagstad et al. (2022) recognized in their article experiences that can either drive or hinder the certification process and the utilization of them.

2.5.1 Sustainability ratings and certifications as a tool for communication

In chapter 2.2, reputation was recognised as the most common driver for obtaining certificates. In literature this can also be seen as the main driver directing how ratings and certificates are utilized. Flagstad et al. (2022) found in their research that certifications are used to strengthen a company's sustainability or environmental legacy, even though there has been concerns on the lack of impact the certifications have on environmental performance. According to literature, companies use disclosures as a promoting tool for their image and to improve or enhance their reputation (Alam et al. 2022; Flagstad et al. 2022). Furthermore, when a company openly shares their intention of obtaining a certificate or rating it can signal potential changes to a company's structure or operations (Carvalho et al. 2022). On the other hand, sometimes companies use them merely for communicative purposes without changing the internal practices to become more sustainable (Flagstad et al. 2022).

Companies can face both positive and negative reactions from the public when publishing their results from ratings. According to Patara & Dhalla (2022) a corporate's sustainability or reporting tool can be seen as the company's business strategy for sustainable development. Satisfactory results can give greater reputational benefits and can help companies to get investments, increase sales and strengthen its brand image (Wang & Chen 2017; Patara & Dhalla 2022). Companies can also more easily attract and retain talent and strengthen employee engagement with a positive reputation. (Patara & Dhalla 2022). If a company's sustainability and its risks are managed poorly it can damage the credibility and reputation of the company. This can then affect negatively the financial

and market performance as well as the sustainable growth of the company. (Monteiro & Aibar-Guzmán 2010)

It would seem obvious to externally publicize when obtaining a certification, but according to Carlos and Lewis (2018) that is not always the case. Carlos and Lewis (2018) article study the reasons for why companies sometimes strategically withhold their certification status or membership in a rating. For example, transparency for companies with non-existing, minimal sustainability actions or they are involved in controversial activities can decrease their credibility and reputation (Monteiro & Aibar-Guzmán 2010; Ferreira Quilice et al. 2018). Paeleman et al. (2023) recognised that not all companies get certified or rated, even if they have a strong focus on sustainability and its different dimensions. These companies might not find it necessary to certify their practices if they see themselves as transparent enough or they or their customers do not understand the value of the certificates.

Companies can use certifications as a means to gain social approval in the market from the right people and audience to require needed resources and support to succeed (Carlos & Lewis 2018). On the other hand, concerns regarding the perception by customers and how they understand the value of the certification sometimes lead companies to not present their certifications publicly. The article argues that when a certification is new and not yet understood by the audience, it is easier for companies to claim being sustainable through touting the certification and go undetected. (Carlos & Lewis 2018) Thus, publicizing a certification with the aim of gaining social approval might backfire for the company. Furthermore, touted certification and poor understanding can also be the reason for the critique aimed at certifications and ratings (Carlos & Lewis 2018; Boiral et al. 2019). Organizations will begin to view certifications and ratings as more valuable symbols and measures of their performance when certifications become more recognized and accepted. Further, as the audience learn to recognize companies that falsely claim to fulfil sustainability standards the certifications can provide a tool for gaining social approval and counter negative claims. (Carlos and Lewis 2018) They can also support in attracting customers and partners, as ratings and certifications can show them what the company stands for (Alam et al. 2022).

Earlier when discussing the motivations for obtaining certification and ratings one of the drivers mentioned was attracting new talent to the company (Diez-Busto et al. 2022). On the other hand, Alam et al. (2022) pointed out in their study that sustainability certifications did not help with attracting new talent and they were not part of the applicants' decision-making when applying or accepting a received job offer. Thus, the motivations to obtain a certification and ratings might not realize in a way a company has intended.

On the other hand, lack of understanding of how the certifications can be utilized in a beneficial way for the company can be hindering the utilization of these tools in a more suitable way. Alam et al. (2022) also mentions that even though certifications and ratings do not attract new employees, it did attract new customers.

Further, a sustainability rating agency's reputation and credibility is important and can affect how stakeholders perceive the results. When a company receives an assessment result on CSR performance from an independent third-party agency, it usually is seen as credible. If the agency is well-known and has established credibility of their own, the company can also increase their reputational benefits when receiving an assessment from the agency. (Ikram et al. 2021; Patara & Dhalla 2022) The company's sustainability practices and procedures can be seen as more credible and reliable. To conclude, reputation and business advantages are intertwined. A poor reputation can have a damaging effect on a business whereas satisfactory results and the positive reputation that usually follows can help the business thrive and grow.

2.5.2 Sustainability ratings and certifications enhancing sustainable development

Certifications, ratings, and reports call for real sustainability commitment (Alam et al. 2022). They create an interaction between actual sustainability actions and the communication of these actions to stakeholders (Flagstad et al. 2022). For example, in the B Corp certification, the process helped companies commit to sustainability in a more comprehensive way (Carvalho et al. 2022). Certifications are also a great tool for identifying more effective ways to integrate social values into the corporate business and markets (Silva et al. 2022). Thus, the need for true commitment can enhance the implementation of sustainability as part of the corporate structures and business.

According to Alam et al. (2022) study, certifications can give companies a sense of purpose and increase understanding on sustainability terms and their connection to business. They can also provide information on what a company should improve in terms of sustainability practices (Alam et al. 2022; Carvalho et al. 2022). An increased understanding on how a business performs in terms of sustainability and what can be improved can help the company perform better than companies who do not implement a sustainability approach in their business practices (Diez-Cañamero et al. 2020). However, Escrig-Olmeda et al. (2019) demand improvement of sustainability performance measurement since they are not yet according to the authors equivalent enough with sustainability processes.

As discussed, certifications and ratings are commonly seen as marketing tools for companies to prove their commitment to sustainability. As tools of communication, certifications and ratings can also increase employee knowledge and enable the company to build strategies supporting sustainability performance (Carvalho et al. 2022). An improved reputation can also help companies attract new funding and (Diez-Busto et al. 2022) and increase productivity while cutting costs (Ikram et al. 2021).

2.5.3 Sustainability ratings and certificates supporting decision-making, business, and competitive advantage

Currently, research on how sustainability ratings and certificates support companies' decision-making is still scarce. Some scholars have identified some benefits and opportunities ratings and certifications can provide in decision-making. But the contradictory results of the value and support of sustainability reporting tools and methods could be a reason for the scarce literature in the area. For example, Fonseca et al. (2022) mentions that scholars have found both negative and neutral relationships between environmental and economic performance, alas the sources used might not be relevant anymore since most of them are old. Fonseca et al. (2022) suggest further research on the relationship between reporting tools such as CSR and business value creation. Also, to understand the relationship between business and sustainability performance as well as the contribution to the SDGs.

According to literature certificates and ratings support decision-making through shaping goals, mission, and vision of the company (Alam et al. 2022). The sustainability performance metrics that certificates and ratings use in their processes help both companies and stakeholder evaluate a company's sustainability performance and success (Monteiro & Aibar-Guzmán 2010). By tracking the performance and progress over time (Alam et al. 2022) certificates and ratings can improve the impact of the company and its profitability by achieving long-term goals of growth (Monteiro & Aibar-Guzmán 2010). This can also help to understand what a company needs to do in order to achieve the goals, fulfil the mission, and vision they have put for themselves. Therefore, for the internal decision-making processes these metrics are valuable. In addition, they can provide additional substantial value to a company's non-financial communication. (Monteiro & Aibar-Guzmán 2010).

On the other hand, it has been seen as difficult to integrate or find connections between the results and decision-making due to the lengthy certification processes and complex businesses. In one article the interviewees pointed out that being a small business is giving them an advantage in implementing sustainability practices since they are more

agile and flexible, can adapt to changes and make decisions quickly in order to implement sustainability measures. (Flagstad et al. 2022). Thus, smaller companies may benefit from their size in terms of implementing certification processes quickly, measure effects immediately, answer to the pressure and demands from stakeholders as well as implement improvement ideas. Additionally, it can help companies to understand more easily how sustainability certification can help provide support for decision-making.

As discussed in a previous chapter (2.5.1), reputation and business are connected. According to Carlos and Lewis (2018) certifications can defend against reputational threats by showing that the company's actions are aligned with sustainable values and actions. Inclusion is seen as a positive signal by investors and customers since it can increase the perception of legitimacy of the business and thus improve the image and brand as well as show that the company is trustworthy. This can help maintain or even improve a company's financial performance, long-term value, and competitiveness compared to others on the market. (Carlos & Lewis 2018) Similarly, poorly managed sustainability activities can result in poorer financial and market performance as well as sustainable growth (Monteiro & Aibar-Guzmán 2010).

Paelema et al.'s (2021) study argues that companies focusing on value creation tend to have greater advantages compared to those focusing only on value capture. Socially responsible companies generate positive externalities by maximizing value creation, which is value not captured in form of revenues. Therefore, it can be important for companies to create value through certifications and ratings to gain competitive advantage on the market. Flagstad et al. (2022) mentioned that certifications can provide companies with new opportunities, access to new markets and the possibility to increase prices or ask for a premium from customers. These can all help provide opportunities for increased competitive advantage.

Certifications and ratings also provide benchmarking possibilities to companies. According to Alam et al. (2022) the B Corp certification and its platform enables companies to compare their impact with peers. This provides an opportunity for companies to compare themselves with competitors and find ways to differentiate themselves from them to increase their competitive advantage and exceed performance.

Furthermore, the rating agencies play a significant role when implementing suitable sustainability standards, since they can provide help and support for the company to fulfill the requirements needed. By implementing the necessary standards to fulfill certification requirements, it can provide a company competitive advantage through cost reduction,

increase productivity, reduce complaints, and increase customer satisfaction. (Ikram et al. 2021)

2.6 Critique towards sustainability certification and ratings

Sustainability reporting and ratings are an important means of communicating sustainability performance, but they have faced a lot of criticism in literature and elsewhere. Inaccuracies and ambiguities are common since reporting is voluntary and there are no mandatory standards. Companies can also choose what they prefer to disclose about their activities and not everyone discloses everything. (Boiral et al. 2019; Patara & Dhalla 2022) Some scholars see sustainability reports being used as a mere marketing tool that aims to influence stakeholders and their perceptions of the company (Boiral et al. 2019). Thus, they are not always seen as a reliable source of information.

Many scholars have stated that the main reason for reporting sustainability and improving the quality of the reports is to communicate and share the results to stakeholders (Boiral et al. 2019). Yet, one of the main challenges of sustainability reporting that is causing issues is the balance (Boiral et al. 2019) and transparency of information (Escrig-Olmedo et al. 2019). The ratings and the rating agencies have been criticized for not offering complete and public information on the criteria they use during the assessment processes to evaluate a company's sustainability performance (Escrig-Olmedo et al. 2019). The lack of transparency is due to the risk of jeopardizing the competitive advantage the rating agency might have, as they invest huge resources to develop their methodologies and reporting tools (Patara & Dhalla 2022). Therefore, it can be difficult to understand what is measured and the comparison between companies can be difficult to execute. The lack of transparency in rating procedures and poor understanding of how sustainability is measured can impact how points are given. For example, Escrig-Olmedo et al. (2020) and Diez-Cañamero et al. (2020) have pointed out in their articles that compensation for lower scores does happen in some ratings. Thus, a lower score in environmental aspects can be compensated for a higher economic score causing distortion in the results and how sustainable a company truly is. Vilas et al. (2022) pointed out in their research that ratings still put a lot of value on the market value instead of the sustainability aspects. Thus, if the reporting tool has a biased concept of sustainability, it will diminish the contribution to sustainable development according to Diez-Cañamero et al. (2020). Sustainability reports have also been accused of being difficult to understand and decipher and thus not being useful to the stakeholders (Patara & Dhalla 2022). Some companies also want to include stakeholders in the process, but the percentage of stakeholder inclusiveness and responsiveness in reviewed reports seems still to be low

according to Boiral et al. (2019). One of the reasons could be the lack of transparency and difficulties in understanding the reports.

A challenge certifications and ratings are facing is the adaptability of ratings and certificates in different geographical and social contexts. Companies differ from each other in many ways such as size, management structure, policies, product and services and others, which makes it more difficult to create common standards (Boiral & Henri 2017; Diez-Cañamero et al. 2020; Pihkola 2021; Patara & Dhalla 2022). Carvalho et al. (2022) points out that companies trying to obtain certificates or ratings in unique circumstances might not get a complete and truthful assessment if the rating is unable to adjust and adapt to differences for example in geographical and social differences. These differences can cause questions or indicators to become irrelevant and cause a lower rating. Furthermore, scores that are incompatible with different systems can limit the opportunities a company has to proceed while trying to get qualified for a certification or rating (Carvalho et al. 2022).

A forthcoming challenge many companies face while obtaining or maintaining a certification or rating are the different costs involved in the process. The costs can comprise of investment costs, high annual fees, and operating costs (Diez-Busto et al. 2022). These can also be barriers for companies that hinder them from participating in these activities. According to Flagstad et al. (2022) smaller companies had greater challenges in terms of needed resources such as time and money when trying to obtain a certification. The prohibitive costs were also seen as discouraging and a reason for decertifying (Flagstad et al. 2022). Other resource related challenges and barriers that Diez-Busto et al. (2022) recognized were lack of training and knowledge and lack of time to plan actions for both short and long term. In Flagstad et al.'s (2022) study the interviewees also mentioned difficulties in finding time for discussing environmental improvements as more practical tasks took up most of their time.

Literature has also identified several barriers related to the process of obtaining and maintaining sustainability certifications. According to Diez-Busto et al. (2022) some of the challenges were resistance to change, faulty internal communication policies, lack of commitment in the top management and suitable measurement systems, certification was not perceived as a strategic objective, insufficient incentives for engaging employees, and flawed implementation strategies. The bureaucracy and rules, lack of flexibility and practical solutions were also seen as certification barriers (Flagstad et al. 2022).

Furthermore, the difficulties in understanding the applicability of certifications were seen as a challenge (Boiral & Henri 2017; Flagstad et al. 2022). For example, as pointed out

by interviewed auditors in Escrig-Olmedo et al.'s (2019) study, the rating agencies can measure the same concepts but in diverse ways, which causes inconsistencies in the assessments. This can affect how the benefits of sustainability reporting tools can be utilized.

3. RESEARCH METHODOLOGY

3.1 Research design

The thesis aims to generate understanding in how sustainability certificates and ratings are obtained and utilized and how they can support sustainable development and decision-making in the manufacturing industry. Though sustainability certifications have been studied, concrete and practical implementations and utilization methods of certificates and ratings are scarcely discussed in prior research. Therefore, by gathering and analysing qualitative data and insights, this study aims to contribute to the theory development of utilizing certifications and ratings as support in decision-making and implementing more sustainable practices in manufacturing companies.

A qualitative exploratory research design enables understanding the practical situation while uncovering added information, discovering connections and the big picture of the research topic (Hirsjärvi et al. 2009; Saunders et al. 2019, p. 179, pp. 186-187). The advantage of exploratory research is the flexibility and adaptability to changes (Saunders et al. 2019, pp. 186-187), which is suitable for this thesis because the certifications and ratings are notably ever-changing, and they have not been extensively researched yet.

An abductive research approach is implemented in this study, where existing theory on sustainability certifications and ratings is applied first, enriched by gathered and analysed qualitative data. The abductive theory building supports the exploratory qualitative research design well, since the approach can help with exploring phenomenon, identifying themes, explaining patterns, and generating or modifying existing theory. In other words, the abductive theory building combines both deduction and induction aiming to expand or modify existing theory by actively interacting between theory and empirical data. A deductive research approach focusses on verifying or falsifying a set hypothesis or theory with the empirical data. An inductive approach on the other hand focusses on a specific phenomenon on which new theory is built upon. (Saunders et al. 2019, pp. 155-156) Both the deductive and inductive approaches have been criticized for not systematically combining theory and insights of the studied empirical phenomenon and draw generalizable conclusions. Thus, an abductive approach is more suitable where theoretical frameworks and empirical observations support and guide each other in an interactive way. (Dubois & Gadde 2002)

The abductive approach has also been acknowledged to be a convenient approach for case study research (Dubois & Gadde 2002). To understand the reasons for choosing

specific certificates and ratings and to understand how they are utilized, a closer examination on these in their contexts is needed which is possible through case study. A case study strategy enables investigating a specific phenomenon in their practical setting (Eriksson & Kovalainen 2008; Saunders et al. 2019, p. 196). Furthermore, a case study supports exploratory research and theory building by answering questions such as what, how and why, and providing a broad understanding of the topic (Voss et al. 2002). The challenging side of case study as a research strategy is that it is time consuming and requires good interviewing and interacting skills during the interviews (Voss et al. 2002).

The chosen research strategy is a case study that was conducted as a multiple case study with three cases. In contrast to a single-case study, the utilized multiple case-study gives a broader perspective of the situation by comparing multiple companies in different situations (Eriksson & Kovalainen 2008). Since the multiple case study enables comparison of different situations it can establish a more generalizable conclusion. In this study each case includes several companies, who all are in a comparable situation. Furthermore, the study aims to understand the current situation in obtaining and utilizing sustainability certificates and ratings and thus a cross-sectional time horizon is the most suitable as temporal changes are not studied.

3.2 Case selection

The case study samples were selected through purposive sampling, which is a common method in case study research (Eisenhardt 1989). With the sampling method the case selection is done by choosing the cases that will best meet the objective of the research and answer the research questions (Saunders et al. 2019). Within the purposive sampling, which creates a non-probability sample, maximum variation, typical and critical case sampling are used (Patton 1990; Saunders et al. 2019, pp. 321-322). The aim was to select cases that represent both similar and different views and stages of the process of obtaining, maintaining, and utilizing certifications and ratings (maximum variation sampling), they illustrate the current situation in the industry (typical), and they have either advanced in the field of certifications and ratings or are in the beginning of obtaining them (critical).

According to Voss et al. (2002) it is also important to connect the cases to the research questions and define the borders of the research. Thus, the case selection was initially done by gathering information on potential cases and reflecting the research criteria on them. As this study is aiming to create understanding on how manufacturing companies can use certificates and ratings to enable their sustainable development, focus was put

on establishing cases within various stages of utilizing certificates and ratings within the industry.

Firstly, the case identification began by gathering information on potential Finnish companies and their utilization of certificates and ratings. Companies' annual reports, sustainability reports, web pages, news articles and internal discussions were used in the preliminary case identification process. The effectiveness of case selections can be enhanced by identifying a reasonable target population first (Saunders et al. 2019, p. 295). Since the study focuses on manufacturing companies in Finland, this gives the case selection a reasonable outline for potential companies that have sustainability certifications. Furthermore, when identifying potential companies, ratings, and certifications such as CDP, Ecovadis, DJSI, MSCI and ISO standards were put in focus, since these were identified to be few of the most popular during the research period. The identified potential companies have been listed in a table shown in Appendix B along with the companies' ratings. In total eight potential companies were identified and contacted.

As the research is done as part of the Data Asset project at VTT and in collaboration with five manufacturing companies, these companies were also included in the case identification process. The topic was also discussed with the companies during a steering meeting, in which a need to better understand the requirements for obtaining and maintaining certifications and ratings was recognized among the participants.

Next, after going through the gathered information three cases were selected for this study following the sampling criteria presented earlier. The first selected case comprises the five manufacturing companies that are part of the Data Asset project. Since they did not yet have any ratings and they hoped to better understand how ratings are obtained they form the first case. Thus, the case includes several companies, but together they represent the first step when starting to obtain certificates. The companies are Glaston, John Deere, Primapower, Procemex and Signode. This group has also had an impact on the constructing and sampling companies for the second case to fill gaps and broaden the perspective of the current situation in the industry.

To fulfil the objectives of the study, it was identified that the second case needs to broaden the perspective of utilizing certificates and ratings. Thus, the second case includes companies that have had ratings and certificates for a longer period. They have the experience of obtaining and maintaining a rating or certificate. Additionally, to deepen the understanding and see the differences, the second case should enable comparison with the first case but also generate new findings. In the preliminary case search, it was found that listed companies are obligated to report their sustainability and many of them

have several certifications and ratings. Therefore, they provide a valuable perspective to the study in terms of maintaining and utilizing sustainability information in their business practices. Thus, the second case represents companies that are already maintaining certificates and ratings. One of the criteria when choosing the companies was based on which certificates and ratings the companies currently have. Companies with a CDP, EcoVadis, MSCI and DJSI rating were preferred since these were the most common ratings used by the listed Finnish companies in the industry and there was an interest to investigate these specific ones.

The third selected case consists of the auditing and assurance perspectives, which was chosen to support the perspectives from the other two cases. Auditors and assurance actors help and support companies to obtain certifications and ratings as well as verify the disclosed information. Thus, the actors within this case can support and add new relevant perspectives along with the other two cases in terms of obtaining and utilizing certificates and ratings as well as considering future aspects concerning this topic.

Together these three cases support each other within the research on certificates and ratings by providing different and complementary viewpoints. They provide a comprehensive selection of companies in various stages of utilizing ratings and certificates providing coverage of the current situation in the industry. Additionally, to enable in-depth analysis of each case while also providing a comprehensive overview of the current situation in the industry, the number of cases is kept to three.

Table 3 below presents the different cases and companies which are presented with disguised names, the industry, and a brief description of their offering. Most of the companies who participated in the study are active in the manufacturing industry focusing on machinery in a business-to-business environment. The focus on the manufacturing industry was chosen because of two reasons. First, the Data Asset project which this thesis is part of at VTT is focusing on the manufacturing industry and companies producing machinery to other industrial companies. Secondly, in literature the understanding of how sustainability ratings and certificates are utilized in the manufacturing industry is still scarce.

Table 3. Selected cases.

| Case | Company | Industry | Brief description of offering |
|--|----------------|-------------------------------|--|
| Non-rated or -certified | Company A | Machinery | Offers heat treatment machines and services for architectural, solar, automotive and appliance applications. |
| | Company B | Machinery | Offers forestry equipment and digital tools for agriculture and logging. |
| | Company C | Machinery | Offers machines and systems for sheet metal manufacturing. |
| | Company D | Machinery | Offers machine vision cameras for pulp, paper, and print industries. |
| | Company E | Machinery | Offers automatic and semi-automatic stretch wrapping machines for pallet loads. |
| Rated and/or certified | Company F | Logistics and machinery | Offers solutions, products and services in cargo and load handling for ports, roads, and ships. |
| | Company G | Chemistry industry | Offers chemistry and water treatment solutions for pulp, paper, board, tissue, water, oil, and gas industries. |
| | Company H | Machinery | Offers industrial cranes and services to several industries. |
| | Company I | Machinery | Offers equipment, tools, services, and solutions for the mining industry. |
| External assessment body/consultant | Company X | Professional services network | Offers advisory, audit, tax, and private enterprise services for various industries. |

The purpose of the first case, including non-rated or -certified companies, is to give insights from companies that do not yet have sustainability certificates or ratings. The aim is to understand aspects that are important to consider when considering obtaining a rating or certificate for the first time. The participating companies are mostly SMEs, with one exception. One of the Data Asset companies is listed but is not participating in any ratings at the moment. Thus, their viewpoints are better suited to be scrutinized along with the other non-rated companies.

The second case comprises of rated and certified companies who are obligated to conduct sustainability reporting, because they are listed companies. These companies were also participating in several sustainability ratings and certificates and thus providing important insights to how they are maintained, utilized, and developed further during a longer period.

The third case comprises one consulting firm that helps companies in the process of obtaining and maintaining certificates and ratings or auditing that everything is done correctly within the company. External help is valuable for many companies and can bring important insights to the process. Thus, the third case's main purpose is to broaden the insights of the other two cases and add new external viewpoints to the subject and research questions.

3.3 Data collection

The data collection for this study was initiated early in the research process to gain an initial understanding of the subject. In case studies the data collection is usually conducted by combining different methods to study the phenomenon, which also increases the reliability of the data (Voss et al. 2002). Thus, the methods used in this study to gather data included interviews, steering meetings, and secondary data sources. After selecting the cases for this study, the primary data was collected by semi-structured interviews with the companies recognized as suitable for each case. Interviews enable collecting valid primary data that can be mapped (Saunders et al. 2019, pp. 434-435) and build a comprehensive understanding on how ratings and certifications are utilized in the manufacturing industry. Semi-structured interviews are recommended for studies where the order or logic of questions may vary, or they are complex (Saunders et al. 2019, pp.144-145). The semi-structured interviews allow asking follow-up questions to gain deeper understanding. Therefore, this approach is suitable for the overall research design and supports the research in its aim to understand the studied subject.

Along with interviews data collection methods also include other data sources such as documents, observations, and other types of secondary data (Eisenhardt 1989; Yin 2003, p. 83). Exploring multiple data sources can increase the reliability of the data when studying a phenomenon (Voss et al. 2002). Verbal reports interviews are sensitive to misinterpretations and can be affected by inaccurate articulation, defective recalling, and bias (Yin 2003, p. 92). Thus, to address these issues secondary data sources such as company annual and sustainability reports and other reports published by organizations were used to complement the data gathering from interviews. Table 3 gives an overview of the used data sources and the number of interviews conducted.

Table 4. *Overview of data sources.*

| Data type | Data and amount of data |
|-----------------------|---|
| Interviews | Interviews with non-rated or -certified project companies (5) Interviews with rated and certified listed companies (4) Interviews with consultants and auditing (1) Data Asset project steering meetings (2) |
| Secondary data | Sustainability reports and annual reports (7) Other publications (4) Internet sources, including e.g., articles and other sustainability publications (15) |

To establish an initial understanding of the subject and to help define the research questions previous literature was studied. Accordingly with the abductive approach and the recommendations by Eisenhardt (1989) the interview questions were influenced by previous literature on sustainability ratings and certifications. A systematic approach was initially utilized for exploring current literature on sustainability ratings and certificates to gain a comprehensive understanding of the current situation on literature in the area. Since sustainability ratings and certificates had not yet been as researched the snowballing method proved to be more helpful in finding additional key sources. The literature has been selected between 2010 and 2023, since there have been many changes within the field, especially within rating agencies as they have merged, and the pressures of measuring and reporting sustainability have changed (Escrig-Olmeda et al. 2019).

The primary data was collected through ten semi-structured interviews held between March and May 2023. The duration of the interviews varied between 25 minutes to 65 minutes due to differences in self-expressions of the interviewees and the length of the interview structure. The interviews were conducted in Finnish except one, which was conducted in English. With the permission of the interviewees the interviews were recorded and transcribed. In addition, notes were taken during the interview to compliment the analysis and enable clarifying questions. The interviews were held remotely with Microsoft Teams. Small talk and other irrelevant discussions at the beginning and end of the interviews were excluded from the interview duration and the transcripts.

The interviewees representing the companies were selected purposively. It was emphasised to include interviewees with knowledge and experience on certifications and ratings as well as ability to represent their organization. Knowledge gained through

extensive experience, involvement in sustainability practices and understanding of the industry can give valuable insights. Thus, it was important for this study to find interviewees with these experiences to gain a deep understanding in the studied subject. Table 5, 6 and 7 presents a description of the conducted interviews for each case.

Table 5. Interview data for case non-rated or -certified companies.

| Inter-view | Date | Company, Title of the interviewee | Duration |
|------------|-----------|---|----------|
| I1 | 22.3.2023 | Company C, Digital Solutions and Strategy Developer | 38 min |
| I2 | 22.3.2023 | Company D, Business Development Leader | 39 min |
| I3 | 12.4.2023 | Company E, Plant Manager | 30 min |
| I4 | 12.4.2023 | Company B, Product Manager | 25 min |
| I5 | 14.4.2023 | Company A, Sustainability Director | 44 min |

Table 5 above showcases the five company interviews incorporated in the case study involving non-rated or -certified companies. These specific interviewees were identified and considered by the companies as the most appropriate individuals for the interviews.

Below Table 6 showcases the four companies from the identified listed companies that agreed to partake in the interview. The participating interviewees either held positions as the head of their company's sustainability team or were active members within that team.

Table 6. Interview data for case rated and/or certified companies.

| Inter-view | Date | Company, Title of the interviewee | Duration |
|------------|-----------|--|----------|
| I6 | 10.3.2023 | Company G, Sustainability Director | 52 min |
| I7 | 3.4.2023 | Company H, Sustainability Manager | 54 min |
| I8 | 11.4.2023 | Company I, Site Sustainability Manager | 46 min |
| I9 | 24.4.2023 | Company F, Sustainability Specialist | 65 min |

Below Table 7 showcases the external assessment body, who agreed to partake in the interviews. Other potential companies were unable to participate.

Table 7. *Interview data for case external assessment bodies.*

| Inter-view | Date | Company, Title of the interviewee | Duration |
|-------------------|-------------|--|-----------------|
| E1 | 4.5.2023 | Company X, Sustainability Specialist | 51 min |

The interview structure comprehended three main themes to understand the current situation of utilizing ratings and certificates as well as future aspirations. The questions in the interview were built around topics on why and how companies obtain ratings and certificates, how they are utilized and how the processes of obtaining and maintaining looks like. Each case study had a similar structure, but with minor differences and modifications to suit the interviewees experience and role in the company and which case the company was part of in this study. During the interviews with the non-rated companies only two themes were discussed whereas the listed companies and the consulting company had three themes in their interview structure (see Appendix C for details). Prior to the interviews, the participants were provided with the themes of the interview to enable their preparation and the gathering of necessary information within their organizations.

During the interviews, an objective stand was maintained since the manner of asking the questions and the interaction between the interviewer and interviewee can impact the answers and thus the collected data. Especially in semi-structured interviews an interviewer's bias can cause issues in the data quality emphasizing the need for an objective stance during the interviews. (Saunders et al. 2016) Therefore, questions were asked in a similar professional manner in all interviews to maintain an objective stance and mitigate possible influences of the interviewer."

3.4 Data analysis

The collected data was analysed systematically in several stages. The primary data source for this study were the interviews, which were recorded and transcribed with Microsoft Teams. They were prepared for the analysis by going through the transcriptions and correcting sentences that the transcription in Finnish had not understood correctly. Simultaneously the data analysis was initiated by familiarizing with the data.

This study uses thematic analysis for understanding the gathered primary data. Thematic analysis enables to spot the most important themes and topics from the data (Kallinen &

Kinnunen 2023). It is a systematic and flexible approach for analysing qualitative data allowing both inductive and deductive approaches (Saunders et al. 2019, pp. 651-652). By utilizing the abductive approach as part of the thematic analysis, the coding of the data included both theory-driven and data-driven methods. First, an initial list of themes and codes was made using existing theory found in the earlier literature search. Some of these ideas were based on the topics presented in Table 2. In addition, during the coding new codes were added in a data-driven manner. These were codes, that did not fit under the recognized codes derived from existing theory. The coding was done with the help of the MAXQDA software where the interview transcriptions were colour coded by different themes and insights found to tell them apart. The codes and themes were then exported to a comprehensive excel sheet to conclude the findings from the interviews. All codes were then inspected and translated into English to make the analysing process easier and more unified. Simultaneously, the codes were revised and refined if necessary. Examples of the analysed themes are external requirements, internal motivations, challenges and advantages, regulation aspects, and resources. The codes were divided into three groups: beginning of process of obtaining ratings and certificates, the process itself with challenges and required resources, and the benefits and future outlooks. An example of the excel sheet can be found in Appendix D, which shows the first group focusing on the beginning of the process. So, what motivations and values they have and what requirements they might face. Furthermore, each case has been divided in the Excel as can be seen in the table in Appendix D.

As recommended by Eisenhardt (1989) the analysis was first conducted within cases which was then followed by cross-case analysis. The initial analysis in each case provides an opportunity to understand more deeply the unique aspects of the companies within that case, which is important when attempting to generalize findings when continuing to the cross-case analysis (Eisenhardt 1989). This helps to understand if there are any differences between the studied cases. In the cross-case analysis the cases were grouped by multiple parameters such as the various stages of the obtaining process and different advantages attained from utilizing reporting tools. The findings were summarized in summary and issue-specific tables to refine the data and find differences and similarities. Data triangulation was also used to strengthen the validity of the results. The secondary data used in the data triangulation can be found in Appendix A.

3.5 Reliability and validity of methodology

It is essential to consider and critically evaluate the validity and reliability of a study. Reliability refers to replicable and consistent research design. A study is seen as reliable

if the research design can be replicated and the similar findings can be achieved. Validity refers to the accuracy of the analysis, appropriateness of measures and generalisability of the results. The reliability and validity of a study are based on the researcher's own evaluation, data collection and analytical procedures. (Saunders et al. 2019, pp. 213-214)

There are several threats to reliability and validity of a study. Reliability of a study can be threatened by either the participant's or the researcher's bias or error. Validity can be threatened by past or recent events, changes in the participants outside of the study and ambiguity about causal directions. (Saunders et al. 2019, p. 214-215) In this study, triangulation was used to minimize the threats. Triangulation means combining different methodologies to enhance the accuracy of the analysis (Patton 1990). The abductive theory-building approach also helped prevent researcher bias in comparison to utilizing merely an inductive approach. The thorough documenting of the research methodology and tools also significantly contributes to a study's reliability (Yin 2003, p. 38).

When collecting the data several measures were taken to improve the validity and reliability of the data. The themes were sent in advance to the participants so that they could prepare and gather necessary information in advance. The interviews were recorded, and notes were taken to minimize bias and improve accuracy of the analysis. Recording the interview can have a hindering effect as it can inhibit responses or discussion on some topics or areas (Saunders et al. 2019, p. 215, 463). Most of the interviews were conducted in the native language of the participants to minimize any linguistic misunderstandings and keep the discussed terms same for all, since there are some differences in terms within the subject in English and Finnish.

The data analysis was done with thematic analysis, which is subjective by nature and poses thus challenges for reliability and validity of the study. These were mitigated by careful documentation throughout the analysis by using MAXQDA and Excel sheets. Careful documentation of the research processes can increase the reliability of a study (Yin 2003, p. 38). This also enabled an efficient and systematic process during the analysis. Additionally, the careful documentation also enables conducting the study in a comparable manner in another context, which increases the transferability of the study. The cases and the companies in each case are all from Finland. Thus, it raises the question if the results could be different if the companies would be located in other parts of the world. It is also important to consider whether the participants openly shared their thoughts and experiences without hiding information.

4. KEY FINDINGS OF THE RESEARCH

4.1 Current opinions and utilization of sustainability ratings and certificates

Currently, both the utilization of sustainability ratings and certificates and the attitudes towards them are divided. Companies are facing all sorts of questions and questionnaires, both mandatory and voluntary. But as there are so many different ones, it has caused confusion over which are helpful and valuable for a company. Some companies were already seeing ratings and certifications as opportunities for improvement and as welcomed frameworks and not just something to be put on display on the wall. Respectively, a few of the interviewed companies still saw them as mandatory obligations and did not seem to have further interests in pursuing or utilizing them. Also, the emission intensive industries, which usually results in poorer ratings performance, was mentioned as one reason for lower participation and utilization of ratings and certificates (I9).

Ratings and certificates were seen as an international way for companies to measure where they currently are in terms of sustainability and to find their level in comparison with the whole industry. They provide a commensurable way of measuring and help companies understand what they need to do to achieve an accepted level of sustainability. (I4) There are detailed reports that have been able to provide support, for example to companies' overall sustainability reporting (I6, I7). In other words, ratings and certifications provide opportunities to act correctly, ensure that the processes and management are in order, though they do not guarantee it (E1).

In some cases, companies already have operations that fulfill necessary sustainability requirements, but they might not have realized it and have thus not been marketing their business or product as sustainable. As the green transformation has increased in popularity and sustainability becoming a key word in business, companies have added words like sustainability into the marketing. One company mentioned that they are still telling the customers the same things as before but now they are also adding the word 'sustainability' as well as trying to pursue certificates to strengthen their reliability in terms of sustainability (I1). Additionally, ratings and certificates have increasingly become a part of companies' sustainability strategies encouraging companies to obtain them and get proof of their sustainable operations and products (I1, I9). Ratings and certificates and especially their results are also used for benchmarking and communication. But there

are also other opportunities and benefits generated by the sustainability ratings and certificates, which will be discussed later.

Companies are partly acting in uncertain circumstances, as currently no one is certain if ratings and certificates will become mandatory in the future. This raises the question of which ones will become mandatory, so that companies could prepare by already obtaining those certificates and ratings. The purpose of regulation and legislation was seen to be to make disclosing of sustainability more cohesive and interoperable (I5). Several of the companies saw sustainability reporting and its tools such as ratings and certificates as laborious. Few of the companies hoped the regulation could alleviate the reporting, which could help companies to focus their resources to where they are needed (I5, I6). Currently, many of the listed companies mentioned that they need to report the same things several times since current ratings and reports have the same questions. Sometimes the questions are similar or identical but how they are required to be presented can differ, which increases the workload for the companies. (I6, I9)

In the next chapter, these topics will be discussed in more detail by focusing on the internal and external requirements for obtaining and maintaining sustainability reporting tools. These will be followed by required resources and challenges. Lastly, the different benefits and advantages the interviewees pointed out are discussed.

4.2 Requirements and drivers for certification and ratings

The second research question aims to discover the requirements and motivations driving companies to obtain and maintain ratings and certifications. First, in subchapter 4.2.1 the external requirements companies are facing are discussed. External requirements are one of the main reasons companies obtain sustainability ratings and certificates. They steer other decisions and choices the companies make in later stages when obtaining, maintaining and utilizing sustainability disclosures. Therefore, understanding what kind of requirements companies face and where they originate from is an important starting point when looking into the process of why and how companies engage in sustainability disclosure.

The next subchapter 4.2.2 presents the internal motivation and drivers of the companies themselves when they engage in sustainability disclosures. In this subchapter different themes such as sustainable development, financial resources, communication, and reputation have been identified as incentives and drivers. Internal motivations are also an important part of when companies start engaging in sustainability disclosures as well as when considering improvements, how ratings and certificates should be utilized and if

the company should continue using them. That is, also the internal motivations and drivers along with the external requirements steer the company and its choices.

4.2.1 External requirements and drivers

External requirements from different stakeholders are one of the main factors prompting companies to obtain and maintain sustainability ratings and certificates. Where the pressure comes from depends on the business a company does (E1). For example, pressure can come from partners in the value chain, suppliers and customers who value ratings and certificates and know how to interpret them (I6). Especially, if the company has not yet developed required practices, then the requirements from stakeholders are usually stronger, according to one of the interviewees (I9).

The two main external stakeholders requiring certifications and ratings from companies are the investors and customers. According to the interviewed companies, investors see sustainability certificates and ratings as important evaluation methods (I5, I6, I7, I9). Investors usually have a considerable influence if the company is looking for funding or getting loans more easily and for cheaper (E1). Therefore, if a company does not disclose necessary sustainability information, the company risks not getting or losing funding from sustainability conscious investors. Also, institutional investors have big international customers who need certificates or ratings or want their suppliers to be part of their sustainability agenda and processes (I5). Thus, investors are a great driver pushing companies to uphold sustainability ratings and certifications.

As the importance of sustainability has increased, the certification or rating requests from customers have increased as they are trying to comply with sustainability practices and operations themselves. Several of the companies interviewed explained that they wanted to fulfil customers' requests, since it can be a significant factor in doing business and keeping the customers. Furthermore, especially for smaller companies or businesses in a niche area can be affected by not fulfilling customer requests and losing customers can have an immense effect on the business success:

“Customers are requiring, and we act based on those. ... As an SME we need to function as the customers want and cannot come up with our own solutions.” (I2)

Customers can also get discounts when purchasing sustainable equipment and get support from the government for those investments (I1). This is a driving force among the customers to ask for proven sustainable products. Ratings and certifications can provide the needed proof, which then motivates companies to obtain them and communicate their results to customers.

Subsidiaries and smaller units within a global corporation can also face requirements internally. Global corporations can require more sustainable practices and measures to validate actions within the corporation. They can also require increased reporting that can be communicated to others and provide proof of sustainable operations driving companies to obtain sustainability ratings and certificates. (I3, I4, I8) Thus, these companies might not have a say in what sustainability disclosures are obtained and maintained:

“We are part of a global corporation, which decides, communicates and define the things in this area, so on product level we do not make all the decisions ourselves, because some come from the corporate level.” (I4)

“Environmental issues and such come from our owner. We have already some indicators such as energy and water usage, and our owner is aiming to profile itself in a specific way, so then these need to be in order.” (I3)

Additionally, some rating agencies do the rating evaluation themselves and include companies when they become of a certain size. Rating or investor platforms such as DJSI and MSCI rate companies when they fulfill their certain requirements to be included in the rating or index. Therefore, companies might not be able to choose to participate in some ratings or certificates, but they can be urged or motivated to perform well and fulfill the requirements in order to get acceptable results and be included in the rating.

Regulation and legislation

Along with the pressures from investors, customers, and other stakeholders the regulations and legislations play a key role. A few of the interviewees had recognized the influence the regulation and legislation can have on their disclosure practices. Especially the annual reports required from companies listed in the stock market are influenced by regulation (I5). Currently, the new reporting directives such as CRDS and ESRS were also mentioned during the interviews posing requirements to the companies and their reporting. Due to their novelty companies did not yet fully know how, for example CRDS would impact their sustainability disclosure. But the companies recognized the new directive worked as an incentive to involve themselves in ratings and certificates or other sustainability reporting practices.

Companies differed in what they saw the role and impact of regulation and legislation to be. According to one of the listed companies, regulations do not yet steer a company's business practices within sustainability or tell companies what aspects should be improved, especially for those that are not active in the EU markets (I9). On the other hand, one of the companies that did not yet have certificates saw that legislation steer actions

more vigorously. Furthermore, regulation was seen as more important for customers than certificates and ratings. (I3)

The regulation issues were seen as the need for more reporting. The companies felt that new regulation and legislation required them to report the same things twice since already existing ratings had related questions included in their questionnaires. Additionally, as there are so many different ratings and certificates both voluntary and mandatory, some of the interviewees mentioned that smaller companies have felt confusion about the need to concentrate on just a specific one or on several different ones. Nevertheless, the regulation and legislation were seen to be an important driver for obtaining and maintaining sustainability certificates and ratings. If the regulation can alleviate the reporting companies need to do, it would work as an even better incentive for companies to participate in the reporting and measuring of sustainability (I9).

4.2.2 Companies' internal motivation and drivers for participating in certification

Though the pressure for obtaining sustainability certificates and ratings is mostly external it has also turned into internal motivation according to some of the interviewees. The desire for companies to serve clients by offering more sustainable solutions and improving themselves are triggering the internal motivation. Also being more competitive and improving current business operations were increasing the interest in sustainability ratings and certificates. Therefore, internal motivation and drive are also important to recognize and understand since it can help companies when deciding if they want to participate in ratings and certificates.

Sustainable development

The pressure of becoming more sustainable and providing evidence of these actions have impacted the motivation to pursue ratings and certificates. For one company a new and updated sustainability agenda that complies with the current trends and requirements in terms of ESG was one of the driving factors (I9). Additionally, the internal aspiration and desire to operate more sustainably were in some cases an important motivating factor as well. Therefore, a company's strategy and internal goals can be an important driver for participating in ratings and certificates.

Several of the interviewees described the ratings and certifications as tools that can help improve the company's sustainability operations. Driving the companies to participate in ratings were the possibilities to gain cost efficiencies and minimize waste with the help of these tools as they would point out areas that needed to be improved. Also, the need for tracking progress and performance motivated companies to pursue ratings and

certifications. According to a few of the interviewees, ratings and certificates provide support for them when achieving internal goals by showing trends and gaps as well as tracking performance. They are seen as valuable and versatile and can thus be used for different purposes:

“They are in a way a valuable tool, that helps to understand where to focus and what should be improved.” (I9)

Business and competitive advantage

As presented in the last chapter (4.2.1) the customers, suppliers and other stakeholders are increasingly requiring ratings and certificates from manufacturing companies. For trades and other business deals these can be a prerequisite before agreeing to commit to something or going through with a trade. This shows that the motivation to participate in ratings and certificates can be both internally and externally driven. To sell their products a company might be forced to obtain a certificate or rating and thus it is externally driven. On the other hand, if the company aims to enter a new market or increase its sales in the current one a rating or certificate might be a way for the company to do that. Especially, if the ratings or certificates are popular on the market. Thus, a company might also be aiming to satisfy customer needs which can help with generating competitive advantage (I1) and therefore acts as an internal driver for participation in sustainability reporting and measuring such as ratings.

Gaining competitive advantage on the market and becoming industry leader in sustainability were mentioned as motivating factors when obtaining and maintaining certificates and ratings. Companies can enhance their competitive advantage by satisfying customers' needs and offering them what others do not. In this case, by obtaining sustainability certificates and ratings and providing evidence of their sustainable actions. These can also enable access to supplier pools that would not be reachable without them. In addition, improved operations minimizing inefficiencies and access to new supplier pools can help companies increase their sales and revenue. Later, the ratings can also ease some paperwork during purchases or supplier agreements (I8). Therefore, the financial aspects which are discussed later, the eased paperwork processes as well as the opportunities for improving competitive advantage are also important drivers for companies and needs to be considered when deciding to participate in the certification process.

Furthermore, the industry a company is operating in can motivate companies to pursue ratings and certificates. For example, one of the interviewees said that having a major part of its business within the forest industry acted as a motivator since the industry is a forerunner in sustainability and sustainability reporting (I6). Therefore, the industry a

company is active within can motivate companies to improve their own sustainability to keep up or even perform better than its competitors.

There were also other drivers that can be seen as internally motivating factors for obtaining a rating or certificate. One of the companies with no ratings or certifications yet strived to create operation models showing stakeholders that they are operating sustainably and incorporating sustainability into daily activities (13). Part of this could be to obtain a certificate or rating to provide additional proof to stakeholders.

Lastly, ensuring that ratings and certificates stay valid was mentioned as one of the internal drivers. As the rating or certificate becomes part of the daily operations and the reporting has become regular and anticipated by stakeholders, companies do not want to lose their rating or certificate. Losing or deciding not to participate in ratings and certificates can look bad to customers and investors, impacting financing and sales (19). Therefore, keeping up with the ratings and certificates and ensuring they stay valid can be a motivator for some companies.

Financial aspects

The motivation and drive to obtain and maintain sustainability certificates and ratings also have some connections to financial aspects according to some of the interviewed companies. For example, they can provide opportunities for increased sales and revenue as mentioned earlier.

A rating or certificate can be valuable if a company is applying for funding. One of the interviewed companies mentioned that one fifth of their investors are focusing especially on ESG and thus the measuring of sustainability, including important KPIs and providing proof of sustainable operations is key (16). Additionally, the grade and points companies get from ratings can relate to funding schemes (17). Thus, a better grade or points can give the company the possibility to fund more easily or get loans with lower interest rates. The opportunity for lower interest rates can be a major factor companies can consider when deciding if they are going to participate in ratings and certificates.

Communication and reputation

For many of the participating companies the communication aspects were also important driving factors to obtain ratings and certificates. These can provide a tool for companies who desire to increase their transparency and credibility as a sustainable company. Some of the companies wanted to obtain a verified stamp of approval and gain an external view on its ESG performance, which could also work as a good indicator and reference for example for customers and investors in business. Furthermore, in terms of

reputation, the motivation behind obtaining ratings and certificates was to become part of a respected rating, which would give a desired picture of the company.

Along with external communication, companies can utilize the ratings and certificates for internal communication as well. These tools have been seen as great for communicating how the company is performing within sustainability matters to employees and the management. One important driver was also the possibility to communicate both internally and externally by using the same or similar language, decreasing the work to produce several reports in different forms for different stakeholders.

It was also seen that the rating or certification could help cooperation with others in the value chain as they can help the company to be seen as a reliable partner and supplier. The possible reputational benefits are close to the business benefits mentioned earlier. Therefore, there are usually several both internal and external motivators and drivers when companies are deciding if they should participate in ratings and certificates.

The internal motivations discussed above are summarized in table 8. The results have been categorized into four different themes: sustainable development, business and competitive advantage, financial aspects, communication, and reputation.

Table 8. *Identified motivations and values for obtaining and maintaining sustainability certificates and ratings.*

| Theme | Case | Motivation and value |
|---|----------------------------|--|
| Sustainable Development | No rating or certification | Desire to operate sustainably Can give e.g., cost efficiencies and minimize waste Getting a certification is part of the sustainability strategy |
| | Rated and/or certified | New sustainability agenda, motivation to expand sustainability activities Good tools for tracking progress and performance Support for achieving internal goals |
| | External assessment body | Aspiration for implementing more sustainable operations |
| Business and Competitive Advantage | No rating or certification | Get ahead of competitors and be more competitive on the market |
| | | Prerequisites for business |
| | | Satisfy customer needs and provide unique offerings Develop operation models that demonstrate the commitments to sustainable practices and integrate sustainability into daily activities |

| | | |
|-------------------------------------|----------------------------|--|
| | Rated and/or certified | To become industry leader in sustainability Doing business within an industry that is a forerunner in utilizing certificates and ratings Ensure certificates and ratings stay valid |
| | External assessment body | Get access to supplier pools |
| Financial aspects | No rating or certification | Increase sales and revenue |
| | Rated and/or certified | One fifth of company investors are ESG investors, thus making KPIs important Grade and points relate to funding schemes, better grade or points can give lower interest rates for loaned assets |
| Communication and Reputation | No rating or certification | To tell stakeholders how the company operates in terms of sustainability Internal marketing for employees Increase transparency Get a verified stamp of approval Cooperate with others in the value chain |
| | Rated and/or certified | External view on a company's ESG performance Increase visibility on sustainable operations Be seen as a reliable partner and supplier Communicate with stakeholders by using a common language Good indicator and reference for customers Communication within the company, e.g., to employees and management team To become part of a respected rating, which portrays a desired picture of the company |

4.2.3 Factors affecting the selection process of ratings and certificates

There are currently an immense number of different certificates and ratings that companies can choose from to get their sustainability practices evaluated and rated. Along with the external and internal motivations and drivers, there are other factors such as reputation of the rating or certificate impacting the decision on obtaining and especially choosing which ones to pursue. The main factors impacting the choice or decision which rating or certificate to choose are:

- external requirements enforcing to participate in specific questionnaires,
- who the company is doing the certification for,
- the meaning and significance of the rating or certificate,
- alignment with company sustainability targets and strategy,
- culture within the company,
- fit with the industry,
- the reliability and credibility of the rating or certificate.

As discussed in chapter 4.2.1 the external requirements can direct companies to obtain ratings and certifications. Some companies face mandatory evaluations when they are committing to a common goal, requirements, or a pact established by higher quarters such as the United Nations (UN) Global Compact. When companies commit to the UN Global Compact, they are obligated to answer the questionnaires, which eliminates the choice of opting out from the answering. Additionally, customers, partners and suppliers can require specific certifications and ratings, thus removing the companies' possibility to choose which ones they would like to pursue. Additionally, if many customers ask for the same rating, the more important it becomes (I7). One company highlighted that as they are a smaller company, they need to follow the requirements of the stakeholders such as customers:

“We need to adjust to those certificates or operation models that our customers require.” (I2)

When the companies have the possibility to evaluate and consider which certificates or ratings would suit their needs best, the disclosures are usually evaluated on a case-by-case basis. There are several aspects companies are looking into when considering ratings and certificates. Firstly, it is identified where the need or requirement for a certification comes from. According to a few of the interviewees it is important to understand who you are doing the certification for (I1, I3, I6, I7). This can help in understanding which reporting methods would work best in terms of communicating results. Furthermore, companies consider the employment needs, what data is asked for in the questionnaires, how many resources are needed, maintenance needs and administration work (I4). These considerations help companies to understand if they have the resources and knowledge to obtain and maintain the potential rating or certificate.

Secondly, the meaning, significance, and benefits of answering the questionnaire and going through the process are scrutinized. Several of the companies mentioned the importance of certificates and ratings being aligned with the commitments of the company

(I1, I6, I7) and that it brings value (I4). The company needs to consider what the benefits for them are when they are filling in the questionnaires and how they can utilize the results and gathered data to provide support for their operations and actions. This criterion is essential when considering which ratings or certificates to pursue so that they can truly support a company's goals and commitments. Furthermore, it was emphasized that the rating or certificate should complement and support the company's strategy. Companies recognized that due to scarce resources and laborious certification processes they would not be able to obtain or participate in all ratings and certifications. The strategy of the company can help to consider if all or only one or two of the areas of E, S and G are important. Also, goals such as becoming part of a bigger rating in the future can be a decisive factor in choosing ratings. Thus, keeping the strategy of the company in mind and reflecting it on the external needs when choosing the most suitable certificates and ratings is vital.

A company's culture also impacts the choice of a certificate. Companies want to pursue ratings and certificates that are aligned with their own goals and that are suitable for their business and industry. Especially, as the processes of obtaining and maintaining ratings and certificates are usually laborious, costly and require a lot of resources, it is important that the values and goals of a company align with the rating or certificate. Of course, the management group also influences the decision of choosing certificates and ratings. They usually have the final say in the choice of ratings and certificates if they are not mandatory and required by legislation.

Furthermore, when choosing a certificate or rating the fit with the industry should be considered. The certificate or rating should fit the industry or field of business, so that it has a direct way of impacting the industry within the context of the certificate or rating. Several of the companies use benchmarking to see what others such as competitors have in the industry to see trends and what the most popular ones are at the moment, before deciding. Even though there are several certifications, ratings, and standards, one of the companies mentioned that they do not have the option to choose since there is only one that is suitable for their field of business where products are sent around the world (I9). This is one example of how the industry can impact the selection of a rating or a certificate.

Other criteria were reliability, credibility, and how well-known a rating or certificate is. Companies trust auditors more if they are well-known and accepted globally. This makes the process easier and more reliable. Thus, the credibility and the reliability of the rating or certificate are important aspects to investigate, especially when the questionnaires are laborious and time-consuming:

“The certificate or rating needs to be reliable, credible, and well-known. ... As these are laborious and take time when reporting or answering questionnaires, we do not want them to be fully unknown and not tell our stakeholders anything.” (I9)

Companies should also keep in mind that quitting to answer a rating or certificate does usually not look good. Therefore, it is important to carefully choose what to participate in and consider the rating or certificate for the long-term and that it eventually answers the needs of the company as well. (I9)

4.3 Implementation of sustainability ratings and certificates

The third research question aims to understand how companies can develop and implement sustainability with the help of ratings and certifications. In this chapter the implementation of ratings and certifications will be presented. In the first subchapter 4.3.1 the resources companies need to include ratings and certificates as part of their operations and to answer the questionnaires are presented. Also, the requirements coming from the ratings and certificates that companies need to meet will be discussed. In subchapter 4.3.2 the challenges companies face when obtaining, maintaining, and utilizing sustainability ratings and certifications are discussed to understand what barriers and challenges companies might face during the process of implementing ratings and certificates.

4.3.1 Resources and requirements from ratings and certificates

Obtaining sustainability certificates and ratings involves answering many questions and data points. The questionnaires can be huge with over 300 questions, which take time and resources to answer (I5, I7). Resources include, for example data, the right people responsible for the reporting and retrieving the data from the correct operations and areas and financial resources. Also, ratings and certificates have requirements companies need to meet to successfully include them in their operations. For example, what data is required and how it should be reported.

Data is one of the most essential resources for a company. The ratings and certificates require a lot of data from companies for the questionnaires and later for analysis to accurately rate a company's sustainability performance. For example, companies are required to provide emission data, process descriptions, information on operation models, actions they have conducted in different areas of business as well as other essential data from different business and operation areas (I8, I9). Different certifications may emphasize various aspects, such as social, environmental, or climate-related issues. Some criticize these ratings for not measuring overall sustainability and focusing on risk management instead (I6). Companies with global operations can face challenges with getting the

required data in the correct form, since not all units might not have the same operation or documentation models. Additionally, occupational safety regulations might not be similar either, which means that centralized reporting and answering questions requires asking information from many people and units requiring more time and resources. (I5) Furthermore, if a company is initially obtaining a rating or the questionnaires includes new areas, the data gathering can pose challenges as they may require new data that the companies did not previously collect (I2, I9). Collecting reliable data can be challenging, especially if it requires coordination with different business areas (I9).

When a company answers the questionnaires, they must ensure the data is reliable, calculated correctly and retrieved in a useful form (I1, I9). Ratings and certifications usually have strict requirements in how the data should be reported, described in the rating or certificate methodology. (I6, I9) One company highlighted the importance of having fact-based indicators and specific documentation systems to fulfill the requirements of rating and certification processes (I8). It is important to identify the requirements early in the process of obtaining or implementing a rating or certificate, since the questionnaires can focus on different sustainability dimensions (I6). Additionally, the methodology and the reporting requirements introduced in the methodology documents play a key role when companies are answering the questionnaires. If the documentation or the answers are not in the correct form a company can lose valuable points, which can also affect the overall rating they get (I9). The methodology and evaluation methods can even change annually requiring companies to actively follow the changes in requirements.

Along with ensuring reliable data is available, companies mentioned the importance of having a person or team in charge of the reporting and answering necessary questionnaires. For example, process descriptions require people who know how to do it correctly since they can be incredibly detailed and extensive. One of the companies in the Data Asset project mentioned that getting the required process descriptions and the processes themselves to a specific required certificate level can take several years. Therefore, they have named a person responsible for the project who starts the documentation and ensures the smoothness of the processes. (I3) Another company from the Finnish listed companies said they are dividing the responsibilities to tackle the broad questionnaires and it is their next step of the reporting process after choosing which rating or certificate to go with or before the start of a new reporting year. They have several team members responsible for different areas and for the retrieving of the required data. Usually, the companies need to alert the right people exceedingly early on before the reporting process, since the timing of the answering usually tends to be during the summer holidays. (I9)

“It feels iterative, it is continuous pondering over what we need to take into account next year and also develop existing answers.” (I9)

External help and support can be seen as a resource as well. As the questionnaires and process of obtaining and maintaining a rating or certificate are laborious and complex companies use external help to alleviate the process. A few of the companies interviewed mentioned that they are utilizing or have utilized external help before. For example, external help can be useful when building the processes around the assessment methods and reporting (I3, E1). An external view on the processes can help the company to understand what they should focus on to get better results, conduct better reporting practices, and do initial evaluation of the sustainability performance of a company. As the rating manuals and methodologies are extensive and need to be read thoroughly, an external person with prior knowledge and experience can be useful. Especially for the most important ones, one company said they used an external partner to tackle the workload and gain better results. (I9) It is also possible to outsource the reporting entirely or only some parts, so that the external partner answers, for example the questionnaires if the company does not have the time to do it themselves (E1).

4.3.2 Challenges with sustainability ratings and certificates

Obtaining, maintaining, and utilizing ratings and certificates do not come without challenges. The main identified challenges and barriers included insufficient resources, difficulties in implementation, and issues with the ratings and certificates themselves. In addition, unawareness of the future and unexpected changes that might come were seen as challenges by the companies interviewed. The different challenges will be discussed in more depth in this subchapter.

Companies face both similar and different barriers of entry and challenges depending on which stage they are in obtaining or utilizing certificates and ratings. For example, companies with no ratings and certificates were seen to face more challenges in the first stages of the process such as implementing the needed measures and responsible persons. The challenges regarding resources on the other hand seemed to be an issue for all companies in all stages of participating in ratings and certificates. Table 9 below depicts the different challenges identified during the interviews. The challenges are connected to both when initially obtaining and implementing a rating or certificate as well as when maintaining and utilizing them.

Table 9. *Identified challenges and barriers for obtaining, maintaining, and utilizing sustainability certificates and ratings.*

| Aspects | Case | Challenges and barriers |
|-----------------------|----------------------------|---|
| Resources | No rating or certification | Time-consuming Requires huge amount of work Requires planning and consideration of value compared to used resources Not easy to get reliable data |
| | Rated and/or certified | Time-consuming Laborious Requires a lot of resources Information and data are not always available |
| | External assessment body | Time-consuming Requires big financial resources and investments |
| Implementation | No rating or certification | How to incorporate efficiently in operations Complex business operations Lack of concreteness in procedures and measures Not anyone's specific task Interpret correctly and communicate internally into concrete actions Finding suitable partners |
| | Rated and/or certified | Not having the required data or information Only executing actions due to the certificate or rating Lack of understanding at various levels and units |
| | External assessment body | No sufficient execution |

| | | |
|---|----------------------------|--|
| The certificate or rating itself | Rated and/or certified | <p>New overlapping ratings appearing all the time</p> <p>Timing of filling the questionnaires</p> <p>The results come in late and describe the previous years instead of the current situation</p> <p>Pre-filled questionnaires by the rating agency are not always accurate</p> <p>Misjudgment and misinterpretation</p> <p>Companies can buy themselves a better level</p> <p>Takes time away from practical things</p> <p>Transparency and credibility issues</p> |
| | External assessment body | <p>Inferior ratings and certificates are decreasing the credibility</p> |
| Future | No rating or certification | <p>The rapid changes rise concerns of longevity of certificates and ratings</p> <p>Unclear how much ratings and certificates are used and required in the future</p> <p>The requirements increase all the time and difficult to predict future requirements</p> |
| | Rated and/or certified | <p>New topics arising and poor understanding and how they should be considered as part of business and operations</p> |

Challenges with resources

Ratings and certificates usually require many resources. As discussed, the process is long and requires companies to act annually, monthly, and even daily. The challenges with resources were also identified as the most difficult ones and pose a great barrier for new companies as they are considering or trying to obtain a certificate or rating. The most common challenges identified by the interviewed companies regarding resources were:

- lack of time,
- time-consuming and laborious workload,
- requires big financial resources, and
- unavailable data and transparency issues with data.

The questionnaires of ratings and certificates are usually extremely broad and detail-oriented, which requires a lot of time when answering them. A few of the companies

recognized that the time they used for filling questionnaires would take time away from the more practical implementations and deeper analysis of the results and their possible outcomes (I5, I6). The lack of time as employees are already busy causes challenges in how carefully the questionnaires are answered and thus also affects their reliability. Companies would need more employees to sufficiently go through all the data, analysis, and results. But due to limited resources, companies cannot always afford to hire additional personnel that would only be focusing on the reporting and answering questionnaires. Additionally, these employees might not have access to or understand the entire data to report it correctly, as the covered area is extremely broad, and the data comes from the experts that create and gather it during their daily work. (I6)

The time-consuming and laborious processes required to implement and maintain ratings and certificates is a big challenge many companies are facing (I5, I6, I9, E1). According to the consulting firm interviewed, the most common reason companies do not obtain ratings and certificates is due to their laborious and time-consuming processes (E1). For example, for one company the time-consuming workload compared to the value gained has been the reason for not becoming part of some ratings such as Dow Jones Sustainability Index. As the company compared the workload with the value gained from the rating, they did not see the rating to bring more value to internal development such as current trends and areas for improvement that could not be retrieved from other similar ratings. (I9) Therefore, some of the companies said they carefully plan, scrutinize, and consider the value ratings and certifications might bring and compare it with the challenges and work required before joining a rating or certificate. However, the estimation of how much work would be needed and should be invested and what kind of benefits the company would gain were seen as challenging. (I5, I6, I7)

Money is also a limited resource for companies. As the ratings and certifications are time-consuming it requires big financial resources to finance the time used on answering questionnaires and analyzing the results. Additionally, the annual costs of certificates and ratings are high, which can be a hindrance to some companies. (E1) Especially for smaller companies, high annual costs can be a great barrier of entry to participate in ratings and certificates. Therefore, if they are required to obtain a certificate, for example due to pressure from the market, they might not be able to do so due to prohibitive costs.

Data is an essential part of the ratings and certificates since they are based on the data companies produce and provide. Therefore, an important challenge to acknowledge is the lack of available data and information on the market and in the supply chains. Especially in markets with several smaller competitors and players getting useful data can be more challenging because the smaller players might not be filling out sustainability

questionnaires and might therefore not have necessary information available (I9). The issues with data sharing and the problems arising when partner companies do not share their data was highlighted by one of the interviewed companies as one of the core challenges. There is still a prevailing culture of keeping information within the company and not openly sharing it in fear of losing their competitive advantage. (I2) This makes it more difficult to get the required data, which can affect how well a company can report their sustainability when filling out the questionnaires. If the data is not available, companies might need to guess or leave out the answers causing issues in the analysis or even poorer results. The lack of data and information is especially challenging when companies are initially starting with ratings and certificates (I2, I9) since they might not know where to start or what others are using in the market (I1). This can make the choice of the most suitable rating or certificate more challenging.

There is several sustainability related KPIs, metrics and calculations to choose from to get the necessary data from a company's operations. One of the non-rated companies saw the calculations as challenging due to their complicated nature (I1). For companies with more resources, it might not be as challenging to spare time for understanding some of the calculation processes but for smaller companies on the other hand this can be an immense challenge. Complicated calculations, huge data sets and questionnaires requiring a lot of resources can thus be a big obstacle for many and can stand in the way for companies to obtain ratings and certificates. Furthermore, the ratings and certificates have extremely specific requirements regarding the form of the data and how it should be reported when answering the questionnaires. One company highlighted that they are facing challenges to get the data in the correct and required form so that they can be utilized in evaluations (I9). The huge amount of different KPIs and measures do not make it easier to manage and effectively collect and report the data in the correct form.

The reliability and transparency of data were also mentioned in several interviews as key issues. If the rating results and certificates are based on unreliable data, it can cause several issues in trustworthiness of the process and results. (I1, I6, I7, I9) Therefore, the question stands how they get the data in a reliable way to provide reliable results and enhance transparency. This will be discussed more later.

Limited resources can also affect how well ratings and certifications can be utilized and how well companies can benefit from their advantages. Currently the certificates and ratings are directed to a small audience as the resources are limited. More time and other resources could help companies to consider more broadly how they can be used to realize their full potential, implement them better as part of current operations and as a result perform even better in terms of sustainable development. (I6) As discussed, the

companies were also facing challenges with having the time to also analyze and understand the results while filling out the questionnaires. Thus, the companies might not be able to realize the full potential the reporting tools can provide for their own sustainable and business development.

Challenges with implementing and maintaining ratings and certificates

During the discussions with the participating companies the implementation of ratings and certifications as part of a company's processes seems to be a common challenge. How to include these as part of the daily operations within a company and not just keep them as a label or a note on the wall of the result and participation were rising concerns. Ratings and certificates are usually more general in nature, so companies face challenges when they are trying to interpret them and turn them into concrete and practical actions. In some cases, companies need to understand what meaning a rating has for a particular project, but as they are general and very comprehensive it can be challenging to depict their influence on smaller parts of the business, projects, or units (I4).

The complexity of business operations and the scattered units were also posing its challenges when companies considered incorporating ratings and certification processes into operations. Also, big offerings and product portfolios can cause challenges. For example, a versatile product portfolio can cause challenges when choosing the most suitable certificate, since one certificate might not cover all aspects needed or all products in the portfolio. In some cases, companies might have to obtain several certificates to cover all the products, which would also require more resources.

Data is a crucial resource at the core of ratings and certificates. Its significance arises especially when implementing reporting tools as part of a company's operations. One challenge mentioned by the interviewees was the lack of data or not having the data needed to answer the questionnaires. For example, one company said they did not yet have all the answers for some of the questions, especially if it was a new area that had been added to the questionnaire (I9). Another reason for the missing data was that the company did not yet have any practices in that area and therefore they could not get any points from those themes. Trying to answer questions with vague answers and lacking the true data does usually not help companies get points since the evaluations are quite harsh, according to one of the interviewees (I9).

There are lot of differences between companies and how they implement ratings and certifications as part of their operations. Some of the companies only execute the minimum required tasks required by the rating or certificate. Thus, there might be improvement possibilities that are neglected as they might not be required or seen as mandatory.

Other companies on the other hand have invested in the pursuit of utterly understanding and keeping up with the current trends to stay on top of the competition.

There are also differences in how companies manage their sustainability reporting. Some of the interviewees mentioned they have specific teams or units dedicated to reporting their sustainability (I7, I9). Others on the other hand did not have a specific person and instead the reporting was just part of someone's job description (I1, I2, I4, I5). If the company does not have a specific distribution of the tasks and responsibilities when fulfilling the questionnaires, they might face more challenges when trying to manage the task of answering the questionnaires and collecting the needed data and information.

Deciding to participate in a rating or certificate impacts a big part of the company. Usually, the decision for obtaining or participating in a rating or certificate comes from the management level while the implementation happens on the more operational levels. The consulting firm has recognized that misunderstandings are common between management and the more operational levels within a company. For example, the management level might have several reasons for implementing sustainability, but the employees on the operational level might not understand thus causing issues during implementation. (E1)

Misunderstandings can also happen, especially if there is a disconnection in communication between the management level and the employees on the operational levels. For example, if the management team wishes to implement sustainability without understanding what the actual work requires from the company, it can cause issues. (E1) Due to missing resources and unavailable people to fill the time-consuming questionnaires can cause issues if the management team does not know or understand how much resources are needed to successfully implement or maintain a rating or certificate.

A common challenge the interviewed consulting firm has recognized was that companies sometimes do not finish or answer the questionnaires properly while believing that they did (E1). This can be caused by the many requirements and to maintain a sufficient detailed level can be challenging (E1), especially if the company does not have enough resources such as time to go through the questions and answers thoroughly. Additionally, the laborious work during the year to keep the data and answers up to date along with other reporting requirements, which also require a lot of work, can affect how much resources a company can put on the ratings and certification questionnaires. The resources and time they can spare might not be enough to get satisfactory results.

To tackle the laborious questionnaires and reporting schemes or to improve their answers companies sometimes ask for external help such as consulting firms or other

assessment bodies. But to get external help with the ratings and certifications or find a partner to cooperate with obtaining and maintaining a certificate can be challenging (I1). They need to be reliable, credible, and have some experience in ratings and certifications to be seen as useful (I1, I9). However, one of the companies pointed out that it is unfair that the questionnaires are so massive, that companies need external help to tackle them and thus use valuable resources that could be used in more practical actions (I6, I9).

Challenges with the ratings and certificates themselves

The certificates and ratings themselves also pose challenges. There are many certificates and ratings on the market and new ones are continuously emerging. Some of the ratings and certificates have been heavily criticized for not being transparent and not actually requiring changes in terms of sustainability and thus providing a false picture of how sustainable a company truly is. Some of them are inferior because they are easy to fill out without implementing actual changes to operations or actions that reflect sustainability or responsibility in the organization (E1). Thus, it is possible for companies to get good ratings and results even though the implementations might not be sustainable. Therefore, companies should be careful in the selection process of certificates or ratings and not trust them blindly (E1).

Another problem is new ratings or reporting methods that companies must be compliant with, but which include areas that are already covered by other similar questionnaires. Some of the ratings are mandatory such as the UN's Global Compact, which is not evaluated and is more of a checklist for companies. These mandatory reporting methods and the several others covering similar areas and questions of sustainability have resulted in feelings of pointlessness and frustration to answer and use ratings and certifications. (I9) Additionally, these have been seen as almost useless if they are not able to provide new insights for the company or the stakeholders.

The timing of the ratings and certificates was also seen as problematic and challenging. Many of the ratings and certificates are used in global corporations that work in multiple time zones, which has created issues in availability of key personnel working in sustainability. For example, CDP closes during the summer when many are on holiday, so companies might not necessarily get the needed information or the right people to answer the questions if needed. Therefore, one of the companies said they prepare the required answers and information exceedingly early and even all year around to have the data available. Furthermore, the results companies get from ratings describe the previous year. Therefore, changes made will not be seen straight away. (I9) Thus, the slow

process and the timing of answering and results were seen as issues with the ratings and certificates.

The next identified challenge was the pre-filled answers and reports made by external rating companies and the misinterpretations made by using e.g., the wrong data or industry average measures. Most commonly, misinterpretations happen due to the criteria of the rating or certificate not being suitable for the applied industry or area (17). Markets worldwide and the differences in culture, customs and legislation significantly impact sustainability and its different dimensions. Therefore, social aspects scrutinized in sustainability ratings and certificates might not be applicable in European companies in the same manner as in North American companies. These differences can cause challenges when comparing companies' results, especially if the questions have not been altered to be suitable for different areas. Thus, the results can be flawed if the measures are not aligned with the industry or business area.

Some of the raters do the analysis of a company's sustainability themselves. In this case the rating company prefills the answers for the company and the company itself may go through the answers if needed. One company mentioned that the rating companies sometimes use peculiar data sources that were not provided by the company for the pre-completed versions. Thus, the data sources rating agencies use are not always the company's own data but instead more general that can be seen as average for that size of company, industry, or other criteria. (19) In some cases, the companies do not know where the data comes from. Therefore, the data used and the answers in the prefilled questionnaire might not be aligned with the company's own GRI Index. For one company a rating company had filled in expenses for EU lobbying, which they are not part of due to internal policies and had reported it openly. Thus, the company had to use a lot of time and resources themselves to correct the prefilled questionnaires and the data used. (19) Companies with fewer resources available might not have the possibility to correct the prefilled data thus causing issues and even possibly lower results in ratings. Since the questionnaires and subjects the ratings are scrutinizing are so broad misinterpretations can happen (17). Especially external examiners might not have access to critical data which can cause challenges in interpretations and analysis. One of the companies interviewed mentioned that they have tried to focus on their annual sustainability report and make it as comprehensive as possible, because there are so many reporting platforms and diverse ways of reporting. The company also criticized and wondered why stakeholders interested in the data, such as the rating agencies, could not use the data banks the company provides. As a solution, the company wanted to invest their time in the annual sustainability reports to provide a concise package including all the necessary

sustainability data which could provide external rating agencies with all the necessary information. (I6)

Currently, the better a company knows a rating or certificate and the reporting requirements, the better results they get. The rating and certification companies provide services for those wanting to understand and improve their results and reporting. Therefore, having resources to purchase such services from a rating company can give advantages to getting a better rating result through the purchased feedback. This causes a conflict according to the interviewed companies, since those with more resources or possibilities to utilize external help have better possibilities to familiarize themselves with the reporting technique will automatically get a better result. (I6) Thus, the methodology of ratings faced criticism because it is possible to buy a certain level:

“If you pay 30 000 to the rating company, they will tell you how to get a better rating. They will give you a list that tells you how to get Platinum in EcoVadis or A in CDP. It feels a bit odd that you can buy a certain level.” (I6)

A few of the companies saw the detailed and demanding reporting technique problematic, since poorly answered questions due to lack of time could have a huge effect on the results (I6, I7). Due to the demanding and time-consuming work of understanding the reporting requirements companies with more resources can get a better grade compared to those who do not have the time or the means to pay for external help. Therefore, it is possible that companies with better sustainability practices get a poorer grade if they do not have the time or resources to familiarize themselves with the requirements.

Ratings and certificates also faced criticism due to lack of transparency and coherence decreasing their reliability (I6, I7). For example, according to one company it is not always clear what is meant by certain questions and how something can be improved since the evaluation is sometimes vague and more general (I7). This makes the development aspect more difficult and understanding why a company has been given certain points. Additionally, it is more difficult to use the results for benchmarking and internal comparison of improvement (I6).

Another challenge with the ratings and certifications is that their evaluation changes often. For example, the points can be scaled differently every year, which has caused uncertainty if companies should commit to ratings and certifications. One company saw a complication with ratings and certificates when they could not impact the questions. This would then impact the uncertainty of commitment as the questionnaires can change suddenly due to reasons independent from the company (I7). Furthermore, the company explained their feedback was not considered when giving the points and pointing out

issues in the results. The company hoped for more transparency and standardization with the criteria to make it more reliable and increase the quality of the answers and rating itself.

Challenges the future brings

The most challenging question to one of the non-rated companies was about the future developments of ratings and certificates (I3). Specifically, the question of how much of these will be required in the future as new directives and regulations come into effect raises concern among companies. There is a suggestion that new alternatives might emerge that may not be taxonomy-compliant but indicate similar efforts, which companies can use to provide proof of their sustainability. The ratings could be one option. (E1). However, with the increasing presence of legislation, the overall significance of external sustainability ratings and certificates may decrease as structured ways to evaluate companies are established (E1). One of the non-rated companies mentioned that while there is uncertainty about the future of ratings and certificates, they may continue to have value, especially if they support regulatory reporting requirements (I5). Additionally, contradicting to the thoughts of the external assessment body, the emergence of eco-labels is expected to become more common, with companies using them for marketing purposes (I5). As can be seen, there are several views on what could happen with ratings and certifications in the future, but there is no certain knowledge. This poses challenges in answering the question of the ratings and certifications longevity, and companies do not know if it is valuable or profitable to invest in reporting tools now.

Furthermore, the requirements and questions change every year which makes it difficult to predict future requirements. New topics are also arising, and the companies face challenges when they do not know how the new topics affect their business and operations and thus how they should report it. The rated companies also expressed their wish for collective questionnaires and evaluation methods and less frequently introduced new reporting methods to keep reporting to a minimum (I6). This would leave more resources to actual implementation of sustainable actions, according to one of the companies (I6).

In summary, the responses indicate a mix of perspectives on the future of sustainability ratings and certificates. Some anticipate increased use and importance, while others foresee potential challenges related to artificial intelligence and an overabundance of reporting. The hope for more collective and standardized approaches is evident, but it is also recognized that qualitative reporting and storytelling elements might continue to be part of the process. Overall, the future of sustainability ratings and certificates is viewed

with a degree of uncertainty, with expectations of changes influenced by evolving regulations and practices.

4.4 Advantages and benefits from sustainability certification

One of the purposes of this study was to understand the advantages and benefits of sustainability ratings and certificates that can help companies with their sustainable development, decision-making and competitive advantage. The understanding and knowledge of how sustainability ratings and certificates can be used is still scarce. The results discussed below will show some of the identified advantages and utilization opportunities companies have recognized.

The main themes in which the advantages and benefits have been divided are decision-making, competitive advantage and business, sustainable development, and communication and reputation. These areas were also the most common ones to be mentioned during the interviews and thus a logical segmentation of the results to be discussed in.

However, even if several of the interviewed companies recognized several benefits and advantages that ratings and certificates can generate, there were still those who expressed they had no interest in pursuing ratings and certificates at the moment. One of the reasons for this could be their lack of understanding of how ratings and certificates could help them in their business and growth or how they can be utilized in a valuable way. For others, it is a background activity that affects and supports continuous development.

4.4.1 Decision-making based on sustainability ratings and certificates

Prioritization and decision-making at the management level is required to implement more sustainable operations and to include sustainability as part of companies' strategies. In this thesis it was studied if sustainability ratings and certifications steer or support the decision-making when companies are trying to become more sustainable.

The interviews revealed that companies do not currently understand how sustainability certificates and ratings can support the decision-making process. During the interviews, the companies said it is difficult to detect if the decisions made in the company are based on the ratings, standards and certificates or something else (I2, I6, I8). According to one of the companies, the complexness of their decision-making makes it difficult to understand the connections (I1). For another company, the reason was that they have had the standards for so long and are already doing more than those standards and new

certificates. They are already integrated into the company's operations and do not therefore merely steer anymore. (I8)

According to a few companies, the ratings and certificates can and have provided support by guiding the actions the companies take (I2, I4, I6, I7). The results companies get after they have been rated can help realize areas that need to be improved or redone. One company mentioned that the ratings can support them when they are deciding whether to make a new risk analysis (I9). Companies can therefore lean onto them and justify their decisions and choices as aligned with the certificate or rating. According to one company, after the decision of applying for a rating or certificate it stands as a strong mandate for the rest of the business, operations, and actions. Thus, guiding the actions a company takes. (I4) Additionally, ratings and certificates can direct the strategic planning, if there are any changes happening such as current trends or areas that are added into the questionnaires. These changes are then seen in companies and what they are emphasizing in their decision-making as well as sustainable development. For example, new upcoming trends seen in ratings and certificates and direct a company's services and product development as well as decisions made within those areas to fulfill the requirements and maintain the rating or certificate (I2).

Ratings and certificates do not only help the companies utilizing and maintaining them. They can also help a company's customers to make the decision to purchase the products. The rating or certificate can validate a company's sustainability and therefore attract the customer or help them make the decision if they value sustainability and want to reassure sustainable practices when purchasing a product or service. In addition, in the sales process the ratings and certifications can help a company's sales team to market the products and prepare them to discuss the company's sustainability actions with customers by using concrete proof in form of calculations and results making them more convincing:

"So, from the perspective of internal decision-making it could be easier for sales and perhaps more convincing, more efficient." (I1)

As discussed earlier, the external requirements can impact the ways a company is conducting their business. In terms of decision-making certificates and ratings can enforce companies to do specific things and fulfil the requirements they are facing:

"If you have committed to something or to investors that you obtain this or have it, then it directs your decision-making, because you have to ensure your operations and business or other fulfills the requirements." (E1)

Some of the non-rated or -certified companies did see some opportunities to utilize certifications and ratings as part of decision-making. When choosing which partners to collaborate with, the company could also ask potential partners to fulfil the requirements or obtain necessary certificates and ratings. This would help them since they need to verify these themselves and make sure subcontracting chains fulfil them as well. (I3)

So, for some companies the sustainability ratings and certificates can provide greater support than for others. Even though some of the companies recognized that the ratings and certifications can support their business, operations, and development in several ways, most of the interviewed companies did not yet rely their decision-making entirely on the ratings. Instead, they saw that they made decisions to be aligned with their vision and understand things better. Furthermore, some did not yet see or understand the possibilities or opportunities of how ratings and certificates could help their decision-making or what the impact would be on decision-making. Reasons for this could be the complex nature of business operations or the broad questionnaires.

4.4.2 Competitive advantage and business development with sustainability ratings and certificates

In this chapter we investigate how sustainability ratings and certificates can generate competitive advantage and help support companies' businesses. To increase and improve the implementation of sustainability, it would be important for companies to gain competitive advantage. This could increase their interest in pursuing and developing more sustainable solutions. As will be discussed in more detail in the next chapter, as a tool the ratings and certifications can be valuable from a business perspective as well, since measuring and business value are still the driving forces in many industries.

Some of the interviewed companies recognized the value of sustainability certifications and ratings can provide in terms of competitive advantage on the market. By satisfying customers' needs and increasing their loyalty with the help of ratings and certificates the company could increase sales and revenue. Through these actions and by communicating their sustainability responsibility a company can improve its position and increase its market share:

"It is gaining competitive advantage, being more competitive in comparison with our competitors and satisfying customer needs, so increasing customer loyalty, increasing revenue and sales. In general, gaining a more powerful position on the market if we get some of registered verification and stamp of environmental impact." (I1)

Companies can have ratings and certificates as part of their strategic goals (I7). If they are utilized in a successful way, they can provide help to achieve them. For example, a

company that has as a strategic goal to increase its revenues or gain a greater market share might benefit from using ratings and certificates by asking for a higher price or communicating their sustainability performance to increase their brand value and thus attract more customers. One of the interviewees said that certificates and ratings could help them become more customer-oriented and understand what customers value by measuring their sustainability performance and being an approved operator (I1). Simultaneously, they can include the customers to be a part of the entire product life cycle (I1). This is especially valuable in a service-based business and can increase customer satisfaction, as they can truly be part of the processes and possibly impact on the product and service they get from the company. In addition, the customer can get funding support from the government for purchasing sustainable machinery (I1). This could be one of the reasons why customers are asking for sustainability certifications. Furthermore, companies that value customers' and investors' opinions on what themes might be important can affect the analysis companies conduct, which further can impact the strategic emphasis of the company (I7).

Certifications and ratings can also be a necessity for companies when negotiating trades with customers and suppliers. It can hinder a trade if the customer is requiring the company to fulfill the requirements or have a rating or certificate to prove they fulfill certain requirements regarding sustainability and the company does not have one (I1, I3, I5, I8). Ratings and certificates are thus great tools as they can help the company go through their sustainability practices and see how they perform (I3). However, if a company does not have a rating or certificate, they are not entirely blocked from doing business, but it can get more difficult by not having the required standards or proof of sustainability (I8). For example, by having certain ISO standards or ratings such as CDP can minimize the needed paperwork during trade agreements (I6, I8).

The ratings and certifications also direct the company's documentation to be done in a certain way. According to one of the companies, certain documentation procedures and systematic development help them generate advantages in their operations and business. On a strategic level, the operation descriptions and clearly depicted responsibilities give the company a basis for their continuous development and show things they need to do and improve. (I8)

Ratings and certificates can also be seen as insurance a company is aiming for. They can provide a company backup in the long term and help with communicating what the real goal is and what measures and operation models a company is using. Therefore, a company can lean on measures, indicators, or a process model in a more reliable way if

they are certified, which can be valuable in the market for customers when they are choosing where to purchase their machinery from. (I4)

By participating in sustainability certification, a company might be more prepared for what might come (I1) and thus be on the front line to realize the possible advantages they might provide. For example, if the ratings and certificates become mandatory reporting tools, a company that has already obtained them might have a head start in utilizing the sustainability certifications.

Furthermore, having a good rating or certificate can help a company to acquire good ratings from others or help them push customers or partners in the right direction. A company can use its influence to generate competitive advantage in several ways. For example, by being an example and encouraging suppliers to follow can help a company's sustainability agenda and improve the sustainability of their value and supply chains (I6).

4.4.3 Sustainable development with sustainability ratings and certificates

As sustainability practices and measures scrutinizing how companies are truly performing have evolved, companies have started to realize the benefit ratings and certifications can have for them when developing their businesses further. Ratings and certification can be seen as universal and global ways to measure how a company is performing within sustainability aspects. The points and grades given by raters and certifiers pose an opportunity to compare the companies' own practices and performance with competitors, for example within the same industry.

During the interviews while discussing sustainable development and how ratings and certifications can enable it, several mentioned they have recognized these to be good tools for measuring performance (I1, I3, I4, I5, I7, I9). Both certified and non-certified companies realized the value of using ratings and certifications as measuring tools helping to improve their business and practices. The questionnaires that ratings and certifications utilize are detailed and require deep reflection and looking into the practices performed by the company. Through self-reflection during the processes the company can create a more profound understanding of sustainability and what level they are currently on, which can help them improve their results and sustainability (I6, E1). In addition, deeper understanding of sustainability and how to implement and improve them can help the company to achieve their goals or an acceptable level (I1, I4, I6).

The process of obtaining and maintaining ratings and certificates and the questionnaires used can also work as an audit. It can help companies clarify their processes and understand them better from a sustainability perspective as well as see if they are on track.

(I5, I8) Disclosures also work as tools for finding weaknesses, deficiencies and things that can be improved (I4, I5, I8, I9). The interviewees also emphasized that the ratings and certification can support sustainable development by showing current trends and important themes that are currently valued in the market (I6, I7, I9). These trends and themes also show indicators that can be used for measuring performance within these areas. By going through the process and realizing what needs to be improved, the certificates and ratings show what the company should be focusing on to improve their business and even competitive advantage.

Some of the companies explicitly declared their desire to include the ratings and certifications as part of their everyday operations and activities within the organization all the way from planning and sales to manufacturing. They also serve as communication internally and externally on how sustainable development is implemented in the company by showing what actions are taken and what requirements are fulfilled. (I5, I6, I7) Thus, it is a valuable tool that also helps to understand where to focus resources for development. It can also help the company to see if they have the required data or if the data can be gathered in a reliable way (I9).

In conclusion, the ratings and certificates along with their processes can help companies to understand more how sustainability can be implemented and improved within the company. They can be seen as tools for continuous development, helping companies to focus on sustainable development. Additionally, these questionnaires and understanding the requirements provide also a great first step and support for companies that have not yet obtained any certificates. After understanding what is required in sustainable development, it can be easier for companies to implement suitable and efficient practices.

4.4.4 Communication and reputation with sustainability ratings and certificates

This chapter investigates how sustainability ratings and certificates can be used for communication and reputation and what the benefits are. As discussed previously, companies see ratings and certificates to communicate their sustainability performance to stakeholders and improve their reputation on the market. In other words, it can be seen as a marketing tool (I4, I7, I9) for attracting customers and enhance reputation.

The interviewees saw the ratings and certificates as an effective communication tool to market themselves as sustainable. These were seen as tools for communicating how the company is operating accordingly with the requirements for interested external parties. When a company performs well the results are proudly advertised showing that the company has gained the certificate or done well in a rating while also operating accordingly

(I4). As a communicative tool the advantages seen were the increase in credibility from investors, customers, and their suppliers in the value chain (I6, I9), validate the company's outlook as a sustainable company (I5) and showing that the company is conducting their business in a sustainable way helping greater causes such as slowing down climate change (I9):

"I would like to believe, that if our customers are at all interested in these, then these support us as we are seen as a good partner and one that truly focus on these such as slowing down climate change." (I9)

Communicating the results becomes valuable when the customers are interested in them or require them, according to one of the companies interviewed. Communicating truthfully about sustainable practices can help companies to be seen as reliable and good partners who are working towards a common goal of slowing down climate change. (I9) It can be a good reference for customers as well when they are making their purchasing decisions (I1, I7). Therefore, the increase of reputation by communicating participation in ratings and certificates can indirectly increase revenue and business performance (I1, I9).

The ratings and certifications were also used in internal communication and marketing. The aim of communicating the results internally is to increase the awareness and understanding of these among the employees. (I6, I7, I9) Additionally, it can be part of the employer branding and used as traction to keep employees, if they value sustainability in the company they work in (I7). Internally they can show the management how the company is doing and what needs to be improved (I7). Furthermore, the need for communicating has also urged companies to document their practices that they might not do otherwise such as process descriptions implementing more systematic processes overall (I8).

4.4.5 Benchmarking externally and comparing internally

Benchmarking can provide companies with valuable insights into the market. For example, through benchmarking a company can investigate what reporting tools competitors are using and how they are performing in terms of sustainability ratings and certificates. Simultaneously, the company can compare its own performance to that of its competitors. The tools can also be used for internal scrutinization. For example, the company can compare its own results to previous years and see how the company has evolved and improved its sustainability performance over a longer time.

The external assessment body and rated and certified companies both identified opportunities and challenges when it comes to comparing sustainability ratings and certificates, but they differ in their roles and perspectives. For example, both parties saw the tools as valuable for both internal and external comparison (E1, I6, I7, I9). The non-rated or -certified companies did not yet have experience of utilizing rating or certificates for benchmarking and comparison and thus did not provide insights in the topic.

In order to utilize reporting tools for benchmarking some challenges need to be assessed according to the interviewees. Both external assessment bodies and rated and certified companies acknowledge that comparing sustainability ratings and certificates is not straightforward, particularly for non-experts in the field. The methodology plays a key role since it instructs how companies should and need to report their sustainability to get points (I6). The interviewees recognized that different criteria and evaluation methods can yield different results and therefore it is important to check the methodology behind the ratings and certificates (E1, I6). For example, different ratings and certificates can have related questions but they can require the answer in different forms (I6). This makes it more challenging and laborious for companies to answer, since they cannot always use the same answer in different questionnaires even though the question itself is similar.

Therefore, several of the interviewees asked for a more standardized methodology. Especially, the rated and certified companies highlighted the importance of having shared standards for sustainability ratings and certificates to ensure consistent and comparable criteria. A common framework or standard was seen to make comparisons easier to conduct, and thus also more beneficial for companies and stakeholders. (E1, I6, I9) However, there was a shared recognition of the challenge of harmonizing various sustainability frameworks and standards to enhance comparability. Companies operating in different business areas, particularly those without direct competitors in the same industry, may find it challenging to benchmark or compare themselves due to varying laws, regulations, and industry-specific factors. Some assessment bodies adapt their surveys based on the size and industry of the company, which can affect the scope of the assessment. This also raises the question of how comparable the results are, if there are huge differences between the scope of the assessment and how questions are valued. (I6, I7, I8, I9) One company also mentioned that they have had difficulties conducting benchmarking since they do not have direct competitors within the same industry (I9). This makes it more difficult to utilize the reporting tools for external comparison. Additionally, it can be challenging to understand what is needed and wanted in the beginning due to lack of examples and possibilities for conducting benchmarking (I6).

In summary, the results suggest that comparing sustainability ratings and certificates can be challenging due to variations in methodology, industry-specific factors, and the approach of different assessment bodies. Standardization and the development of shared criteria are seen as important steps to improve comparability. Companies use these ratings and certificates for benchmarking and communication purposes, even though they acknowledge the differences in the focus areas of assessment among different entities.

5. DISCUSSION OF KEY FINDINGS

5.1 The process and archetypes of utilizing sustainability ratings and certificates

The fundamental research question of the study aimed to create understanding in how companies in the manufacturing industry currently utilize sustainability certificates and ratings. When an understanding of the current situation has been established, it is easier to consider future changes and improvements that might be necessary to further and improve the utilization of different reporting tools.

To answer the first research question, a process for acquiring a sustainability rating has been identified from the results. The blueprint of the process aims to help companies understand what the process will include when they initially obtain a rating or certificate. Additionally, the process can also provide support for companies who already participate in sustainability certification and help them get an overview of what they are currently doing. Furthermore, four archetypes of companies participating in certificates and ratings have been identified. This categorization can help companies identify their own level of utilizing a rating or certificate.

The process for obtaining and maintaining a sustainability rating or certificate

A simplified process for obtaining and maintaining a rating or certificate can be structured from the results. The process has been presented in Figure 2, showing the several steps companies should keep in mind when considering to initially participate in sustainability certification. The process can also provide valuable insights to companies that already have ratings and certificates since it provides a clearer picture of the important steps that needs to be taken in order to benefit from the advantages the reporting tools can provide. As discussed in both literature and in the results of this study, there are transparency issues and poor understanding of how ratings and certificates can be used for decision-making, sustainable business development and generating competitive advantage. Thus, the process presented in Figure 2 provides a general overview of the steps companies can take and how they are currently proceeding when obtaining or maintaining a sustainability rating or certificate. The rhombus shapes represent decision-making points, and the rectangular boxes represent actions.

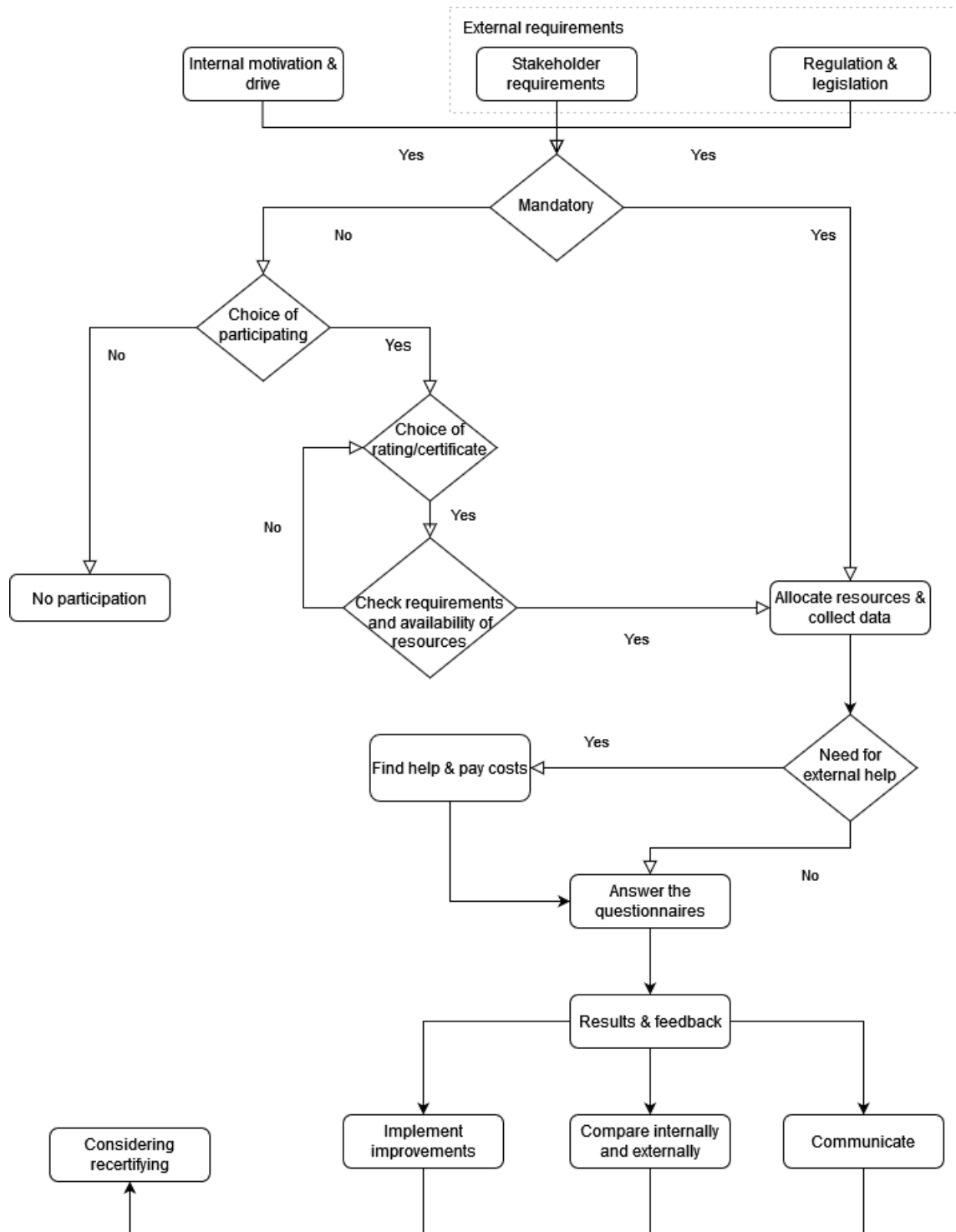


Figure 2. The process steps of implementing and maintaining sustainability certificates and ratings.

The process of initially obtaining a rating or certificate usually starts when a company faces internal and external pressures. During the discussion with the interviewees, it was recognized that it is more common for companies to start considering or participating in ratings and certificates when there is an external need such as an external party requiring them. Literature has also identified external pressure the main influencer driving

companies to participate in sustainability reporting and certification (Waddock 2008; Escrig-Olmedo et al. 2019; Murad et al. 2021; Diez-Busto et al. 2022). Requirements from customers and investors, competitors obtaining ratings and certificates, and regulation are few examples of external pressure. Though several internal motivating factors and drivers were identified in both literature and the discussions, it is less common for companies to obtain a rating or certificate when there is only internal drive and motivation. However, according to Alam et al. (2022) the pressure to recertify usually comes from within the company and not from the stakeholders.

One of the reasons for the external pressure being the main driver for starting to participate in ratings and certificates is because there is a need for it among the customers. If the customers do not value or understand the value of a rating or certificate it can be difficult for a company to market or convince customers of their value. Especially in a market where ratings and certificates are not commonly used and there is a lack of knowledge. For a customer, a rating or certificate might not provide information they consider during decision-making if they are more interested in other factors such as efficiency and costs. Therefore, if the company is one of the first to market their proof of the company's sustainability performance, it might not be as effective and valuable in the eyes of the customers if they do not understand it. Thus, it is less common for companies to start participating in ratings and certificates through their internal motivation. On the other hand, internal motivation can be an important driver and can prove to be useful in new markets, especially if their value can be presented to stakeholders such as customers in a convincing way that later proves to be useful for the company in the form of competitive advantage. Hence, we can conclude that most companies pursue ratings and certificates because of the external pressure and requirements they face. However, internal motivation is also important so that companies act on external pressure.

After recognizing the pressure and motivation for obtaining a certificate or rating the companies consider if the rating or certificate is mandatory or not. Hence, if the rating comes from another company in the supply chain, for example from a supplier or the customer as a requirement, then the company does not have a choice but to answer the questionnaire. Then, the company moves directly to allocating resources and collecting necessary data. In some cases, if a company chooses to participate and let their internal motivation and drive guide them, then some ratings and certificates can become mandatory. For example, a company can choose to participate in a specific pact such as the UN Global Compact, which requires companies to participate in some reporting schemes and tools. Thus, it is partially voluntary as the company chooses to be part of the pact.

However, if the pressure of obtaining a rating or certificate is more general without focusing on a specific rating or certificate, then the next steps would be to first consider if there are reporting tools that generate more value compared to the costs and resources required from the company. The findings of a study on carbon emission disclosures suggest that companies with larger resources are more inclined to engage in sustainable practices and reporting (Ika et al. 2022). Thus, if the advantages are not greater, the company might decide to opt out of ratings or certificates. If the answer is yes and the rating or certificate could be valuable for the company, the next step would be to consider different alternatives more closely and choose the most potential ones.

When considering which ratings or certificates to pursue, a company should go through the needed resources as well as the requirements the reporting tool might have. One of the most important aspects to consider in this step is whether the benefits and advantages the rating or certificate might be able to provide for the company exceeds the financial requirements, the heavy workload, and the need for investing huge resources to manage the process overall. A considerable challenge many companies face while obtaining or maintaining a certification or rating are the different costs involved in the process (Diez-Busto et al. 2022). Both interviewees and several studies mentioned costs as a hindering factor for pursuing ratings and certificates (Carini et al. 2017; Diez-Busto et al. 2022; Flagstad et al. 2022). Therefore, it is important to compare the benefits a company can gain and whether they exceed the costs of certification. If the ratings or certificates being scrutinized do not seem to match the needs of the company, new ratings and certificates should be investigated. One possibility is also to decide not to participate in utilizing reporting tools due to the prohibitive costs. Furthermore, the company needs to consider whether they have enough labor resources and time to pursue certification, since they are time-consuming (Carlos & Lewis 2018). Several of the interviewees also identified access to time and employees as challenging when participating or considering participating in certification.

After different aspects regarding resources and financial means to manage the obtaining and maintaining process of a rating or certificate have been considered, the company chooses one or more of the reporting tools they want to proceed with. Next, the company should allocate resources and divide responsibilities. The company can allocate only one or a bigger team to go through the data and report them accordingly with the certification methodology. It is crucial to understand where the data comes from and how it can be collected and presented in the correct form needed for the questionnaires. Since the methodologies of the ratings are usually very detailed and it is emphasized that the data is reported accordingly, companies can lose points if they report something in an

incorrect way. Additionally, when considering the resources and allocating employees for the tasks, a team or a responsible person taking charge of the process should be appointed. This clarifies the process and responsibilities and ensures the reporting gets done in time. Overall, this was seen as a challenge by the interviewees as they might not always have a clear understanding of who oversees the certification process.

When continuing the process of answering the questionnaires companies can consider if they need external help to tackle the laborious answering process, gathering of data, analyzing the results, and implementing necessary improvement actions. If not, the company will do the answering themselves. If the company finds a need for help and has the financial means to cover the costs, they should start searching for suitable and reliable parties. When considering the use of external help companies should evaluate if the external help is trustworthy and reliable and suitable since it can have an impact on how stakeholders perceive results, reputation, reduction of costs and customer complaints, productivity, and competitive advantage (Ikram et al. 2021; Patara & Dhalla 2022). Also interviewed companies mentioned it can be difficult to find reliable partners with the right knowledge and experience and therefore careful consideration is crucial. External help can be utilized earlier in the process as well. According to Ikram et al. (2021) companies who are seeking external help usually need support with decision-making, problem-solving and communication with stakeholders. For example, when considering if the company should participate in ratings and certificates or when comparing different alternatives, an external viewpoint can be helpful.

After the company has considered their needs for external help and decided whether they to use external help or not, the company proceeds to answer the questionnaires. After the answers have been sent in, they are evaluated by the rating or certification agency. The agency will grant a certificate or give a rating on the sustainability performance after evaluating the answers and data provided by the company. The results can then be utilized by the company. The most common utilization of the results and feedback is to communicate the results to stakeholders, compare the results internally and externally with competitors, and to implement improvements. Not all companies will utilize the rating or certificate in these manners or extent.

The entire process from recognizing the need for a rating or certificate starting with the external pressure and internal motivation to exploiting the benefits, implementing improvements, and communicating the results is lengthy and laborious as recognized in both literature (Carlos & Lewis 2018; Alam et al. 2022; Flagstad et al. 2022) and the interviews. Ratings especially require an iterative process since companies need to measure and report their sustainability performance annually to receive a rating every

year. After going through the entire process presented in Figure 2, the company can rotate back to specific parts of it such as evaluating new potential ratings and certificates if they want to participate in more or make changes into the already existing ones they have. New regulations and legislation or other external pressure can also require a company to go through the process once again if e.g., there are major changes in how the measuring or reporting is done.

Based on the findings, there were few differences in the process for smaller and bigger companies or rated and non-rated companies. Regardless of company size, the overall process and its requirements and advantages are similar for both rated and non-rated companies. Thus, the company size or the current rating status does not seem to matter considering how the process should be executed in order to get a rating or certificate. But when it comes to costs, smaller companies might have faced challenges with scarcer resources. Throughout the process, there is a constant need for knowledge and resources like data and employees to report the data correctly. Smaller companies might not be able to afford external help or do not have resources to spare to properly go through the methodological requirements and answer the questionnaires in the required manner. Furthermore, the annual costs of participating in ratings and certificates are high at the moment. Therefore, it can be more challenging for companies with less resources to successfully implement the process of obtaining and maintaining a rating or certificate or even participate. However, Flagstad et al. (2022) points out that a smaller size can be advantageous due to flexibility and ability to adapt to changes, implement sustainable actions with immediate effect and make decisions faster. Additionally, according to Alam et al. 2022 smaller companies pursue certification to stand out.

Although the process of obtaining ratings and certificates is similar for all companies, the study found that there are vastly differing opinions and impressions of using sustainability ratings and certificates. Some companies see benefits of utilizing and have been actively pursuing answering questionnaires to gain satisfactory results and improve their own operations and sustainability. Literature found the increase in transparency, credibility, recognition by stakeholders (Ferreira Quilice et al. 2018; Boiral et al. 2019; Ikram et al. 2021; Murad et al. 2021; Flagstad et al. 2022), cost reductions (Carini et al. 2017; Ikram et al. 2021, and opportunities for competitive advantage as motivating factors (Escrig-Olmedo et al. 2019; Ikram et al. 2021; Silva et al. 2022). However, not all interviewed companies saw value in utilizing reporting tools and were not currently pursuing to participate in any certification processes. As the reporting and participating in ratings or obtaining certifications is mostly voluntary (Cho et al. 2020), companies are not obligated to answer questionnaires if customers or suppliers in their value chain do not require it.

Therefore, some of the companies did not see it as necessary to participate in sustainability certification and instead sought other methods to prove their sustainability.

Archetypes of engaging in sustainability ratings and certificates

The results suggest that there are four archetypes representing a company's stage of utilizing ratings and certificates. The archetypes are non-utilizers, beginners, intermediate and advanced. These have been gathered in Table 10 below, which shows different actions that companies on specific levels usually engage in. Previous literature has not yet made earlier classifications of levels companies are on when utilizing ratings and certificates. The classification can provide companies with a helpful tool to understand what level they currently might be on. By identifying the level, companies can consider what aspects they should improve and include in their operations to achieve the next level if they are interested. The classification can also give companies assurance that they are on the right track and aligned with their own objectives in terms of utilizing sustainability reporting tools.

Table 10. *Different actions companies on specific levels usually engage in.*

| Actions | Non-utilizer | Beginner | Intermediate | Advanced |
|--|---------------------|-----------------|---------------------|-----------------|
| Communicates rating results actively | | ✓ | ✓ | ✓ |
| Participates in mandatory ratings and certificates | | ✓ | ✓ | ✓ |
| Participates in voluntary ratings & certificates | | | ✓ | ✓ |
| Benchmarking | | | ✓ | ✓ |
| Designated team handling the processes | | | ✓ | ✓ |
| Supports other reporting such as the annual report | | | | ✓ |
| Requires fulfilling of questionnaires from others | | | | ✓ |
| Utilizes ratings and certificates for decision-making | | | | ✓ |

The non-utilizers are companies that do not yet answer any sustainability ratings or certificates. There are several reasons for companies not to participate in ratings or obtain a certificate identified in this study. For example, they might not have the required resources to manage the workload, provide the necessary data or have the financial means to cover the annual costs. Another reason is that companies might not see the value or have a need to participate in the rating or certificate.

As sustainability ratings and certificates are commonly used for communicative purposes it is usually one of the first things companies will utilize them for when first obtaining a rating or certificate. According to recent literature (Alam et al. 2022; Boiral et al. 2019; Diez-Busto et al. 2022; Ikram et al. 2021) and the interviewed companies one of the most common drivers for obtaining ratings and certificates was reputation. Therefore, companies starting to immerse themselves in sustainability certification usually improve their reputation by communicating their results to stakeholders. The communication can later be developed and be used more specifically to target different stakeholder groups. For example, how results are communicated and what the purpose of the communication is depends on whether the target is the investors, the customers, or readers of the annual report. Thus, as the communicative purpose is one of the main motivators and usually the first to be implemented after or even during the initial obtaining process, this can be seen to be achieved by beginners, intermediate and advanced.

The next aspect in Table 10 are the mandatory ratings and certificates. According to the results, most companies start their participation in ratings and certificates due to external pressure. Though sustainability ratings are voluntary the requirements for a certificate can come from a supplier, customer, or other external party and can thus be seen as mandatory if they are a prerequisite for business or trade. For example, reporting tools required by legislation are also mandatory requirements companies need to align with (Waddock 2008; Escrig-Olmedo et al. 2019). Therefore, the first rating or certificate is usually a mandatory requirement a company needs to fulfill in order to sell its products or services. Thus, all levels from beginners and up can be seen to fulfill this action.

Participation in reporting tools can also be voluntary. Usually, the pressure from market or internal motivation drives companies to voluntary reporting. The voluntary ratings and certificates are seen as additional to the mandatory ones. A company might be motivated to add new ratings and certificates that are not required by them to improve and broaden their sustainability reporting or increase their reputation by showing that they voluntarily participate in more than the minimum required. Therefore, companies participating voluntarily in reporting tools are seen to be on an intermediate or advanced level. However, companies categorized to be on a beginner level are not entirely excluded from the

category of participating in voluntary ratings or certificates. Especially, if the utilization of ratings and certificates is still in its initial stages as it is in the manufacturing industry, some companies might not face external pressure to obtain a rating or certificate. Instead, these companies might have reasons stemming from internal motivations that are driving them to participate in sustainability reporting and obtaining ratings and certificates.

After obtaining sustainability ratings and certificates, companies can begin to use ratings and certificates for other purposes than communication. According to the results, benchmarking was a common way to utilize the results and feedback from the ratings. Companies can for example compare their results with others such as competitors on the market to see how and what others are doing. By comparing results with others, the company can find improvement ideas or niches to improve their performance and even competitive advantage. Companies that have answered the rating in previous years can compare their results from those years with the new ones and see if there has been any improvement and what the trends have been. As internal comparison requires participation for several years, companies conducting comparison are seen to be on an intermediate or advanced level. However, it is not precluded for beginners to be conducting comparison with competitors or others on the market. Benchmarking can even be conducted before initially obtaining a rating or certificate, since it can provide helpful insights for the company which reporting tools are most used and trustworthy. But due to lack of transparency as pointed out by several scholars (Boiral et al. 2019; Escrig-Olmedo et al. 2019; Patara & Dhalla 2022), it can be difficult to find necessary data for benchmarking.

Companies designating a specific team for managing the reporting process and answering the questionnaires of ratings and certificates are seen to be on an intermediate or advanced level. These companies usually divide the responsibilities and tasks to tackle the immense workload. They have one responsible team or person taking responsibility for the entire process. Having a designated team to gather the data and answer the questionnaires can help streamline the process. Then the risk of answering the questionnaires being just someone's additional task with less priority is minimized, since it can easily be dismissed due to other more urgent tasks. Therefore, a designated team or person to do the reporting can help ensure that the necessary measuring and reporting are executed.

Companies that can be categorized to the advanced level are utilizing the sustainability ratings and certificates on a more profound level. These companies have already established connections between the ratings and their annual reporting. Thus, the ratings and certificates serve as support for the annual report by broadening the themes or areas

discussed in the annual sustainability report and going into more detail. The rating or certificate and their questionnaires serve as a gathered database for sustainability data and information the company can use for other purposes than just reporting and communicating the results internally and externally. In other words, the process becomes more streamlined while being part of the company's operations.

Furthermore, companies who use ratings and certifications as support for decision-making can be seen to be on a more advanced level. These companies have found both direct and indirect ways to generate support from ratings and certificates effectively for their own decision-making. According to Flagstad et al. (2022) achieving true sustainability requires decision-making and greening measures to be part of a company's daily operations.

Lastly, companies on an advanced level require ratings and questionnaires from others such as their suppliers or partners in the supply chain. The company might use the rating as a requirement before agreeing to conduct business with a partner. Another reason can be to gather the data from suppliers and partners so that the company itself can report their sustainability and answer questionnaires more accurately, including parts of the supply chain and not just their own operations. Overall, very few of the interviewed companies used ratings or certificates further in the supply chain themselves. In other words, most of the interviewed companies did not yet require ratings or certificates from their suppliers or partners. This will most likely change in the future as the CSRD, and the EU taxonomy requirements will be more enforced affecting supply chains comprehensively.

As the understanding of utilizing sustainability certifications as part of a company's operations, business development and decision-making is still in its initial stages, the levels will most likely change in the future as the scene develops. New aspects to each level might come up or specific actions might be considered to belong to another level. Additionally, future research might find innovative ideas and actions that should be included in the classification to make it more reliable and comprehensive.

As the results show, companies currently face a lot of challenges when obtaining and participating in ratings and certificates. The multitude of challenges is the main reason sustainability ratings and certificates have not been that popular as the challenges outweigh the benefits for many. But as different sustainability reporting tools have risen in popularity in recent years and the external requirements for sustainability certification have increased, companies must find ways to minimize the challenges they face to be able to take advantage of the possible benefits.

Challenges with certification processes

The substantial number of resources that is required along with the expensive costs of participating are a few of the main barriers hindering companies to participate in ratings and certifications. Small companies especially face greater challenges as the annual participation fee could take up an extensive part of their budget. Crals & Vereeck (2005) discusses sustainable entrepreneurship and certification and its affordability for SMEs. Even though the article is older, the same issues discussed in the article were also identified in the results. The article identified that SMEs are ignoring sustainability certificates due to costly procedures when obtaining them, which was also mentioned by the SMEs interviewed for this study. Crals and Vereeck (2005) also argued that the lack of time is the greater issue than the financial aspects. For example, companies can afford one ISO certificate but obtaining more or the complete set can prove to be infeasibly expensive. To minimize the issues of costs and time constraints the article suggests SMEs should choose more simple, pragmatic, and effective certification formats that suit their needs and goals (Crals & Vereeck 2005). This would allow the companies to truly consider what they value and find a rating or certificate that aligns with their values. On the other hand, as ratings and certificates are mostly driven through external pressure and requirements many of the ratings or certificates required are a specific one the customer or supplier wishes the company to fulfill. Thus, this eliminates the choice an SME might have to find a suitable and pragmatic rating or certificate. Thus, as Crals and Vereeck (2005) suggest, SMEs should consider the return or the benefits they can get and the opportunity costs of a sustainability strategy they can implement instead of only examining financial costs related to obtaining a certificate or rating. This aligns with the earlier discussion of comparing the value gained against the challenges and costs a company might face when considering if participating in a rating or certificate could be a good decision.

Furthermore, a lack of financial resources could potentially cause a rift in the market between companies that can afford the costly processes and investments required to obtain or maintain a certificate or rating. Especially, if the rating or certificate is mandatory for doing business, companies that might not be able to afford it could lose their customers or find it more difficult to conduct their business. However, if ratings and certificates are mostly voluntary it can take time before a greater rift is realized in business.

Overall, many challenges could be identified in literature and during the interviews. Especially in literature sustainability ratings and certificates have faced a lot of critique in recent years. Therefore, if a company decides to participate in ratings or certificates, it is important for the company to choose the most appropriate one that suits their needs.

To conclude, the results and literature answer the first question by showing how companies are approaching sustainability ratings and certificates and how they are being used. There are several similarities between the literature and the findings of this study, though the results broaden the literature by proposing four archetypes of companies participating in sustainability certification and a structured process for obtaining a rating or certificate. Additionally, the findings shed light on the reasons for whether companies participate in sustainability certification or not. The main reasons for not participating in ratings and certificates have been identified as lack of understanding of the value and advantages they might bring, the lack of resources or prohibitive costs. Especially for smaller companies with less resources available, the workload and time required can be detrimental to successfully implement ratings and certificates. However, there are also several advantages that the company can realize by participating in reporting, which will be discussed in chapter 5.3.

5.2 Factors guiding the selection of the most relevant ratings and certificates

The second research question is a more specific one aiming to fill gaps found in literature. There is scarce discussion in literature on the requirements companies face and what factors are guiding companies to choose the most relevant rating or certificate for themselves. Thus, this study aims to understand the factors guiding the selection of ratings and certificates through the second research question.

The need for a rating or certificate usually starts from external pressures and internal motivations as discussed in the previous chapter. Additionally, according to Escrig-Olmedo et al. (2019) the motivations and external requirements such as stakeholders' wishes, regulations and the company's competitive position in the market are important drivers when choosing ratings and certificates. Therefore, when a company is considering which rating or certificate to choose, the needs they must fulfill such as customers' requirements for certain sustainability information or validation of certain processes should be kept in mind. This can help ensure that the company meets the needs the rating or certificate should fulfill. Additionally, internal and external drivers can be linked to each other. Therefore, if a company has internal motivation to become more sustainable or increase customer-perceived value and the customers value them as well, the company can achieve that by obtaining ratings or certificates. Thus, it can ensure the chosen rating or certificate is the most relevant and suitable for the company. Furthermore, it is important to carefully consider and compare different ratings as it will be a choice for the long term. As discussed earlier in the results, a company's reputation or

actions can be questioned if they suddenly stop answering a sustainability rating or lose their certification.

Regulation, an external requirement, significantly impacts how sustainability reporting and measuring should be done. Murad et al. (2021) points out that the legal and regulatory aspects should be included in sustainability management planning. Regulatory requirements can also differ depending on where the business is located and thus the local regulatory aspects should be considered when selecting sustainability reporting tools and align with them. However, the impact of regulation and legislation was not very well identified during the interviews. Similarly, there is still scarce discussion in literature, especially on the new coming legislation regarding CSRD and the EU taxonomy. As the new regulations regarding mandatory corporate sustainability reporting are novel, the discussion will most likely increase in literature in the near future. In addition, as the area is becoming more discussed the more literature will investigate the different effects regulation and legislation might have on performance and company practices. These changes could potentially also impact how sustainability ratings and certifications are used.

According to Diez-Cañamero et al. (2020) there is a lack of heterogeneity in the evaluation process, which is a problem, even though the ratings all measure CSR or ESG. Different measurements make it more difficult to compare results from previous years or during the same year with the results of competitors. Another issue the article brings up is the compensation for negative scores since some ratings can have a greater weight on the economic aspects (Diez-Cañamero et al. 2020). Additionally, along the issues of heterogeneity with the measures, transparency was mentioned several times in the results as an issue. Due to these issues all companies might not obtain the same results from the ratings, even though they measure, qualify, and quantify the same things. Furthermore, Carvalho et al. (2022) discussed in their article that unique circumstances can affect the measuring and evaluation of sustainability performance if the measures are not adapted to differences in geographical or social contexts. However, contradicting the literature above according to Ikram et al. (2021) and Patara & Dhalla (2022) companies who receive an assessment on their sustainability performance from a third-party are usually seen as credible. Credibility and reliability were also seen as crucial factors for the companies interviewed when choosing a rating or certificate. But lack of transparency and heterogeneity can impact the credibility of third-party evaluations. Therefore, it is crucial for companies to carefully consider alternatives and which ratings or certificates are reliable and credible. Companies should scrutinize the different alternatives by looking into how the methodology and evaluations are presented, so that they are transparent

and thus able to reliably give the company a rating or certificate that is trustworthy to stakeholders as well.

Another aspect for companies to consider when deciding on which certificates or ratings they should pursue is to think of the implementation in terms of measures and finding the data. In addition, how those measures can support the strategy or the commitments of the company. The measures required when answering the questionnaires should be useful and measure the correct things. It can be difficult for a company to know if they are measuring the correct factors or areas, since the results they get are based on what they are measuring. Pihkola (2021) mentions the difficulties and challenges with measuring sustainability. For example, the incompatibility and incomparability of metrics as also mentioned by Diez-Cañamero et al. (2020) makes it difficult to measure and build a comprehensive overview of the sustainability. Especially, if several sustainability dimensions are assessed, which is typical in ratings, it can be more difficult since the results will become more complex and difficult to interpret the more indicators are added (Pihkola 2021). In Figure 1 presented in theoretical chapter 2.1, the statuses of the different sustainability dimensions are only the statuses of the used metrics and indicators. Thus, the status is heavily reliant on how the sustainability dimension is measured. This can then impact on what scores are gained in the sustainability certifications and how they are presented in the sustainability reports. Therefore, to help choose the most appropriate sustainability certifications, the measures should be connected to the commitments and goals the company aims to achieve with the rating or certificate. Thus, they can provide the most support to achieve the goals or requirements the companies need to fulfill. It should also be considered that there might be issues in the metrics and thus also in the status of the measured sustainability.

In the future, when companies are considering ratings and certificates as well as improvements, the choices will be more dependent on how the management team or leaders of the company relate to sustainability certification according to Silva et al. (2022). As discussed in the results, the company culture impacts when choosing the rating or certificate, because they should be aligned with the company's values and culture. KPMG (2023) highlighted in their study on selecting a sustainability label, that when making the decision of which labels to pursue, the company's overarching ESG strategy should be considered. The process of selecting a rating or certificate requires significant investments of time, money, and management resources (KPMG 2023). The choice is also made for the long-term and therefore, it is vital to choose the most appropriate ratings through careful consideration. Thus, the management team will have a significant role when discussing alternative ratings and certificates and choosing which rating or

certificate to participate in. The management team needs to carefully consider all the factors they see to be important for them to successfully choose the most appropriate sustainability certification. A poor decision along with poor management can lead to events damaging the reputation and credibility of the company affecting their success in the market (Operan-Stan et al. 2020).

An initial framework for selecting the most appropriate sustainability certification or rating can be established based on the findings of this study and discussions in literature. This can be used as support during the process of obtaining and maintaining a rating or certificate described in the previous chapter. Framework consists of four steps: identifying the audience or stakeholder pressure, alignment with internal ESG strategy and values, the scope of the certification process, and the resources and effort needed. The framework is presented in Figure 3 below.



Figure 3. Framework for selecting ratings and certificates.

First, the company needs to **identify** for whom the reporting tool is targeted for. It can be the customers, consumers, investors or be compliant with new upcoming regulation requirements. This also decides whether the company can choose their rating or certificate they want to obtain or if it is determined by the customer or regulation. Second, the company needs to identify internal needs and wishes. In this step the company needs to consider its own ESG strategy or goals regarding their sustainability if they have any.

This ensures that the rating or certificate is **aligned** with the company's values and can support the goals the company is aiming for. According to Wong and Petroy (2020) it is crucial to understand the rationale behind how ratings can influence strategic results for the company. Thus, it is important to dedicate time to prioritizing ratings that effectively facilitate these outcomes.

Thirdly, the company needs to **scope** the certification process and what material areas they are obligated or wish to address. This includes, for example, deciding the goals, tasks, timeline, and budget for obtaining a rating or certificate. Finally, the company needs to **plan and ensure** that they have the means to obtain and maintain the certificate or rating. For example, access to necessary data and knowledge within the company or use external help for assessing their sustainability performance and answering the questionnaires. In this step, the company should also choose a person or team responsible for the entire process of obtaining and maintaining the rating or certificate.

To conclude, previous literature has not examined factors or requirements that guide companies to choose the most relevant ratings and certificates. Therefore, the findings in this study provide new insight into what factors companies should consider when deciding the most appropriate sustainability rating or certificate for them. The proposed framework for choosing the sustainability rating or certificate can provide additional support for companies along with the process identified in chapter 5.1.

5.3 Utilizing advantages from certification in business development and decision-making

The third research question also aims to fill the gap of understanding on how sustainability ratings and certificates can be utilized by companies in other matters than communicating their results to stakeholders. The focus is especially on business development and decision-making.

In general, it has not yet been clearly understood how companies can practically utilize ratings and certifications in decision-making in literature. According to Monteiro and Aibar-Guzmán (2010) the relationship between sustainability reporting and a company's performance have been researched and the results have suggested both positive and negative relationships. The reason for this has been the variations in methodologies, which can impact the results as also discussed in the previous chapter. According to Díez-Cañamero et al. (2020) the ratings are usually based on the SDGs that utilizes a more macro level approach difficult to implement on corporate level. Therefore, it can be challenging to evaluate and measure sustainability performance and development with ratings and certifications. Simultaneously, it can be difficult to understand how the ratings

and certificates can support decision-making as the concrete actions might not be easily understood. The results of this study show that the company representatives interviewed were unsure how ratings and sustainability certificates could help their decision-making. However, the companies interviewed had a good understanding of how sustainability ratings and certificates can be utilized overall. These aspects can also support the decision-making of the company both directly and indirectly.

5.3.1 The direct and indirect benefits and advantages of ratings and certificates

Companies can realize different benefits from sustainability ratings and certificates depending on how they are perceived and utilized. The results showed that the benefits and advantages companies recognized were different from each other, most likely due to different applications and utilization. For a few of the participants, the concrete benefits of ratings and certificates for their business were not yet understood and therefore they had a smaller interest in pursuing sustainability reporting tools. There are not always clear connections how sustainability certification can support and help a company's business. Thus, the realization of advantages and utilizing the benefits can be seen as company dependent. Patara & Dhalla (2022) also highlights that companies are unique and have thus unique sustainability strategies, which also makes benchmarking and understanding common benefits more difficult.

The benefits generated by the sustainability reporting tools can be divided into direct and indirect benefits. Table 11 below shows the different direct and indirect benefits companies can utilize to their own advantage. Sustainability ratings and certificates offer a wide range of direct benefits, such as enhanced reputation, cost savings, and better access to capital. Additionally, their indirect effects can lead to broader industry changes, innovation, and a more resilient and sustainable business environment encouraging sustainable development.

Table 11. *Identified direct and indirect advantages of ratings and certificates.*

| Direct | Indirect |
|--------------------------------|-----------------------------------|
| Improved reputation | Employee attraction and retention |
| Operational efficiency | Stakeholder engagement |
| Compliance and risk mitigation | Innovation and research |
| Access to capital | Long-term resilience |
| Competitive advantage | Supply chain improvement |

Communication and reputational aspects of sustainability ratings and certificates have been extensively discussed in the literature (Carini et al. 2017; Carlos & Lewis 2018; Ferreira Quilice et al. 2018; Operan-Stan et al. 2020; Ikram et al. 2021; Flagstad et al. 2022; Patara & Dhalla 2022), often receiving more attention compared to other benefits and advantages. Also, the results of this study underscore the significance of effective communication and reputation management within the context of sustainability ratings and certificates. It is evident that companies derive substantial reputational benefits from sustainability ratings and certificates. These endorsements serve as powerful tools for enhancing a company's image and credibility, not only among consumers and investors but also within the business community. The positive reputation gained through certifications can lead to increased trust, improved relationships with stakeholders, and a competitive advantage in the market. Therefore, as a communicative tool the ratings and certificates can be seen having a direct impact on the company and its reputation.

The benefits from reputation can be seen as a direct impact since many companies use them to improve their image and convince stakeholders of their sustainability. The findings also show that reputation affects other aspects of the company as well and what advantages they can benefit from. For example, as ratings and certificates are used to improve brand value and trust, they can also impact on the position the company has in the market. Carini et al. (2017) highlighted that companies focusing on CSR have been seen to have better long-term performance due to improved reputation. Through increased trust and brand value, customers that are conscious of sustainability might prefer the company over its competitors. This can result in higher sales volumes and profits increasing the company's market value (Carini et al. 2017; Flagstad et al. 2022). Thus, by using sustainability ratings and certifications to improve reputation and brand value it can indirectly result in competitive advantage and increased revenues. However, as a communicative tool sustainability, ratings and certificates provide information if companies are not complying with the necessary standards. Some scholars also highlighted the potential negative impacts ratings and certificates can have, if the company does not sufficiently comply with the sustainability requirements or manage sustainability poorly (Operan-Stan et al. 2020; Patara & Dhalla 2022). Therefore, a company's reputation can be negatively affected by a poor rating, which can also impact on its financial performance and success (Operan-Stan et al. 2020).

While communication plays a significant role, especially within the realm of academic literature, there remains an ongoing discussion and critique regarding the clarity and comprehensibility of sustainability reports and reporting tools. Stakeholders, including investors and the public, at times encounter difficulties deciphering these reports (Carlos

& Lewis 2018; Patara & Dhalla 2022), which indicates that there is room for improvement in the communication of sustainability data and results. Effective sustainability communication plays a pivotal role in business, particularly for emerging companies entering the sustainability sphere. Carmo and Miguéis (2022) study shows that non-listed companies are also affected by concerns about how sustainability affects the image and reputation of a company and not just listed companies. However, the ambiguous nature of sustainability reports presents a significant challenge, and the situation poses a paradox. While this issue may not directly correlate with a company's operations, its inability to communicate sustainability efforts impacts those businesses keen on sustainability initiatives. Therefore, the clarity of sustainability reports emerges as a critical concern. Furthermore, identifying who is responsible for clarifying the reports and reporting tools and gauging companies' expected responses become pivotal considerations. These complexities underline a challenge affecting both enterprises and stakeholders invested in sustainability. Addressing this challenge calls for clarifying reporting methods to foster more transparent and impactful sustainability communication.

The benefits from stakeholder engagement as well as upholding employee attraction and retention can be seen as an indirect advantage. Patara and Dhalla (2022) discussed that ratings can help with employee attraction and engagement. It might attract individuals who want to work for socially responsible organizations and thus be a competitive advantage as an employer. Alam et al. 2022 on the other hand found that improved reputation from certification did not help with attracting new talent but helped with finding and attracting new customers. Thus, stakeholder engagement is partly connected with reputational aspects, as stakeholders valuing sustainability might be more interested in engaging with the company if they have proof of their sustainability. On the other hand, pursuing sustainability ratings encourages companies to engage with a wide range of stakeholders, from customers to employees. This indirect interaction can lead to improved relationships and feedback, which can inform and drive positive changes within the company. As the results show, external pressure was the most prominent reason for obtaining ratings and certificates. Thus, interaction with stakeholders can be an important asset for companies to understand the stakeholders' needs and values. Furthermore, a strong commitment to sustainability, demonstrated through ratings and certifications, can indirectly lead to improved employee recruitment and retention if the employees value sustainability aspects when applying for vacancies.

As mentioned, the improved reputation can also impact positively on the competitive advantage of the company (Ikram et al. 2021). High sustainability ratings can set a company apart from its competitors. It directly provides a competitive edge by attracting

customers who prioritize sustainability and making the organization more attractive to partners and investors. However, the results show that competitive advantage was not very well understood yet by the participating companies. On the other hand, several researchers discussed some aspects of competitive advantage the ratings and certificates can give for a company as was presented in table 2.

Sustainability ratings and certifications offer an opportunity for companies to enhance their competitive advantage. As green consumerism continues to gain prominence, these ratings and certifications become a means of creating valuable and rare resources for businesses. Silva et al. (2022), Carlos and Lewis (2018) and Wang and Chen (2017) point out that sustainability certifications not only boost an organization's reputation but also provide a direct edge in the competitive landscape. Companies with strong sustainability credentials can attract a growing segment of eco-conscious consumers, leading to increased customer trust and loyalty. Moreover, this focus on sustainability and the attainment of certifications often leads to the development of novel resources and a deeper understanding of sustainability principles. This newfound knowledge can be harnessed to explore and exploit new markets. It allows companies to implement more sustainable practices and offer environmentally friendly products to cater to the evolving demands of their customers (Flagstad et al. 2022; Silva et al. 2022). Sustainability ratings and certifications not only support a company's reputation but also contribute directly to its competitive advantage, enabling it to capitalize on the growing market for environmentally responsible products and services while driving innovation and market expansion.

Furthermore, operational efficiency can be seen as a direct impact of utilizing sustainability ratings and certificates. They require organizations to thoroughly assess and optimize their operations while answering the questionnaires and later improve based on the feedback and results they receive. As the findings of this study show, several companies saw sustainability ratings and certificates as tools for continuous improvement and recognizing trends providing better understanding of the company's sustainability performance. This can lead to direct cost savings through improved energy efficiency, resource utilization, and waste reduction. Carini et al. (2017) and Ikram et al. (2021) also identified cost reductions and increased productivity as benefits gained from improved operations when utilizing certifications. Simultaneously, pursuing sustainability ratings and certificates can lead to research and innovation. Organizations may develop new products and processes to meet sustainability criteria, which can indirectly drive innovation across the industry but also improve the sustainable development of the company. Thus, innovation and research can be seen as indirect impacts of obtaining and utilizing ratings and

certificates. Additionally, organizations that prioritize sustainability when improving operations are often better prepared to face long-term challenges such as climate change, resource scarcity, and social issues. This indirect benefit ensures the company's long-term resilience and adaptability.

A study made by KPMG (2023) also recognized reporting tools to be valuable for differentiating a company or its products in the market. Thus, high sustainability ratings can attract socially responsible investors who are interested in companies that align with their values. Access to such investors can provide funding for sustainable projects and initiatives and with lower financing costs (Murad et al. 2021). Thus, gaining access to capital can steer a company's decision-making to attract suitable investors. According to the Corporate Reporting Dialogue (2019) a sustainable and inclusive economy includes both financial stability and sustainable development. Thus, sustainable social and environmental development depends on a stable financial system, which can require funding from sustainability conscious investors.

Sustainability certificates often cover regulatory requirements and risk assessments. By adhering to standards, companies can directly reduce legal and operational risks associated with non-compliance. As a tool, ratings and certificates can provide companies with feedback or information on what risks they need to consider and assess to improve their sustainability and gain a satisfactory performance level. Thus, sustainability ratings and certificates can play a crucial role in ensuring that companies comply with sustainability standards and mitigate associated risks. They help companies meet legal requirements, address operational and supply chain risks, protect their reputation, and enhance long-term resilience. According to Murad et al. (2021), regulation can act as enablers for actions supporting sustainable production and services. These benefits not only reduce potential liabilities but also contribute to a competitive advantage and improved financial performance. Thus, legal aspects should be included in sustainability management planning (Murad et al. 2021).

Companies may also use sustainability certifications to evaluate and improve the sustainability of their supply chain. This indirect effect can lead to broader adoption of sustainable practices among suppliers, enhancing industry-wide sustainability. The evaluation can also lead to more sustainable procurement practices and improve supply chain resilience. However, only one of the companies interviewed mentioned they were utilizing ratings and certificates in this manner. It is not the easiest to incorporate as it requires a lot of data and information from different parts of the supply chain and not everyone is eager to share data openly. Thus, there are still opportunities for improvement regarding supply chain improvement.

5.3.2 The support of rating and certificates in decision-making

Saxena et al. (2020) sees sustainability as one of the vital factors impacting decision-making in manufacturing. Ahmad & Wong (2018) sees sustainability assessment as the process directing companies' decision-making towards sustainability. Thus, sustainability should be considered as one of the key manufacturing attributes. However, the results of this study show that few of the interviewed companies understood or knew how sustainability ratings and certificates could help the decision-making within their company. One of the reasons for this is the complex operations models, which can make it more difficult to identify connections between the results gained from answering the ratings and certificates and the operations. For example, companies might not have identified the opportunity or the possibilities of basing their decision-making on the feedback gained when participating in sustainability certification. On the other hand, the ratings and certificates will help companies to better understand their sustainability and sustainability performance.

Though ratings and certificates can be seen to indirectly support and guide a company's decision-making, there are still challenges to identify the opportunities in companies. As very few of the interviewees understood or saw any potential in utilizing sustainability certification as support for decision-making, it is still a difficult benefit to realize and put into practice. The literature discussed very little how decision-making can be supported by sustainability reporting tools. However, even though the companies had issues in directly finding connections between decision-making and sustainability ratings and certificates, the discussed direct and indirect benefits can be seen as enabling connections between the reporting tools and the company's decision-making. Operan-Stan et al. (2020) identified sustainability metrics to be valuable for internal decision-making as the metrics help to evaluate a company's sustainability success. Furthermore, in terms of decision-making smaller companies might realize more advantages according to Flagstad et al. (2022), since they are more agile, flexible, and able to adapt to changes as well as making decisions more quickly based on the performance results. Thus, smaller companies might have an advantage in making decisions quicker and implementing necessary processes for obtaining ratings and certificates, changes, and improvements based on the results and feedback they receive.

Ratings and certificates provide a benchmark against which a company can measure its performance. The identified literature did not yet discuss benchmarking opportunities in depth, but they can be used to compare impacts (Alam et al. 2022). Due to lack of standardization (Patara & Dhalla 2022) the comparison is difficult to conduct. However, the interviewees of this study saw benchmarking as valuable both in internal and external

comparison. Benchmarking helps identify areas where a company is excelling and areas that need improvement, enabling data-driven decision-making and successful competing on the market. As a tool, answering the questionnaires and analyzing the feedback the companies get as they receive their results can help identify their strengths and weaknesses (Silva et al. 2022). Thus, by analyzing the specific criteria and indicators used in ratings and certificates, companies can pinpoint their strengths and weaknesses in various sustainability areas. This information can inform strategic decisions on resource allocation and improvement initiatives. Additionally, to meet sustainability requirements companies need to have supporting ESG strategies (Jean & Grant 2022). Sustainability ratings provide a framework for setting long-term sustainability goals and strategies. Alam et al. (2022) also discussed shaping goals and the mission and vision of the company by using the insights from ratings and certificates. The aspects such as market analysis and stakeholder engagement can also and should be considered when considering long-term sustainability strategies. Therefore, companies can use this information to make informed decisions about their future direction.

Sustainability ratings often include assessments of a company's environmental, social, and governance (ESG) risks. Companies can use these insights to assess potential risks to their reputation, compliance, and operations, helping them proactively address and mitigate risks. These insights can also steer a company's decision-making depending on what they need to focus on in their operations. The ratings also received critique from the interviewees as they felt like the ratings only assessed the risks and not really the sustainability performance. However, by analyzing the risks companies can implement actions to mitigate them while improving their sustainable development. Of course, it is important for companies to truly implement sustainable actions and business models and not only reporting how they would act in certain risk scenarios.

As recognized, sustainability ratings as a tool can inspire companies to innovate and develop more sustainable products and services. They can help identify market opportunities for eco-friendly products and technologies when analyzing the improvement needs within a company's sustainability practices. New and improved sustainable practices often lead to resource and energy efficiency, which can result in cost savings. The reporting tools can thus guide companies towards making decisions for more efficient and cost-effective operations (Ikram et al. 2021).

When selecting and utilizing sustainability ratings companies can consider the interests and expectations of various stakeholders, including investors, customers, and employees. Understanding how these stakeholders perceive the company's performance can guide engagement strategies and decision-making. Ratings and certificates can raise

awareness internally among employees about sustainability performance and goals. They can encourage a sense of responsibility among staff, leading to more sustainable practices within the company (Patara & Dhalla 2022).

In summary, ratings and certificates provide companies with valuable information, external validation, and stakeholder alignment to support their sustainability efforts and decision-making processes. They help companies align their operations with environmental, social, and governance principles and can lead to improved performance, reputation, and profitability.

6. CONCLUSIONS

6.1 Theoretical contributions

This study contributes to the literature of sustainability ratings and certificates by providing empirical insights on the choice and utilization of reporting tools in the manufacturing industry. Studies suggest potential issues with certification, underscoring the importance of investigating internal organizational processes when striving for sustainability, especially in environmental aspects (Flagstad et al. 2022). Current literature has not yet investigated how sustainability ratings and certificates are selected and what impacts the selection. How reporting tools could be utilized by companies has not been studied either. Therefore, this study contributes with new insights and processes companies can use internally to select, obtain, and maintain sustainability ratings and certificates. Thus, the study helps to establish a better understanding of how sustainability reporting tools can provide value for companies. The findings also support previous literature highlighting similar internal and external motivations (see e.g., Waddock 2008; Ferreira Quilice et al. 2018; Boiral et al. 2019; Murad et al. 2021; Alam et al. 2022) and similar identified opportunities and benefits (see e.g., Carlos & Lewis 2018; Operan-Stan et al. 2020; Ikram et al. 2021; Alam et al. 2022; Carvalho et al. 2022; Patara & Dhalla 2022).

Sustainability reporting and its relationship with a company's performance has been empirically studied (Operan-Stan et al. 2020). Similarly, there are studies on sustainability ratings and certificates discussing some of their benefits and opportunities they provide for companies (Alam et al. 2022; Carvalho et al. 2022). On the other hand, there are growing trends towards sustainability and new opportunities for sustainable business has emerged (Silva et al. 2022) with potentially greater advantages such as better long-term performance and improved competitive advantage (Carlos & Lewis; Operan-Stan et al. 2020). The empirical results show that there are several advantages related to utilizing ratings and certificates in terms of sustainable development, communication, and decision-making. These can also provide companies with competitive advantages through improved efficiency, reputation and innovation.

Flagstad et al. (2022) called for research focusing on the certification processes to understand what they include and require from a company. However, there are only few studies on the processes of certification and the existing ones are only on surface level focusing on one specific certification such as B Corp. Thus, the identified process for obtaining and recertifying ratings and certificates in this study provides a simple blueprint

for companies, which they can use to understand what they need to do in order to obtain or maintain a sustainability rating or certificate. Additionally, this study provides empirical findings on how companies utilize ratings and certificates dividing them into levels. This helps companies understand what level they currently are on and what they might have to do to get to the next level and exploit more advantages and benefits.

Furthermore, the manufacturing industry has not gotten much attention from researchers regarding sustainable assessment or sustainability reporting tools (Alam et al. 2022). According to Alam et al. (2022) more attention directed towards the manufacturing industry could help improve the sustainable performance of companies. Therefore, this study focused on manufacturing in Finland, especially companies within machinery to broaden the literature and create understanding on the requirements, opportunities, and advantages of sustainability reporting tools.

The three cases that were purposively selected for this study aimed to contribute to understanding the differences between rated and non-rated or -certified companies. Flagstad et al. (2022) called out for research comparing certified and non-certified companies because certification processes can be context dependent. The analysis of the studied cases did however not find significant differences between the cases in terms of how sustainability ratings and certificates can be obtained or maintained. The case consisting of non-rated and -certified companies did provide insights for how companies should start from when considering selecting and obtaining a sustainability rating or certificate. Building upon these insights the already rated and certified companies insights added value in terms of understanding how to maintain the reporting tools and utilize them as part of a company's decision-making, sustainable development and enhancing competitiveness. However, among the cases, one of the most prominent differentiators was the varying access to financial resources and time. Previous literature also identifies costs and limited resources as challenging and hindering factors for companies in the pursuit of obtaining or maintaining a sustainability rating or certificate (see e.g., Carini et al. 2017; Ikram et al. 2021; Diez-Busto et al. 2022; Flagstad et al. 2022). High costs have an impact on how successfully a company can pursue expensive sustainability ratings and certificates and can cause unjust market positions. In this study, already rated and certified companies were listed companies with greater resources than the companies who did not have any ratings or certificates. The empirical results suggest that especially smaller companies should carefully consider if it is realistic and reasonable to pursue voluntary ratings and certificates and requires careful consideration of the potential benefits.

Lastly, previous literature scarcely discussed how companies are selecting suitable sustainability ratings and certificates. Some scholars studied the reasons for pursuing reporting tools highlighting the benefits (Murad et al. 2021; Alam et al. 2022; Flagstad et al. 2022) without considering the steps of the selection process. The empirical findings propose a framework for selecting the most appropriate rating or certificate for a company which considers how the rating or certificate aligns with the values, goals and strategies of the company in order to provide most value and contribute to business growth.

To conclude, this study provides a better understanding of the utilization of certifications and ratings and how they can help companies to with their sustainable development. The empirical findings provide the audience with tools to become more familiar with sustainability certifications and might help with detecting companies, that are making false claims about their sustainability. However, even though ratings and certifications can be utilized to improve a company's sustainability, it is vital to remember that the reporting tools are only serve as a supporting tool for companies and the actual realization of advantages is dependent on the company and its actions.

6.2 Managerial and practical implications

This study helps manufacturing companies to understand the scene of sustainability ratings and certifications and how they can support business in diverse ways. The study can help companies assess how they are currently utilizing ratings and certificates as well as understand and evaluate opportunities and challenges related to obtaining and maintaining a rating or certificate. The findings can provide managers with valuable implications on how to improve the processes of implementing sustainability certifications, selecting the relevant ratings and certificates and how to realize advantages. Improved utilization and well-chosen ratings and certificates can help companies improve their sustainability and simultaneously improve measuring of their performance.

Table 12. *Summary of managerial and practical implications of the study.*

| Managerial and practical implications |
|---|
| <ol style="list-style-type: none"> 1. Engage with stakeholders to understand their requirements. 2. Align the sustainability ratings and certificates with the company's strategic goals and sustainability objectives. 3. Allocate resources and expertise to tackle the laborious questionnaires and reporting requirements. |

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4. **Ensure effective data collection, analysis, and reporting processes to meet the reporting requirements.**
 5. **Communicate the company's sustainability performance and commitments to reporting.**
 6. **Ensure continuous improvement by utilizing sustainability ratings and certificates. Assess performance regularly and identify key areas of enhancement.**
 7. **Leverage sustainability ratings and certificates to gain competitive advantage.**
-

The seven key practical recommendations of this study are concluded in Table 12 above. These are discussed in depth to provide actionable implications for companies to utilize ratings and certificates in order to enable sustainable development and potentially competitive advantage.

1. Engage with stakeholders to understand their requirements.

Engaging with stakeholders, including employees, customers, and investors, about the chosen sustainability ratings and certificates is crucial. This helps the companies understand which ratings and certificates the stakeholders value and require from the company to fulfil. A company can gain an understanding whether there is a need for them to obtain a rating or certificate to keep the customers or attract funding. Additionally, a better understanding of stakeholder requirements supports the selection of most relevant ratings and certificates.

2. Align the sustainability ratings and certificates with the company's strategic goals and sustainability objectives.

First, to benefit from pursuing sustainability ratings and certificates a company should align the sustainability ratings and certificates with the goals and sustainability objectives it has. Suitable reporting tools aligned with a company's goals and sustainability objectives can support development by showing areas that need to be addressed and improved to fulfil the strategic objectives. Managers should consider how the selected certifications support the broader mission and vision of the company. This requires clear and deliberate decision-making regarding which sustainability standards to pursue and integrate into the company's strategic plan. If necessary, the company should also regularly review its sustainability strategies and adjust its ratings and certificates to ensure that they support the long-term vision of the company. Thus, strategic alignment involves ensuring that the choice of sustainability ratings and certificates aligns with the organization's overall strategic goals and sustainability objectives.

3. Allocate resources and expertise to tackle the laborious questionnaires and reporting requirements.

The selection and utilization of sustainability ratings and certificates often require dedicated resources, including financial investments and personnel. Managers must make informed decisions on how to allocate these resources effectively to achieve and maintain the chosen ratings and certifications. A person or a team should be appointed as responsible for reporting and answering the questionnaires. This will be helpful in successfully managing the laborious workload and ensure that the reporting will be done. Allocating resources also implies a commitment to sustainability that goes beyond mere rhetoric and necessitates strategic planning and alignment.

4. Ensure effective data collection, analysis, and reporting processes to meet the reporting requirements.

Effective data collection and analysis are necessary to meet the reporting requirements of chosen sustainability standards. Managers should establish data collection processes and analytical capabilities to ensure effective and successful reporting and utilization of reporting tools and evaluations. For example, practical implications can include implementing data collection systems, train employees, and invest in data analysis tools to ensure accurate reporting and continuous improvement. The established data collection processes and analytical capabilities a company has helps meeting the reporting requirements and answering the questionnaires accordingly with the methodology. The processes can also ensure that the data is available when needed. Additionally, establishing robust reporting mechanisms and monitoring the processes enables tracking and verifying compliance with the selected ratings and certifications.

5. Communicate the company's sustainability performance and commitments to reporting.

Effective communication is also essential and can have valuable impact on reputation, which can also affect the market position of the company. Therefore, managers need to establish clear channels of communication with stakeholders, ensuring that information about sustainability initiatives such as sustainability ratings and certificates and performance is available. Transparency in reporting sustainability data and progress is crucial to maintain trust and credibility. To conclude, practical implications include developing communication strategies and channels to keep stakeholders informed and engaged regarding the organization's commitment to sustainability.

6. Ensure continuous improvement by utilizing sustainability ratings and certificates. Assess performance regularly and identify key areas of enhancement.

Managers should use sustainability ratings and certificates as tools for continuous improvement and regularly assess performance and identify areas for enhancement. This includes identifying their own level of utilizing sustainability ratings and certificates. If necessary, the company can take corrective actions to improve its sustainability performance or to address the possible issues or needs for improvement identified in the evaluations and results. To identify weaknesses the company can and should also regularly address its processes and the ratings and certificates it maintains. Ensuring continuous improvement supported by sustainability ratings and certificates can also act as a catalyst for innovation and product and service development. Thus, managers should consider using sustainability reporting tools for improving its own sustainability performance and product and service development. An example of a practical implication would be to invest in research and development aligned with sustainability goals to meet or exceed the standards set by the chosen ratings and certificates.

7. Leverage sustainability ratings and certificates to gain competitive advantage.

The choice of sustainability ratings and certificates can affect the company's positioning in the market. Managers should leverage these certifications to gain a competitive edge. This can be done by develop marketing strategies that highlight the organization's sustainability achievements to attract sustainability-conscious consumers and stand out in the market. Additionally, as several of the sustainability ratings or so-called indexes are connected or similar to stock market indexes companies can use sustainability ratings to influence and attract potential investors. Some investors have in recent years focused on ESG and thus to access capital managers should incorporate ESG factors into financial reporting and engagement with investors. The company's commitments to sustainability should then be communicated to attract socially responsible investors and access capital at favourable terms. Access to capital can support other previously mentioned implications such as continuous development and connecting with stakeholders, which can lead to improved competitive advantage.

In summary, selecting and utilizing appropriate sustainability ratings and certificates require strategic alignment, resource allocation, stakeholder engagement, data management, continuous improvement and innovation, market positioning, and attracting investment. Organizations should integrate these considerations into their sustainability strategies and operations to realize the full potential of these certifications.

6.3 Limitations and quality assessment of the study

The study succeeded in establishing a better understanding of the current situation of utilizing sustainability certificates and ratings, the possible benefits as well as understanding what criteria or factors should be considered when choosing the most appropriate reporting tool. However, there are some limitations regarding the chosen methodology as well as the research context. According to Lincoln and Guba's (1985) evaluative criteria, the quality of qualitative research can be assessed by examining its credibility, transferability, dependability, and confirmability (Lincoln & Guba 1985). These criteria serve as a valuable framework for evaluating the strengths and potential limitations of the study on sustainability ratings and certificates in the Finnish manufacturing industry.

To enhance the credibility of this study, rigorous measures were undertaken. Primarily, the study's credibility was ensured through an extensive literature review. This review not only served to build a theoretical foundation but also allowed the researchers to familiarize themselves with the key topics, concepts, and debates related to sustainability ratings and certificates in the manufacturing industry. Additionally, the initial discussions and steering meetings and the analysis of secondary data played a pivotal role in this aspect. By grounding the research in these preliminary steps, the study established a robust foundation, demonstrating a commitment to rigor and depth in the investigation.

Data triangulation was another critical method applied in the study to bolster its credibility. By cross-referencing data from multiple sources, including interviews, secondary data, and existing research, the study ensured that the findings were robust and consistent. This method of data triangulation not only enhances the reliability of the study but also contributes to its overall credibility. Moreover, the study's findings resonated with previous research in the field, which included identifying potential advantages as well as challenges when utilizing ratings and certificates. This alignment with existing literature further reinforces the credibility of the study.

However, it is essential to acknowledge potential limitations regarding credibility. The study's credibility may be impacted by the purposeful sampling of interviewees. While the chosen interviewees were selected based on their presumed key roles in companies, this approach may introduce bias. To enhance credibility, future research might consider a more diverse set of interviewees, including representatives from more companies and from distinct roles within the companies as well as external assessment bodies. By broadening the range of perspectives, the study's credibility could be further enhanced.

Additionally, the credibility of the study might be compromised by the quality of interviews. Verbal reports, like interviews, are susceptible to bias, inaccurate articulation,

communication issues, or defective memory. Given the complexities of sustainability ratings and certificates and the potential for tensions and misalignments in the industry, it is vital to address these challenges to maintain the highest level of credibility.

The transferability of this study aims to highlight the relevance of its findings beyond the specific context. As noted by Lincoln and Guba (1985), the transferability of research findings is crucial to demonstrate the broader applicability and significance of the study. To address this, the study provides discussion on how companies within the manufacturing industry in Finland utilize sustainability ratings and certificates, highlighting the unique characteristics, contexts, and the prevailing situation. However, several factors influence the transferability of the study's findings.

Primarily, the study focuses on companies in Finland, which may limit its applicability to international contexts. Sustainability practices and priorities can vary significantly between countries, and the factors influencing the choice of sustainability ratings and certificates may be subject to cultural, regulatory, and economic differences. Consequently, the transferability of the findings to manufacturing industries in other countries, especially those on different continents, may be hindered by this limited geographic scope. For instance, Finnish companies operating within a Nordic welfare state may have different motivations and challenges when it comes to sustainability ratings and certificates compared to companies in regions with different social welfare systems and economic structures. Additionally, the cultural and business norms within Finland, such as a strong emphasis on trust and non-contractual governing, might play a significant role in the adoption and effectiveness of sustainability ratings and certificates. These cultural nuances may not be directly transferable to regions with distinct cultural backgrounds. To enhance the transferability of the study, it would be beneficial to include comparative cases from other countries, allowing further cross-case analysis and a broader perspective on the factors influencing the choice and utilization of sustainability ratings and certificates.

Dependability is crucial for ensuring consistent and repeatable findings in a study (Lincoln & Guba 1985). To achieve high dependability, the study's methodology chapter meticulously describes the research implementation. This includes a detailed account of methodological choices and data gathering procedures. The study's research design, utilizing the case study strategy, is well-suited for examining the phenomena in their real-life contexts, which enhances the dependability of the findings.

The case selection for the study was justified based on the existence of differences between the selected cases and the insights they provide regarding the research topics. The cases were chosen purposefully to enrich the study with diverse perspectives from

different sized firms in various stages of utilizing sustainability ratings and certificates. While the selection of cases did provide some valuable insights, it is essential to acknowledge that there is no concrete evidence indicating that these cases offered more robust results than other potential companies identified in the preliminary case identification.

Confirmability means the extent to which the findings of a study are shaped by the respondents rather than influenced by the researcher's motivation, interest, or bias (Lincoln & Guba 1985). The study acknowledges that, to some extent, the case selection was influenced by the researcher's perceived interest in the selected cases. This acknowledgment is a crucial step towards ensuring confirmability. Researchers should strive to minimize personal bias in case selection to maintain a high degree of neutrality in the research process.

Other issues that could potentially impact confirmability include unintentional effects on interviewees' answers and the researcher's influence on the framework creation, data analysis, and grouping of findings. The study acknowledges that the analysis focused on the subjects perceived as most interesting, leaving some subjects at a more superficial level. This recognition is essential for addressing potential confirmability issues. To enhance confirmability, future research should aim for a more neutral and objective stance in case selection and data analysis. In addition, the researchers should be aware of potential biases and actively try to minimize the researchers own influence on the research process.

6.4 Suggestions for future research

Suggestions and implications for future research stem from the findings of this study, the discussed limitations and previous literature. The literature on sustainability ratings and certifications is still scarce, especially in terms of how to utilize them for different purposes such as decision-making and generating competitive advantage. This study is providing a base for expanding and diving deeper into the topic to broaden the understanding of sustainability ratings and certifications as reporting tools and as support for businesses within different areas and operations.

As briefly discussed in this study, the resources a company has can influence which sustainability rating or certificate a company should choose and how well a company performs in ratings. However, the effect of knowledge and resources have on rating results and the process of obtaining a rating or certificate should be investigated further. Several challenges were identified but future research should investigate how

companies manage these challenges successfully and how they can be minimized when companies are striving to enhance their sustainability practices and aiming to secure a rating or certificate. Additionally, research should investigate how the level of knowledge and resources impacts a company's performance in sustainability ratings. This research can uncover the nuances of how investments in knowledge and resources correlate with improved sustainability outcomes and higher ratings.

Furthermore, even though this study investigates the factors behind the choice of sustainability ratings and certifications, deeper analysis is needed to understand how various sustainability ratings and certificates compare to each other. Can they be used interchangeably, or do they offer unique insights and value? This research can guide companies in selecting the most relevant certifications for their specific goals, but further research can broaden this knowledge by providing better understanding of the similarities and differences of sustainability ratings and certificates. As noted by Patara and Dhalla (2022) and Boiral et al. (2019), there is a need for research that addresses the disorganized nature of sustainability information disclosure and the criticisms surrounding the credibility and reliability of sustainability reports and rankings. Future studies should work on developing a more consistent and reliable framework that simplifies the application of sustainability practices within the manufacturing industry.

As sustainability ratings and certificates have been scarcely investigated, there are many questions rising regarding how they are integrated into companies' daily operations and if they are necessary along with other sustainability reporting. Therefore, future studies should conduct deeper analyses of how sustainability ratings are integrated into a company's day-to-day operations. This research requires empirical, real-world examples to provide practical insights into the mechanisms through which sustainability ratings drive change within organizations. The process identified in this study can be used as a base for establishing a broader understanding. Building upon Flagstad et al. (2022), future research should specifically concentrate on the certification processes. Distinguishing between the perspectives of employees and managers can shed light on the dynamics, challenges, and motivations that underlie the pursuit of sustainability certifications. In addition, building on the configurational perspective proposed by Slager et al. (2021), future research can focus on how sustainability metrics affect and direct organizational change. This perspective offers a holistic view of how various sustainability elements interact to create meaningful shifts within companies, providing valuable insights for both academia and industry.

Incorporating these research directions can contribute to a better understanding of how sustainability ratings and certificates impact the manufacturing industry. These insights

can aid companies in making more informed decisions regarding sustainability strategies and practices while also advancing the academic understanding of sustainability within organizations.

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APPENDIX A: SECONDARY DATA SOURCES

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APPENDIX B: RATINGS AND CERTIFICATES USED BY FINNISH COMPANIES

| Company | Certificates and Ratings |
|------------------|--|
| Company F | CDP, EcoVadis, MSCI ESG Rating, ISS ESG Rating |
| Company G | CDP, EcoVadis, ISS ESG Rating, Sustainalytics, MSCI ESG Rating, UN Global Compact |
| Company H | CDP, EcoVadis, Sustainalytics ESG Risk Rating, MSCI ESG Rating, ISS ESG Rating |
| Company I | CDP, EcoVadis, Ethibel Sustainability Index (ESI), FTSE4Good, UN Global Compact |
| Company J | CDP, EcoVadis, FTSE4Good |
| Company K | CDP, MSCI ESG Rating, FTSE4GOOD |
| Company L | CDP, EcoVadis |
| Company M | CDP, EcoVadis, Dow Jones Sustainability Index, ISS ESG Rating, MSCI ESG Rating, UN Global Compact |
| Company N | CDP, EcoVadis, Dow Jones Sustainability Indices, FTSE4Good, ECPI ESG, ISS ESG Rating , MSCI ESG Leaders Index, OMX Sustainability Index, ESI Excellence Europe, STOXX Global ESG Leaders Index |

APPENDIX C: INTERVIEW STRUCTURE AND QUESTIONS

In this appendix the interview structures and questions for the non-rated or -certified companies, rated and/or certified companies and auditors are presented separately. The interviews were conducted in both Finnish and English and the interview guides are presented in English.

Interview structure for non-rated or -certified company interviews:

Introduction:

- a. What is your current role and responsibilities at your company?
- b. How are sustainability certificates and ratings part of your work?
- c. What is the level of utilization of certifications and ratings in the industry?

Understanding why and how companies obtain certificates and ratings:

- a. Does your company currently have any sustainability certifications or ratings? Which ones?
- b. Are you currently pursuing any new certifications or becoming a part of a rating?
- c. What are your motivations (internal and external) to obtaining a certification or rating?
- d. What is your intended goal with the certification or rating?
- e. What factors do you consider when deciding which certification or rating to choose?
- f. What factors have helped you decide which certification or rating to choose?
- g. What are the benefits of obtaining a certification and rating?
- h. What are barriers for obtaining a certification or rating?

Understanding how certificates and ratings are utilized:

- a. How do you intend to utilize the certification or rating on a strategic level?
- b. How does the certification or rating/index support your
 - i. decision-making?
 - ii. business development?
 - iii. implementation of sustainability?
 - iv. sustainability reporting?
- c. How could the utilization of certifications and ratings as part of sustainable business development and decision-making be improved?
- d. What are the biggest challenges in utilizing certificates and ratings?
- e. What do you think the future holds for certifications and ratings?

Closing:

- a. What help would you need with sustainability certifications and ratings?
- b. Would you like to add something that has not been discussed yet?

Interview structure for rated and/or certified company interviews:

Introduction:

- a. What is your current role and responsibilities at your company?
- b. How are sustainability certificates and rating/indexes part of your work?
- c. What is the overall level of utilization of certifications currently in the industry?

Understanding why and how companies obtain certificates and ratings:

- a. What are your (internal and external) motivations to obtaining a
 - i. certification (EcoVadis, CDP)?
 - ii. rating/index (DJSI, MSCI)?
- b. What is your intended goal with the certification or rating?
- c. What factors do you consider when deciding which certification or rating to choose?
- d. What factors have helped you decide which certification or rating to choose?
- e. Has the choice of certificates proven to be successful? Why?
- f. What have been the benefits of obtaining a certification and rating?
- g. What are barriers for obtaining or maintaining a certification or rating?

Understanding how certificates and ratings are utilized:

- a. How are you currently utilizing the certificate or rating on a strategic level? If not, why?
- b. How does the certification or rating/index support your
 - i. decision-making?
 - ii. business development?
 - iii. implementation of sustainability?
 - iv. sustainability reporting?
- c. What are the biggest challenges in utilizing certificates and ratings?
- d. How could the utilization of certifications and ratings as part of sustainable business development and decision-making be improved?
- e. Are the certificates and ratings you have comparable with each other and with the ones of other companies?
- f. What do you think the future holds for certifications and ratings?

Focus on specific certificates and ratings and their processes:

- a. Which are your most important certificates and ratings?
- b. Which certificate and rating are the easiest and most difficult to maintain?
- c. Can you describe the process of maintaining
 - i. EcoVadis/CDP/x certificate?
 - ii. DJSI/MSCI/x rating/index?
- d. What have been the requirements for obtaining/maintaining this certificate or rating? What data is required?
- e. What do you see as the biggest challenges in maintaining certificate and/or rating x?

Closing:

- a. What help would you need with sustainability certifications and ratings?
- b. Would you like to add something that has not been discussed yet?

Interview structure for external assessment body interviews:

Introduction:

- a. What is your current role and responsibilities at your company?
- b. How are sustainability certificates and rating/indexes part of your work?
- c. What is the overall level of utilization of certifications currently in the industry?

Understanding why and how companies obtain certificates and ratings:

- a. What (internal and external) motivations have companies had when they are pursuing a certification or rating?
- b. What do you see to be the benefits of obtaining a certificate and/or rating?
- c. What are the common barriers when initially obtaining a certification and/or rating?

Focus on specific certificates and ratings and their process:

- a. Which certificate and rating are the easiest and most difficult to obtain?
- b. What are the requirements for obtaining and maintaining certificate or rating x? What data is required?
- c. What shortcomings are common when companies are applying for certificates and ratings?
- d. How do you support companies while they obtain a certificate or rating?
- e. How often should a certificate be recertified?

Understanding how certificates and ratings are utilized:

- a. How can certifications and ratings be utilized on a strategic level?
- b. How can the certificate or rating support
 - i. decision-making?
 - ii. business development?
 - iii. implementation of sustainability?
 - iv. reporting?
- c. What do you think are the biggest challenges in utilizing certificates and ratings?
- d. How could the utilization of certifications and ratings as part of sustainable business development and decision-making be improved?
- e. How well are the certificates and ratings comparable with each other?
- f. Do certifications add value along sustainability reporting? How?
- g. What do you think the future holds for certifications and ratings?

Closing:

- a. Would you like to add something that has not been discussed yet?

APPENDIX D: EXAMPLE OF CODED INTERVIEW DATA IN EXCEL

| | Requirements outside/externally | Motivation | Value | Regulation and legislation | Choice of rating/certification | Tools |
|-----------------------------------|---|---|---|---|---|---|
| Non-rated or -certified companies | Institutional investors require a lot, as they have big international customers requiring or want to see their suppliers as part of their. We are part of a global corporation , which decides, communicates and define the things in this area. so on a product level we do not make. Customers are requiring them more and thus we are developing/trying to find the most suitable. Also requests have increased if the Customers are requiring and we act based on those. We are being audited in similar ways as tool 2 in many cases. As an SME we need to function as the customers want and cannot come up with our own solutions (also motivation). We respect Customers requests have increased , it is a requirement for business/trade (not strategic). Environmental issues and such | E.g., ISO systems requirement came from the customer, it was prerequisites for trading . There is a condition or such for doing. True desire to tell customers and stakeholders how the company works with sustainability/responsibility . Internal Motivation to get ahead of competitors and be more competitive on the market. Customers can get discounts when purchasing. Mostly customer/externally driven. The goal is to increase sales and to offer customers what they are looking for . To be more transparent , get a verified stamp of approval, what the environmental impacts are. Verified and registered on . We want to operate sustainably (responsibly) and we believe that the values employees have, require a | The price is still important, as long as it works as a driver... E.g., life cycle costs including sustainability/responsibility stuff bring a new. The certificate itself is not the main goal, it is the operations model. We want the employees and customers to see and experience that our | The contents of a company's annual report can be influenced by regulation . The purpose is (also for stakeholders) so that their meaning might decrease or disappear . On the other hand we can think that these support each other because e.g. I think it is weird that someone would have to dictate these, because the customer saves with these as well and it is a good thing for Legislation guide/steer more vigorously , they also usually have some kind of transition period . But companies can do things in | They are evaluated on a case by case (-specific) , where they come from (the need/requirement). what does . Probably that it suits/fits the industry/field of business , and that it has direct ways to impact the industry in that context the. Look what others have in the industry, competitors, big companies etc., what are the current trends. We need to adjust to those certificates or operation models that our customers require . We do not even know all the possible certificates/ratings. Throughout the history of this company we have strived to build our. Since the certificates costs are high and requires resources , we consider if we can build our own process so | It can be seen in the way that we need to answer quite a lot to different things . We do not really use them the only way is that. Can be used to audit the processes of a company , realize what can be improved and done better. There are communication benefits, we can with that communicate/signal that we fulfil this certificate and we operate . Also offer calculations to customers, such as carbon footprint per machine when they are manufactured the environmental impact. Not. The ratings/certificates provide a great tool to clarify a company's processes when going through them if they are not in |
| | Investors and customers require/requested certificates/ratings. Customers (tool 2) and investors tool 3 and other similar ones. Different stakeholders have different needs. Both customers and investors. Mostly started from when partners in the value chain, suppliers and customers value them and knows how to interpret tool 2 is requested by the customers, we have a desire to serve the clients, thus it is triggered from the outside and becomes then "internal". Our customers (one of the biggest if not the biggest) require them, it is a necessity for many of them. We would lose a lot of customers, if we are part of a corporation , which steers and makes requirements. | Updated sustainability agenda -> in line with ESG , so that all themes would be a bigger part. Thus, tool 4 is good to track how we are. Internal: See how we perform, what are the targets for development, these have come from our executive/management group. Achieve set. The goal of becoming part of S&P Global , since it portrays a specific picture of us. It gives something concrete that we can. Communication with stakeholders , so that we speak the same language. Another main driver is the forest industry , since they are. I think it is an external view on our ESG performance, and it is a stronger message externally than when we just tell, so it provides. The goal is to improve points (rating/grade) - it is connected to a "loan" or a financing instrument, better grade | The company sees them in high value (appropriate them?), because they want to become the industry leader in sustainability. They have a new updated sustainability agenda, that is inline with ESG and consider more strongly all the themes. For this tool 4 Global Compact is seen as frustrating, since it has same or very similar questions as other certificates/ratings/reports. The benefits are. Current situation/value/benefit: In the big picture, where all these aim is primarily transparency in non-financial . I believe everyone gets some level in e.g., MSCI. Our goal is to increase our points e.g., in tool 2 every year, especially when it is. The goal is to ensure, that the certificate remain valid every year . -- E.g., ISO standards and other certificates can help to. It is not really seen in any other way, than in customer contacts, since the questionnaires mostly come from the customers that what | The regulation does not yet steer business practices or what should be improved especially for those (ratings) that EU Taxonomy is becoming a "bigger" part and can be seen in the other ratings (tool 5, tool 4), it is also the only one that is referring to a law. Future : So I hope everyone would start publish their data in a form that can be used by the ratings. It is interesting to see what value these | A goal was set to achieve points that year, so that if the company would be big enough in terms of their revenue/turnover, so. The certificate/rating needs to be reliable/credible and well-known (as for example tool 4). As these are laboursome . Then we have some mandatory , e.g., UN Global Compact - Communication on Progress, which is similar to the others, as you are. There are a lot of requirements (for participating) coming from outside and we try to answer most of them. But of course we do. Since our products are shipped to over 100 countries , thus ISO standards that are global and since our customers are global is. One important factor is that the auditor needs to be global , it needs to be well-known . Makes the process easier and more reliable. | A valuable tool, that helps to understand where to focus on and what should be improved . The points show what to focus on. Shows where to focus on (in the future). They show current themes where the company should focus and what the possible indicators. Tool 4 current, there is a lot of themes we have not even realized are big themes, such as cybersecurity, that we need to fulfil/convinc. Current/synthesis: The reporting supports more the ratings, usually the annual report is published before the ratings questionnaires. Used for different purposes (feels like it). Investing ESG questionnaires cover quite well the entire field. |
| Rated and/or certified companies | Can be seen as part of reporting. | Do things to achieve a specific certificate or rating or someone is requiring it from the company. To get access to a supplier pool , where they can get more sales and such. | Can increase sales when getting access to a supplier pool when obtaining a certificate and/or rating. | Especially smaller companies are wondering as there are coming new regulations from the EU if it is mandatory to | Its best to choose certificates/ratings that complete the strategy - important for the strategy. Its not good to participate in all. | |
| | External: stakeholders, investors . It depends on what you do, can come from the consumers as well. Investors might be the | Internal: aspiration for truly do something good and e.g., be environmentally friendly in business operations, so that we get someone to check that we do everything properly. So that | | | | |

Company names have been taken away from Excel, which were used to identify to which company the statement belongs to. Also, some of the different ratings and certificates mentioned have been changed to tool 1, 2, 3 and so on to minimize connectivity to specific companies.