Utilizing benchmarking for compliance to the ESG: an exploratory study

Author: Mika Beukert[1]

Graduation Committee Members:

1st supervisor: Dr. T. Oukes[2]
2nd supervisor: Dr. K. Sigurdsson[3]

Abstract

The European Commission has presented the Corporate Sustainability Reporting Directive (CSRD), which obliged large organizations to report on environmental, social, and governmental organization activities. Due to this, organizations are facing challenges. These challenges, if solved, could provide benefits. To solve the challenges, this paper introduces a model, which is created by using existing literature on benchmark and stakeholder analysis. Existing literature is used to provide an overview of the challenges and benefits. The external benchmark is used to determine sustainability categories and their relevance. The internal benchmark determines the importance of the external categories. The results are used for a gap analysis, to discover if the categories are important to report on. The external benchmark resulted in 11 categories. The internal benchmark provided 2 crucial categories, 3 less relevant, 3 possible competitive advantages, and 3 categories with improvement opportunities. Therefore, by applying an embedded single case analysis, organization x is aware of the implications of the categories and can make action plans to solve the challenges. There is no research done on how the CSRD challenges could be solved. This paper has created a comprehensive model that can be used to overcome the challenges, which has not been done before.

Keywords: Corporate Sustainability Reporting Directive, benchmark, stakeholder analysis, MB-model, sustainability

1. Introduction

Over the last decades, public opinion about Environment, Social & Governance (ESG) has changed. The reason for this is the increase in climate change awareness and environmental problems. Firms are expected to integrate these aspects into their decision-making and strategies (Billio et al. 2020). In line with this development, the European Commission (EC) has implemented changes in the existing laws, to make them stricter for large organizations. The EC defines an organization as large if the organization has more than 250 employees, the turnover is more than 50 million, or the balance sheet total is more than 43 million (European Commission, 2003). In this paper, the perspective of a large construction organization is used, which will be called organization x. Their revenue is above 1 billion euros, and the employee level is above 1000. Thus, compliance to ESG is necessary. The construction industry is chosen because it is one of the largest industries in the world economy (McKinsey Global Institute, 2021). However, the industry is also considered one of the largest contributors to CO_2 emissions with roughly 40% of the total emission coming from the construction sector (Global ABC, 2018). Therefore, this industry is under pressure to reduce its emission level. They must become greener, build more sustainable buildings, and be acting responsibly towards the climate. Hence, an analysis must be made that enables construction organizations a roadmap, which ensures that those organizations can overcome the challenges of ESG.

---

[1] Master of Science Graduation Student, Business Administration, Faculty of Behavioral Management and Social Sciences, University of Twente, The Netherlands.
[2] Department of Entrepreneurship and Technology Management, University of Twente, Enschede, The Netherlands
[3] Department of Entrepreneurship and Technology Management, University of Twente, Enschede, The Netherlands

The EC has also issued new regulations and restrictions for organizations. All of this is meant to reduce the emission, the pollution in the air, ground, and water, and to reduce the waste of organizations. As of this moment, the implementations, made by the EC, are meant for big organizations. Multiple studies have mentioned that the regulations and restrictions, regarding the ESG, are the cause of new challenges faced by organizations (Ameashi & Grayson, 2009; Boffo & Patalano, 2020). However, they failed to give a comprehensive understanding of what organizations should do to overcome these challenges. Organizations that are having a bad environmental directive, could make an organization vulnerable to legal action or regulatory penalties; bad treatment of employees may lead to high absenteeism, lower productivity, and weak client relations; and weak corporate governance can incentivize unethical behaviors related to pay, accounting, and disclosure irregularities, and fraud (Boffo & Patalano, 2020). Thus, by complying, organizations can avoid the negative consequences of ESG.

The initiative, in which the regulations of the EC are implemented, is called the Corporate Sustainability Reporting Directive (CSRD). Due to the CSRD, which was introduced in 2020 and is in line with the climate agreement of Paris, organizations have to think about their ecological, social, and government footprint. The CSRD introduces eco-labels for financial products. The EC intends to encourage investments in sustainable economic activities (European Commission, 2020). Furthermore, the regulation entails the adoption of durability in prudential claims for financial corporations and changes in non-financial reports. Also, organizations must prepare for the most recent publications of the DNB (climate risks), the European and country-own climate agreement, the United Nations Principle for Responsible Investment, and the Recommendations from the Taskforce on Climate-Related Financial Disclosures (European Commission, 2021).

Organizations must deal with a lot of regulations. However, not all organizations have the necessary data and knowledge to develop the right strategy to overcome the ESG challenges. Therefore, benchmarking can be a great tool to gather valuable information and compare different processes and practices with others to provide great value for the organizations. Benchmarking is a comparative method where a firm finds the best practices in an area and then attempts to bring its performance in that area in line with the best practice (Sekhar, 2010). It is a reference point to measure and when applied to work processes yields superior results (Sekhar, 2010). Therefore, organizations can learn from one another to achieve the best practice possible. According to Mertins et al. (1995), there are two distinct benchmarking techniques: internal and external benchmarking. These techniques are then divided into different segments. With internal benchmarking, the authors implicate that organizations try to learn from their branches, departments, and sister companies. External benchmarking is a technique for looking outside the practices of the own company. These are compared with their practices. This paper aims to combine internal and external benchmarking. In doing so, the best practices of both techniques are combined, to gain better and more relevant information. Benchmarking could provide benefits such as: increased customer satisfaction, productivity, quality, implementation of continuous improvements, increased market performance, environmental awareness, and industrial competitiveness (Purwanto et al. 2020). These benefits are reflected in the ESG responsibilities, because, due to the benchmarking strategy, organizations are acting more towards solving the challenges provided by the new regulations. Thus, benchmarking could provide to be a good tool.

Stakeholders are individuals, groups, and organizations who have an influence on or are influenced by an organization (Freeman, 1984). By gaining knowledge and information about the organization's stakeholders, organizations could develop an understanding of them. Moreover, it is also possible for organizations to identify certain opportunities. Stakeholders could also have the potential to give direction to an organization's project or targets (Mason & Mitroff, 1981; Crosby, 1992; and Walt, 1994). So, for organizations, it could be useful to implement a stakeholder analysis. A stakeholder analysis aims to understand the stakeholders from the perspective of the organization. By addressing this perspective, it is possible to determine the relevance of the targets and projects of the organization, as well as the level of influence the stakeholders face or have on the organization. (Brugha & Varvasovszky, 2000). Stakeholders are defined as individuals, groups, and organizations who have an influence on or are influenced by an organization (Freeman, 1984). By gaining knowledge and information about the organization's stakeholders, organizations could develop an understanding of them. Moreover, it is also possible for organizations to identify certain opportunities.

Stakeholders could also have the potential to give direction to an organization's project or targets (Mason & Mitroff, 1981; Crosby, 1992; and Walt, 1994). So, for organizations, it could be useful to implement a stakeholder analysis.

The main goal of this research paper is to find out how the usage of internal and external benchmarking, in combination with a stakeholder analysis, can improve the compliance of construction organizations to the ESG. The reason for using such a combination is that it does not exist. Thus, this paper fills a gap in the existing literature. However, since such an analysis has not been done before, it could also imply that it could not have any contribution towards the literature. In line with the main goal of this research paper, the main research question will be:

RQ: How can construction organizations use internal and external benchmarking, in combination with a stakeholder analysis, to improve their compliance with the CSRD?

This paper contributes to theory and practice in the following ways. Firstly, this paper is built on the existing literature on ESG (Henisz et al., 2019; Pagano et al., 2018). It also provides the challenges of ESG for large construction organizations (Amaeshi & Grayson, 2009; Boffo & Patalano, 2020). However, these studies lacked solutions for the challenges and what the benefits are for organizations when complying with the ESG responsibilities. This paper will provide a solution for the challenges in the form of benchmarking. Benchmarking can be a useful tool for organizations to use because it provides insightful data for the development of new ideas and practices. Furthermore, this paper provides practical implications, specifically for the construction sector, which has not been done before. It provides organizations with a clear view of how a benchmarking strategy can help organizations with compliance with the ESG. This paper will provide a model to guide organizations toward a suitable solution. The model that is created, is called the MB model. It combines the strengths of internal and external benchmarking, and stakeholder analysis. The result will be a roadmap for organizations to help them in complying with the ESG regulations. Since such a model does not exist, this paper could potentially fill a gap in the literature.

This paper consists of the theoretical framework, which will discuss the literature and theories that are relevant to this research. The research methodology describes the methods that are used for this paper. The findings will discuss the results. This paper ends with a conclusion.

2. Theoretical Framework
The theoretical framework defines and discusses different theories, terms and concepts related to the aims and goals of the research. The paper focuses on the following theories: ESG and subsequently the CSRD, the benchmark theories, and the stakeholder analysis.

2.1 Environmental, Social, and Governance
The definitions of the Environmental, Social and Governance parts are provided in this section. ESG is the abbreviation of Environment, Social, and Governance (Henisz et al., 2019). The environmental criteria include the organization's energy usage, waste discharge, resources needed, and the result of the consequences for existing as an organization. Moreover, it also includes carbon emissions and climate change. Organizations are using energy and resources for their operations, and are affected by the environment, but also have an effect on the environment (Henisz et al., 2019). The social criteria include labor relations, diversity, and inclusion. Organizations are operating in a wider, more diverse society. The criteria address the relationships and the reputation of organizations it has with people and the communities where business is conducted (Henisz et al., 2019). The governance criteria refer to the extent organizations are complying with the stakeholders' needs and the regulations. Organizations have to comply with the regulations of the countries it is conducting business in (Henisz et al., 2019). The internal practices, procedures, and controls of organizations should be in line with the regulations and should be adopted in the decision-making and strategy. In the end, organizations are seen as a legal creation, that require governance (Henisz et al., 2019). With the ESG criteria, the EU focuses more on sustainability. Therefore, the European Commission has issued the Corporate Sustainability Reporting Directive (CSRD) and the EU taxonomy, in which large organizations are obliged to comply with those regulations. The CSRD is used to comply with the ESG criteria.

The Corporate Sustainability Reporting Directive (CSRD) is the new initiative of the European Commission. An overview of the CSRD is given in Table 1. It builds on the existing rules: all large organizations and all organizations listed on the regulated markets are falling under the scope

of the regulations. Also, it requires organizations to report information about the audit and assurance. The CSRD adds requirements, that will be discussed later in this section. Thus, the CSRD has added requirements to the organizational requirements and risk management of organizations. This change makes obligations to the organizations to be transparent about the integration of sustainability risks. Organizations should hereafter make an inquiry about the ESG preferences of their clients.

The EU rules require large companies to publish regular reports on the social and environmental impacts of their activities. These laws require large companies to disclose information on the way they operate and manage social and environmental challenges. Organizations have to publish information regarding environmental matters, social matters and treatment of employees, respect for human rights, anti-corruption and bribery, and diversity on company boards. In the end, this could help investors, civil society organizations, consumers, policymakers, and other stakeholders to evaluate the non-financial performance of large companies and encourages these companies to develop a responsible approach to business (European Commission, 2021).

The first added requirement of the CSRD is double materiality. The double materiality concept entails the impact of the organization on the climate, and the impact of the climate on the organizations. The reference to the company's development and performance position indicates financial materiality, in the broad sense of affecting the value of the company. Climate-related information should be reported if it is necessary for an understanding of the development, performance, and position of the company. This perspective is typical for most interest to investors. The reference to the impact of the company's activities indicates environmental and social materiality. Climate-related information should be reported if it is necessary for an understanding of the external impacts of the company. This perspective is typical of most interest to citizens, consumers, employees, business partners, communities, and civil society organizations. However, an increasing number of investors also need to know about the climate impacts of investee companies to better understand and measure the climate impacts of their investment portfolios (Baumüller & Sopp, 2021).

Secondly, the CSRD adds a requirement to the process to select material topics for stakeholders. Materiality assessment is the process of identifying, refining, and assessing numerous potential environmental, social, and governance issues that could affect your business, and/or your stakeholders, and condensing them into a shortlist of topics that inform company strategy, targets, and reporting. The process consists of seven phases; Define purpose and scope, identify potential topics, categorize, gather information about the impact and importance of topics, prioritize, engage management, and seek stakeholder feedback. Organizations can get the most benefit from their materiality process by using it as an opportunity to apply a sustainability lens to business risk, opportunity, trend spotting, and enterprise risk management processes (Bartels et al. 2014).

Forward-looking information refers to business predictions of the business state of affairs (Alkhatib, 2014). So, the requirement for more forward-looking information, including targets and progress thereon implies that the organization should make forward information, regarding the ESG, clearer and more elaborate. According to Alkhatib (2014), forward-looking helps organizations determining their short and long-term strategy. In this way, they are exposed to less risks, since they have predicted what happens in the future. So, they have knowledge and information on how to deal with some (or all) risks.

The CSRD must be reported in line with the EU Taxonomy Regulation. The EU taxonomy is another guideline of the European Commission, to create a more sustainable future. The EU taxonomy, a classification system made by the EC, focuses on six environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, prevention of pollution, and the control of it, and the protection and restoration of biodiversity and ecosystems. Organizations are expected to adopt these objectives in their strategy and decision-making. If they succeed/fail to meet the requirements, the EU taxonomy will provide organizations an overview of whether their economic activities are sustainable or not (Lucarelli et al. 2020).

Table 1: Overview of the CSRD

	Category	**Information**
Background Information	*Applicable for*	Large organizations that meet two of the three criteria: *>250 employees*

		>40M turnover
		>20M total assets
	Application date	October 2022: first set of standards
		January 2023: application of the reporting requirements
		October 2023: second set of standards
		2024: audited report including CSRD
		Organizations have to report about:
CSRD	*Environmental criteria*	Implementation and performance of EU Taxonomy objectives:
		1. Climate change mitigation
		2. Climate change adaptation
		3. Water and marine resources
		4. Resource use and circular economy
		5. Pollution
		6. Biodiversity and ecosystems
		Double materiality
		Environmental protection
		Materiality assessment for stakeholders
	Social criteria	Social responsibility
		Treatment of employees
		Respect for human rights
		Diversity on company boards
		Intangibles (social, human, and intellectual capital)
	Governance criteria	Anti-corruption and bribery
		Implementation of the Sustainable Finance Disclosure Regulation
		Forward-looking information

2.2 Challenges

The challenges regarding the CSRD are defined and discussed in this section. The implementation of regulations regarding ESG has brought challenges for organizations to overcome. An overview is given in Table 2. Amaeshi & Grayson (2009) addressed five key challenges regarding compliance with ESG. The first relates to the complexity and power relations. The issues regarding ESG responsibilities are acknowledged to be very complex. Due to this complexity, the issues are more difficult to address, integrate and assess within the management decisions. Moreover, this makes understanding the ESG issues much harder. Therefore, there is no clear view of what is acknowledged as ESG and what is not. The reason for this is that the ESG agenda is expanding with new theories and regulations about what is considered responsible business practice. It was a simple set of ethical principles and now it embraces many more issues. In this way, the stakeholders are demanding more information from the company, regarding the ESG (Berkeley et al. 2003). Boffo & Patalano (2020) also addressed transparency. Due to the complex challenge, the transparency of the ESG responsibilities is vague. This results in a harder-to-reach alignment of the sustainable financial objectives of investors with the financial and social returns.

Secondly, the authors addressed the challenge of quantification and financialization. The quantification of the ESG data must be a thing so that it should be tangible and responsive to external and internal forces (Callon & Munieza, 2005). By implementing this, the market system is comparable and contrastable. Because of this, stakeholders can identify whether the company's financial performance went up due to ESG compliance or due to some other reason. Therefore, quantification and financialization are important themes for organizations and stakeholders. The reason for this is that organizations could get frustrated, due to the inability of the market and actors operating in that market, to get a quantitative and financial handle on the ESG issues (Ameashi & Grayson, 2009). Although financial performance, in combination with a focus on the ESG issues, is important for stakeholders, it is no longer the roadmap to sustainable wealth. Over time, there has been a shift over what the stakeholders are expecting from organizations in terms of ESG. Therefore, organizations could follow the sustainable value creation framework, in which all the ESG costs and benefits are explicitly stated (Fatemi & Fooladi, 2013).

The third challenge is identified as inadequate management systems. Ameashi & Grayson (2009) stated that this is one of the main challenges in the integration of ESG. These systems have four key issues. The first issue is that the systems are unable to align the performance and reward systems of the employees, because most organizations have their focus on the short-term, while the ESG issues are long-term. Secondly, the poor decisions made in the identification and prioritization

process imply that ESG issues are not the top priority and are most of the time last-minute issues. However, the ESG becomes more important, so the decision-making should implement the ESG issues as a higher priority. This is further strengthened by the research of Campbell & Slack (2011), who claimed that environmental issues are often ignored by analysts because the issues are seen as perfunctory, while in reality, the issues become more important. Thirdly, there is the issue of the lacking skills in the determination of the materiality issues. The organizational social performance and the organizational financial performance have different implications for materiality. This leads to a conflict of interest. The short term is not sufficient, because the clarification for the financial materiality or the non-financial materiality is lacking the impact of the issues on the performance of a company (Boffo & Patalano, 2020). The last issue is that the management methodologies and approaches are underdeveloped. These underdeveloped skills are the poor communication skills and the lack of knowledge about the implementation of the ESG issues (Ameashi & Grayson, 2009).

The time horizon is identified as the fourth challenge. This challenge is essential in decision-making and is also one of the main challenges. The stakeholders are not primarily interested in the profit, but in the management integrity and transparency in terms of operational risks. This creates a mismatch between the short-term and long-term investment time horizons and the short-term and long-term investment interests. Organizations tend to have a short-term focus, in combination with an insufficient long-term strategy. This creates a misbalance, because the short-term strategy is based on numbers, and does not consider the complexity of the corporate management and investment (Ameashi & Grayson, 2009).

The fifth and the last challenge, as discussed by Ameashi & Grayson (2009), is trust and accountability. All the above-mentioned challenges are boiled down to the trust and accountability between the organization and its stakeholders. There is a distrust in the credibility of management because the stakeholders are concerned that managing the ESG issues is harming the stakeholders. The financial reputation is crucial to gaining the trust of the stakeholders. Management has to address the stakeholders' trust in the strategy and the ability to deliver. The communication, credibility, and quality of the financial reporting of the organization are all important for a trustworthy relationship with the stakeholders. Boffo & Patalano (2020) specified this problem by addressing that the reporting of the ESG should be relevant and consistent with the reporting frameworks. Therefore, organizations are facing a more complicated challenge. However, the outcome is that the reports are fulfilling the standards, which increases the trust of the stakeholders. Thus, by overcoming the challenges, the organizations and management are gaining more trust and accountability.

2.3 Effects of ESG compliance

The effects of the ESG compliance will be defined and discussed in this section. By complying with ESG responsibilities, organizations could benefit from it. An overview is given in Table 2. Implementing ESG regulations could have positive influences on organizational financial performance. Investors are interested in the financial performance of an organization because it provides insight into the economic health, management activities, future operations, profits, and stock (Kenton et al. 2021). Thus, financial performance is important for organizations, and therefore, an increase in performance is interesting for organizations. According to Whelan et al (2020), there is a relationship between ESG and financial performance, because improved financial performance, due to ESG, becomes more marked over a longer time horizon. In the short term, ESG investments do not result in a positive effect on performance. However, it had a positive effect in the long term (Hang et al. 2019). Dorfleitner et al.'s (2018) analysis provided significant results which stated that the returns of organizations (with strong ESG ratings) are 3.8% higher per standard deviation of ESG scores in the long-term.

Furthermore, ESG integration, broadly speaking as an investment strategy, seems to perform better than negative screening approaches (Whelan et al. 2020). Using this strategy (negative screening), as investors choose securities, they will exclude companies or industries they consider morally unsuitable for their goals. (Wallace, 2017). So, when organizations are looking for investments, they can compare the investment with their ESG goals, and based on this analysis, decide whether they are going to invest or not. Both approaches contribute positively to the organization. However, Ielasi et al. (2018) compared the different sustainable investing strategies and they found that there is a difference between the ESG integration strategies and the passive, active, and ethical

strategies, in favor of the ESG strategy. This research is further strengthened by Kahn et al. (2016), which showed the outperforming potential of mapping ESG issues and ESG improvement.

ESG investing appears to provide downside protection, especially during a social or economic crisis (Whelan et al. 2020). In times of a financial crisis, the ESG stock market (*green funds*) performed better and recovered its value quicker (Wu et al., 2017; Fernández et al., 2019). Therefore, the risks of investing in high-rated ESG are lower than investments made in low-scoring ESG.

The ESG challenges tend to drive the financial performance of organizations. Investments made to improve factors, such as risk management and innovation, are having a positive influence on financial performance. So, solving challenges could benefit the organization's financial performance (Whelan et al. 2020). Based on the outcome of solving the ESG challenges, Atz et al. (2019) developed the Return on Sustainability Investment (ROSI). This framework could be used to determine what effect the implemented strategy has on financial performance. It uses sustainability mediating factors. The mediating factors are identified by Vishwanathan et al. (2019). These are: enhancing the firm reputation, increasing stakeholder reciprocation, mitigating firm risk, and strengthening innovation capacity. By implementing these mediating factors into the strategy, the ESG score will improve (due to better sustainability), which will result in better financial performance.

Besides the benefits of financial performance, there are also other benefits. By implementing ESG practices in a good way, organizations can profit from competitive advantages. The first one is an enhanced brand image. With a better brand image, organizations can charge higher mark-ups, promote their ESG initiatives, and promote through word of mouth and advocacy (Jukemura, 2019). Nielsen (2015) stated that due to the positive contribution towards ESG, customers are having a better perception of the organization. Due to this, they are willing to pay more for the products and/or services. The research of Rivera et al. (2016) showed that there is indeed a positive relationship between ESG and customer satisfaction. However, organizations should not exaggerate, otherwise, it has a negative influence on the satisfaction level.

Organizations that can discover their ESG issues and address the issues that are ranked the most important, should adopt those sustainable activities. The reason for this is that these organizations are outperforming their competitors in the stock market (Khan et al. 2016). Such sustainable practices could include the usage of renewable energy, but also reducing the waste of paper. This results in better operational cost-efficiency. Better cost-efficiency is more interesting for the stakeholders because it shows that organizations can generate higher profits for the stakeholders (Jukemura, 2019).

Lastly, organizations that have already embedded the ESG issues and responsibilities, are facing less compliance risk to future regulations. If the issues regarding the ESG (and thus the CSRD) are changed, organizations can act quickly to the changes, because they already fulfilled the last set of regulations. It could provide organizations with less cost (Jukemura, 2019).

There is also evidence that suggests that by implementing the ESG regulations, organizations are facing negative influences or zero influences on the organizational financial performance. Only certain parts of the ESG have a negative or zero influence. The ESG disclosure on its own does not drive financial performance (Whelan et al. 2020). This could imply that the focus is more on what organizations are practicing than what they say they do. Fatemi et al. (2018) distinguished the ESG disclosure and ESG performance and found that the organizational value increased/decreased if the ESG performance is high/low. On the other hand, though, the author discovered that ESG disclosures had a negative effect. So, not all specifications of the ESG have a positive influence.

Table 2: Overview of the challenges and benefits

Challenge	Possible effect	Benefit if solved
Complexity and power relations	Weak alignment of sustainable financial objects between organization and stakeholder	Increase in the long-term financial performance
Quantification and financialisation	Implementation of ESG issues is not insightful for stakeholder	The positive contribution of the stakeholder towards the organization.
Inadequate management systems (main challenge)	Systems unable to align performance and reward systems of employees	Increase in employee engagement

	ESG issues are not a high priority	Less risk in compliance with future regulations
	Social and organizational financial performance are having different implications for materiality	Materiality is clear towards the stakeholders; performance is more specified
	Poor communication skills	Increase in stakeholder trust
	Lack of knowledge about the implementation of ESG issues	Outperforming competitors
Time horizon (main challenge)	A mismatch between short and long-term investment time horizons	More focus on the numbers in the long-term strategy; financial performance becomes more market
	A mismatch between short and long-term investment interest	Stakeholders are more interested in cooperating with the organization
Trust and accountability	Stakeholders are afraid of bad managing the ESG issues due to a lack of trust	Enhanced brand image; better cost-efficiency

2.4 Benchmarking

This part discusses what benchmarking is, the advantages and disadvantages, the different methods of benchmarking, a stakeholder analysis, the creation of a new model, and the relationship with ESG. Benchmarking is the process of recognizing, learning, and incorporating best practices from companies globally to help a company enhance its performance. (Singhania & Saini, 2021). It is a process that looks outward for best practices and good performances, and then evaluates real company activities against objectives (Kumar et al., 2006). According to Mertins et al. (1995), there are two distinct benchmarking techniques: internal and external benchmarking. These techniques are then divided into different segments. With internal benchmarking, the authors implicate that organizations try to learn from their branches, departments, and sister companies. External benchmarking is a technique for looking outside. The practices of the own company are then compared with the external practices. So, organizations have different methods to acquire new and valuable information and knowledge.

2.4.1   Internal

As mentioned before, benchmarking is divided into internal and external benchmarking. With internal benchmarking, similar processes within organizations are examined and compared to gain valuable information about the potential performance (Mertins et al. 1995). The advantages of this type of benchmarking are that it has no external limits that have to be considered, and data access and implementation are easy. Additionally, Isoraite (2004) noticed that usually less time and resources are needed in internal benchmarking. However, a downside of internal benchmarking is that the success regarding the performance is low because the different segments of the organizations tend to have the same cultural and organizational standards, which results in a lower success rate. Real innovation may be lacking and best-in-class performance is more likely to be found through external benchmarking (Isoraite, 2004).

Plant Related Benchmarking is a type of internal benchmarking. By implementing this, organizations are looking for similar processes within their company. The processes are signed by technological, organizational, and personal influences. Therefore, it is possible to compare those processes by building similar process groups. The comparison is made on four requirements. The effectiveness implies that processes have to fulfill the tasks and targets given to them. Secondly, efficiency implies that processes must fulfill their tasks with minimum expenditure. The ability to test and control: the state of a process should be known at any time and there must be the possibility to make corrections. Lastly, adaptability implies that processes must be designed in a way that they can be reached on changes in their surroundings (Mertins et al. 1995). This type of benchmarking will be hard to implement within organization x. The reason for this is that all the information regarding projects and processes has to be approved by the directors. The subsidiaries suggest certain projects and suggest changes in processes and make calculations. However, the directors have to be the ones that approve. This is a regulation from the organization itself, and they do not intend to change this.

Therefore, the focus will be on the other internal benchmarking type, which is Trust Related Benchmarking. Mertins et al. (1995) stated that this technique is used for the comparison of several plants within one company. Equal fields are examined. Additionally, a process is started through this channel of fair competition between the plants that build the absolute assumption for continuous improvement, especially in connection with external benchmarking. This type is possible within organization x. The reason for this is those standard storage percentages are used from the builder to the developer. The same holds for every subsidiary. In addition, the same objectives are always required from the group: the construction project must have a coverage of at least x%. The development project must have at least x% coverage. The other objective is that the result is at least as high as estimates have been calculated (i.e. a construction project with x% coverage can be a bad project despite coverage > x%. E.g. if estimates were based on coverage of x%).

2.4.2   External
The external benchmarking technique is thus looking outside the own company to make a comparison. This comparison means that there are similarities because only similar things can be compared. External benchmarking provides opportunities for learning from those who are at the leading edge, although it must be remembered that not every best practice solution can be transferred to others (Isoraite, 2004). External benchmarking takes more time and resources, but the findings and development of good recommendations are higher.

Competition analysis is an external benchmarking type, which provides information about the current and future market activities of the competitors, their strengths and weaknesses, as well as their possible reactions to specific behaviors. The difference between pure competition analysis and benchmarking is that in benchmarking, functions and services are always measured from the best. In this way, organizations are aiming to gain a better competitive advantage (Mertins et al. 1995). Although this paper is focusing on the competition, this type of benchmarking is not chosen, based on the complete focus on the competitors. The organization is also interested in possible benchmarks through non-competitors because this branch section could also provide valuable information.

According to Mertins et al. (1995), Branch Related Benchmarking (another type of external benchmarking) examines the efficiency of a definite function throughout the branch. It is not about the comparison of two firms, which is the case in competition analysis. In this case, a much larger group of companies must be examined. Brach-related benchmarking looks for trends and serves for the performance analysis of subsystems. The same holds for this type of benchmarking. The organization is looking within its branch. However, information from other branch organizations could be valuable.

Therefore, this paper uses the Branch Independent Benchmarking type. This type searches throughout a spectrum of branches for new, innovative practices, independent of their source (Mertins et al. 1995). Organizations are not looking for competition inequality, but superiority for long-term success. This type of external benchmarking aims to find the best practices and use them to innovate their organizational practices. Rolstadås (2013) revised the Branch Independent Benchmarking as described by Mertins et al. (1995) and concluded that it is the best practice because it is not bounded by one branch, but addresses the possibilities of other branches too. The focus of the organization is aimed to gather as much valuable information. The main objective will be within the same branch. However, there is a possibility that the information could be gathered by looking at other branches. By implementing this strategy, Mertins et al. (1995) stated that organizations are not going for the same results as competitors, but are focusing on higher long-term success and superiority. Therefore, organization x is using the Branch Independent Benchmarking type.

2.4.3 Benchmark Selection
The types of how this paper is going to benchmark have been described in the previous section. Camp (1989) stated that one cannot learn benchmarking by reading or taking a class, but by the hands-on learning experience. However, the author stated that by setting different steps for the benchmark process, several mistakes can be prevented. So, to get the right result from the benchmark, organizations could follow the benchmarking models described by Anand & Kodali (2008) and Bhutta & Huq (1999). Anand & Kodali used the model to benchmark the benchmark model they described and did this by literature review. Bhutta & Huq implemented a case study to describe the process. In

their case study, the organization used internal benchmarking (surveys) to improve its maintenance process.

First, the benchmarking model of Anand & Kodali (2008) is described. This model has an external focus and comparison strategy. It consists of ten steps and four phases. The following three steps are in the planning phase. The first step is identifying the benchmarking subject. The intention is to get a specific view of what the organization wants to compare. Next is to identify the benchmarking partners. The partners could be anyone the organization is trying to investigate. However, the partners should have a significant influence on the organization. Otherwise, the research would not be reliable. Step three is to determine the data collection method and collect data. Before collecting the data, a method has to be selected. By implementing this, the data collection would be much more structured and reliable. Then, the analysis phase. This phase consists of the determination of the current competitive gap, and the future performance of the project. The information gathered in step three will be used to determine the possible gap between the performance of the own organization and the best-practice organization. From this analysis, the future performance of the organization will be determined, as well as how this performance will be achieved and maintained. The communication of the findings and the gaining of acceptance are part of the integration phase. To communicate the findings, presentations with key people should be held, preferably by someone with a neutral view of the company. By implementing this, the findings are more likely to be widely accepted by the participants of the strategic developments (Kelessidis, 2000). Every organization has a different way of establishing goals. The functional areas, to which the findings are communicated, will be aware of the need to modify the existing functional goals. The functional area consists of the employees who carry out a particular business function. Therefore, the benchmarking findings should be converted into new operational and functional goals. This ensures the best implementation of the newly established goals (Kingdom et al. 1996). Lastly, the action phase consists of the development of action plans, the implementation of the plans and monitoring the progress, and possibly recalibration of the benchmark. Anand & Kodali (2008) did not describe the action plans and implementation of the plans, because these steps are meant to be applied in an industrial setting. However, organizations that are active within this industry should adopt those. These steps imply that organizations should develop action plans and implement those plans, to solve the challenges and achieve the goals. The development of the action plans should be done by the functional area since it is within their work area. In this way, the development will be most effective and efficient. This results in more practical plans and new procedures, thus more successful implementation (Kingdom et al. 1996). After the implementation of the action plans by the functional area the results have to be monitored, to ensure that the required results are achieved (Bhutta & Huq, 1999). It is possible that the functional area notices that the results are not achievable, are not achieved, or are achieved. The goals could be recalibrated, or there could be something wrong with the taken course of the process. However, the process could also be a success. Then the benchmark could also apply to other organizations (Bhutta & Huq, 1999). The last possibility is strengthened by Finnigan (1996), who mentioned that adopting the benchmarking process was essential for Xenox, to win major awards in different countries. This organization used this process to benchmark another organization. This was a success, so it started to benchmark other organizations too. The outcome speaks for itself.

The model of Bhutta & Huq (1999) consists of six steps in its benchmarking process. There is an internal focus. The first step is, similar to Anand & Kodali (2008), what to benchmark. In both processes, it holds the same implication. If organizations are classified as large organizations, it is more reliable to internally research the best practices processes, since there are more processes to compare with. Step two is to establish teams. After the decision on what to benchmark, the teams have to be established. This depends on what to benchmark. The reason for this is that internally, the area of the benchmark has the most knowledge and information regarding that area. So, the selection is important in terms of efficiency and effectiveness. Identifying partners and identifying critical measures is step three. The established team could look at other teams within the same process. However, it is also possible to collaborate with a team outside their process. This could provide other helpful insights, to improve the performance of another process. As mentioned before, this process is more oriented towards internal benchmarking, but it could also be possible to launch an external benchmarking. However, the implication here is that with the external search, organizations are learning from each other how a benchmark could be done internally. So, it is an external benchmark to

learn how to implement an internal benchmark. The team has made the identification, so the next step is to collect the necessary data. To gather the necessary data, different methods are applicable. The information, collected through the method, could help the teams in understanding where and what to improve. With the data collected, a gap analysis can be created. On the one hand, the analysis can be made by addressing the difference between the internal processes. On the other hand, the analysis could be made by addressing the differences between the processes of the external processes. The final step is feedback and review. All the gathered data is reviewed and made public to the functional area. This area is going to implement step-by-step changes in the process. At each step, the area is asked to give feedback. In this way, slight adjustments may be made, which could provide a better result.

There are differences between the two proposed benchmarking models. The formation of teams is done differently. In the model of Bhutta & Huq (1996), teams are created as part of the process, while in the other model, teams are created as the study progresses. Moreover the model of Bhutta & Huq (1996), the focus is more problem-based, while the other model is more process-oriented. The model of Anand & Kodali (2008) has more formal communication about the benchmarking findings, while in the other model, this is not the case. Thus, this paper adopts both processes to create the right structure for the interviews and literature review.

2.4.4 Stakeholder analysis

This section will contain elaborations on the stakeholder analysis. Stakeholders are individuals, groups, and organizations who have an influence on or are influenced by an organization (Freeman, 1984). By gaining knowledge and information about the organization's stakeholders, organizations could develop an understanding of them. Moreover, it is also possible for organizations to identify certain opportunities. Stakeholders could also have the potential to give direction to an organization's project or targets (Mason & Mitroff, 1981; Crosby, 1992; and Walt, 1994). So, for organizations, it could be useful to implement a stakeholder analysis. This analysis aims to understand the stakeholders from the perspective of the organization. By addressing this perspective, it is possible to determine the relevance of the targets and projects of the organization, as well as the level of influence the stakeholders face or have on the organization. (Brugha & Varvasovszky, 2000). Organizations must always be aware of the influence of the stakeholders. If there is a mismatch between the organizations and stakeholders, organizations could be attacked by the stakeholders. This could result in a loss of trust and accountability in the organization (Walker, 2000). Nowadays, stakeholders are showing an increase in the sustainability performance of organizations. Their decisions are often based on this performance because ESG issues are gaining importance (Pagano et al. 2018). So, if organizations do not want to lose their stakeholders, they should increase their compliance with the ESG issues.

According to Macharis (2005), the analysis consists of seven steps. The first one is to define the problem, which is the basis of every analysis. The problem has to be accurately described, otherwise, the research could be too large. This makes the research less reliable. Secondly, the stakeholders and their objectives are identified. Organizations have to determine who their most significant stakeholders are because they are the ones with influence on the organization. After addressing the stakeholders, organizations have to identify their objectives. The reason for this is that these objectives have to match the ones of the organization. This is to satisfy the stakeholders. Next, the importance of the objectives has to be determined. Certain objectives could be mentioned more often by stakeholders. This could imply that these are more important, thus organizations could focus more on the important objectives. The fourth step consists of giving every objective a certain indicator so that the significant objectives can be measured. This indicator provides the organization with a measure to what extent certain objectives are significant for them. In step five, the organization is evaluating the objectives on its own and searches for matches. The most significant objectives are evaluated with the indicator. This provides an overview of what is matched and what is not. The last step is to implement the matched objectives. Thus, the analysis has provided the organization with the matches. These matches should be implemented.

2.4.5 MB-model

The MB-model will be discussed in this section. By combining the strengths of the models of external benchmark selection (Anand & Kodali, 2008) and internal benchmark selection (Bhutta & Huq, 1999), and stakeholder analysis (Macharis, 2005), this paper will provide a new called the MB model. This

new model will provide organizations with a roadmap for identifying and overcoming their problems by using a benchmark strategy. The model will implement the best practices of the models as discussed by Macharis (2005), Bhutta & Huq (1999), and Anand & Kodali (2008). The MB model consists of eight steps. The data collection and data collection method are a continuous process throughout this model, The reason for this is that in every step, data is collected with a different method. The method is based on the specific criteria of the organizations. Therefore, it is a continuous process, and not a given step as is the case in the other models. Table 3 provides an overview of the MB model.

The first step is to identify the challenges the organization wants to investigate. In the models of Bhutta & Huq (1999), Anand & Kodali (2008), and Macharis (2005), the identification of the challenges is the first step. Therefore, the MB model, introduced by this paper, will start with the identification of the challenges. In this step, a clear understanding of what the challenges are is developed. The organization should collect data based on specific criteria.

The identification of the stakeholders is the next step in the MB model. This step is found in the models of Macharis (2005), Bhutta & Huq (1999), and Anand & Kodali (2008). According to Bhutta & Huq (1999), the reliability and effectiveness of the research will reduce if too many stakeholders are considered. Therefore, organizations should identify stakeholders with a strong influence on the ESG situation, to develop strong relationships with them and effectively comply with the ESG issues (Oleksiv et al. 2020). The method used to determine the stakeholders is the self-selection method (Chevalier & Buckles, 2008). This method makes use of experts, who have sufficient knowledge about the situation to determine the stakeholders.

The next step in the MB model is the identification of the external subjects, which is derived from the model of Anand & Kodali (2008). This model was focused on external benchmarking. It analyzed external literature to gather information on what the most addressed subjects were of other researchers. If certain subjects are often addressed, one can assume that this subject can be defined as highly significant. When subjects are not often addressed, there is a low significance level. Anand & Kodali (2008) determined a percentage for the occurrence, to call a subject common. When subjects are within a determined range, they are regarded as the best (Anand & Kodali, 2008). The reason for this is that these subjects are not common nor unique. Thus, these are the ones that not every company is using. This could imply that organizations can use this to their advantage, to gain a more competitive advantage towards the subjects other organizations are not having. Below the range, subjects are defined as unique (Anand & Kodali, 2008). The MB model uses the same strategy. The percentages are case-specific, so organizations should determine what they implement.

The fourth step in the MB model is to determine the external subject's internal importance. This step is derived from Bhutta & Huq (1999), which used internal benchmarking to analyze the ability of an organization to solve challenges. The internal benchmarking in their model aims to compare the processes within different departments. By implementing this, they were able to gain information on which topics cause processes to be more effective and efficient. Some topics will be mentioned more often. This implies that these will have a significant influence on the process, because, according to Geber (1994), the number is the trigger. The MB model will adopt the same strategy. However, some parts are different. The MB model will use internal benchmarking to compare the external subjects' internal significance within different departments. So, instead of comparing processes, it compares the subjects.

After the determination of the subjects' internal importance, the organization has an overview of what, according to the stakeholders, the most important subjects are. Then, a gap analysis could be made. The models of Macharis (2005), Bhutta & Huq (1999), and Anand & Kodali (2008) have all implemented a gap analysis. In these papers, the analysis is used to determine if there exists a gap between the performance of the organization and the best practices. There is the possibility that the performance is good or better compared to others. However, it is also possible that the analysis proves that the performance is not sufficient enough. Once the gap analysis is conducted, organizations are having an overview of the strong and weak points (Macharis, 2005). The MB model also implements the gap analysis. The gap analysis can be an important tool to find strong and weak points, because it will be easier to quantify or identify them and because it helps organizations to make improvements (Markovic, 2019). The information collected in the previous step will provide organizations with an overview of the most important subjects and to what extent these are implemented. Therefore,

organizations could make an analysis based on this information and certain standards it wants to achieve.

Step six is about the development and implementation of action plans. Anand & Kodali (2008) and Macharis (2005) stated that once the gap analysis is conducted, organizations have strong and weak points. Based on these, functional goals are established. Therefore, it is possible to develop and implement action plans. These action plans could be developed and implemented to further strengthen the strong points and/or overcome the weak points. According to Anand & Kodali (2008), the organization should prioritize the implementation of the action plans, because it should match with the stakeholders. The MB model adopts the same principle.

The implementation of the action plans is reviewed and will be given feedback, based on the results. Feedback and review are necessary for the continuous improvement of the effectiveness and implementation because it identifies possible flaws or mistakes, but it also identifies good results (Anand & Kodali, 2008). According to Bhutta & Huq (1999), this improvement can only be achieved by involving the stakeholders. It is step 7 in the MB model. Stakeholders are involved by giving feedback on the implemented steps. Then, the organization is reviewing the steps to identify why the established goals are/are not achieved. It provides the organization with an overview of where the wrong or right decisions are made.

If the goals are not achieved, then it is possible to recalibrate the taken steps. Based on the feedback and review, changes could be made in the taken steps. However, the stakeholders should be considered in changing the steps (Anand & Kodali, 2008). This is the last step of the MB model.

Table 3: an overview of the MB-model

Step	Why?	Definition
1. Identification of the challenges	Basis of the research	What challenges are organizations facing
2. Identification of the stakeholders	Sample of the research	Identify the most significant stakeholders
3. Identification of the external subjects	External data collection	External significant subjects will be provided.
4. Determination of the subjects' internal importance	Internal data collection	Determine the external subjects' internal significance
5. Gap analysis	Structure for the comparison	Make a comparison between the significant subjects of the external and internal stakeholders
6. Develop and implement action plans	Narrow the potential gap or strengthen strong points	Developing and implementing action plans to strengthen the competitive position
7. Feedback and Review	Show the result of the action plans	Feedback on the implemented action plans and review of whether the organization has made the right decisions
8. Recalibration (possible)	Solve the mistakes/flaws	If feedback and reviews show negative results, certain steps could be adjusted

3. Research Methodology
The methodology section will contain the research design. The unit of observation and analysis, data collection and collection process, and the data analysis, that are used in the MB model, will be elaborated. Furthermore, a list of found categories is given, with their implication.

3.1 Research Design
This study aims to explore the challenges and benefits of the Environment, Social, and Governance (ESG) responsibilities for large construction organizations. Furthermore, this paper proposes a benchmark strategy for management purposes. To accomplice these objectives, the following research question is created: *How can large construction organizations use internal and external*

benchmarking, in combination with a stakeholder analysis, to improve their compliance with the CSRD? The research question will be investigated from the perspective of a large construction organization, which is called organization x in this paper. The reason for the construction sector is that it is one of the largest sectors in the world, but also a very cyclical sector. If there is economic welfare, then the construction sector is flourishing and if the economy is declining, then the construction sector is one of the first sectors that is noticing this (Matwiejczuk & Gorustowicz, 2017). The products are complex due to the ongoing changes in, for example, the regulations. This ensures the discovery of interesting data.

This study uses a case study to investigate the research questions. A case study, as defined by Gerring (2004), is an in-depth study of a single unit, where the aim is to clarify the characteristics of a larger group. This paper uses the single case study. To be more specific, the embedded single case study. According to Yin (2018), single case studies focus on one group, person, or event. An embedded case study uses more than one sub-unit of analysis (Yin, 2003). There are multiple sub-units of analysis in this paper. This makes the single case study an embedded single case study. The focus in this paper is on the single case of organization x. The sub-units of analysis are the employees and external organizations.

The paper aims to propose a theory on how benchmarking could help organizations in their compliance with the CSRD. Data needs to be collected to gain valuable results. The process of collecting, analyzing, and interpreting non-numerical data is called a qualitative approach, according to Denzin & Lincoln (1994). A quantitative approach is defined as a systematic analysis of numerical data (Creswell, 2003). This study will focus on the qualitative approach because it is an exploratory study, which uses interviews to gather relevant data.

3.2 The research design of the MB model
This section will contain elaboration on the steps, of the MB model, taken by organization x. Elaborations will be given on the unit of observation and analysis, data collection and collection method, and data analysis. These will be discussed for each specific step. Table 4 provides an overview of the research design of the steps. According to Earl (2011), the unit of analysis is the prime entity that is analyzed, while the units of observation are units on which information is collected. Organization x has founded an ESG team. This team consists of employees that are actively engaged with anything that has to do with ESG.

Step 1: Identification of the challenges. The ESG team has determined that the difficulties, coming from the EC regulations, are the main challenges to overcome within this paper. The team has gained information, regarding the EC regulations, from the official website of the European Commission. In line with these regulations, they have determined that they are not possessing the right knowledge to figure out what subjects are relevant to report on. These subjects should be connected with the CSRD. By addressing the relevant subjects, organization x wants to comply with the regulations.

Step 2: Identification of the stakeholders. The data, regarding the identification of the stakeholders, is collected through the self-selection method, as described by Chevalier & Buckles (2008). The ESG team will determine the relevant stakeholders for this paper by using this method.

Step 3: Identification of the external subjects. The units of analysis are organizations that are actively complying with the ESG regulations. The units of observation are the competitors and non-competitors that are actively complying with the ESG regulations. The number of competitors and non-competitors is very large. Therefore, not every organization can be selected. So, this paper implements a smaller set of units of observation, to gain valuable knowledge. Again, purposive sampling is used. The chosen organizations are given in Appendix II. The data will be collected through the sustainability reports of the organizations. These reports are accessible through the internet. Creswell (1998) stated that the sample size must be between ten and thirty. However, the sample size is also dependent on when data saturation is reached. Therefore, this paper is collecting data in line with the research of Creswell, as well as on data saturation. Inductive coding is used because there is no information internally about what the external subjects could be. With inductive coding, the researchers develop codes that are used by the participants, so that the codes stay close to the data (Linneberg & Korsgaard, 2019). Bernard (2017) stated that by using inductive coding, patterns can be found in the data results. The interpretations of the codes will also be more reliable

when using inductive coding (Gioia et al, 2013). This results in a list of codes. These will be used in the next step.

Step 4: Determination of the subjects' internal importance. The employees of organization x cannot be questioned entirely. Geber (1994) stated that the number of interviews is not important, as long as the data showed valuable information. Therefore, a smaller set of units of observation will be interviewed. This is non-probability sampling, which is defined as a technique in which the researcher bases the sample on his/her judgment (Goodman & Kish, 1950). However, this may cause a sampling bias. A sampling bias implies that the collected variables to determine the distribution are not selected correctly. Also, it does not visualize the correct distribution, due to the non-random reasons (Panzeri et al., 2008). To reduce the sampling biases and errors, purposive sampling is used. Vehovar et al. (2016) defined this as a technique to select and judge based on criteria to create a representative sample. The steps in the sampling process are defining the population, sampling frame, sample of studied units, and data on studied units. The population contains all the employees in organization x. The employees are the sub-units of analysis. The organization has a database of over 1000 employees and a large number of connections tied to the organization. From this database, a purposive sample (Vehovar et al. 2016) is constructed. This paper has drawn the general managers of the subsidiaries of organization x to represent the employees. Creswell (1998) stated that the number of participants must be between ten and thirty. However, the number of participants is also dependent on when data saturation is reached. Therefore, this paper is collecting data in line with the research of Creswell, as well as on data saturation.

To collect the data, this paper uses the interviews. According to Bhandari (2020), interviews are the most common method in qualitative research. Interviews could provide a useful way to learn about the world of others. However, due to cultural differences, communicating could be difficult. Therefore, interviews should be well-planned. To overcome this challenge, the interviews in this study use the localist perspective (Qu & Dumay, 2011). The localist perspective implies that the interviewer adapts to the culture of the interviewee. By addressing the culture of the interviewee, the information from the interviews will be interpreted in the right way. Furthermore, the interviews will be semi-structured and have the same well-prepared interview protocol, see Appendix I. A semi-structured interview is a verbal interchange where one person asks questions and the other one answers them. The interviewer has a pre-determined list of questions, but has the chance to explore other issues that feel important (Longhurst, 2003). The semi-structured interviews could be relevant, because it could provide insightful data, that is gathered by applying different angles to the questions. This helps the interviewer explores the subject from a different perspective (Longhurst, 2003). The reason for the same protocol is that it structures the questions and there is a possibility to ask follow-up questions, which could provide more valuable data. By addressing the follow-up questions, the interview will be an in-depth interview with non-standardized questions. The interviews will be, where possible, physical. If it is not possible to do a physical interview, Microsoft Teams, Skype, or any other digital video call service will be used. To ensure the high quality of the interviews, several measures are used. The interviews will be recorded, transcribed, and coded, to interpret the data better. Interviewees will be asked about their compliance with the interview. The interviews are confidential, so the names are not made public.

Saldaña (2013) described the coding process as defining first cycle codes, then a smaller number of second cycle codes, and then categorizing them in potentially third and fourth cycle codes. By implementing this process, the coding of the transcripts would be much more structured, which decreases the chance of wrong interpretations. In the end, implementing a good coding process would have a positive effect on the research, thus deductive coding is used. Deductive coding implies that researchers have a list of pre-defined codes before the start of coding. There is more focus on the coding of existing theories (Miles et al. 2013). By using deductive coding for the data analysis, the pre-determined codes are counted to see what subjects of CSRD are used more often. These subjects of CSRD could be considered as most significant for the organization. The codes are pre-defined in the previous step. Due to this, the interview will be much more focused, because this paper already possesses external subjects, and it wants to research the internal relevance. This way of deductive coding is relevant, because prior research is done on the subject, which resulted in pre-defined categories. By applying deductive coding, time is saved and it helps guaranteeing the interest of the pre-determined categories (Hemmler et al., 2022). There is a possibility that the reports will provide

different topics than the pre-defined list. These topics could also be valuable and relevant for the organization. Therefore, this paper should not be biased toward the pre-defined list. First, the topics will be noted and thoroughly analyzed. The outcome could be that the topics are put under the pre-defined list. In Appendix III, the list of pre-defined codes is presented. However, it could be that the topics are not falling under a specific category. Therefore, the pre-defined list of codes could change, which could result in a re-organization of the list. This will result in more structured data.

        Step 5: Gap analysis. The unit of analysis of the gap analysis is the internal and external ESG subjects. The unit of observation is the subjects found in this paper. These subjects are categorized as found in Appendix III. The data is collected through the previous steps. The methods are already discussed. The data will be analyzed by making a comparison between the units of observations. To structure the comparison, this paper identifies, categorizes, and reports answers that are mentioned multiple times (Salmons & Wilson, 2008). After this process, the data will be synthesized and organized into more structured and coherent categories and sub-categories (Scott & Melissa, 2017). Therefore, a structured overview with the comparison between the subjects is generated and used for the next step.

        This paper will focus on steps one to five because further implementation is done by organization x. Steps six to eight are depicted in Appendix IV.

3.3 List of categories

This section will contain a list of categories, which is given in table 5. These categories are the pre-defined codes used in this paper. The first category is *employee welfare.* Employee welfare implicates the organizational decisions made to satisfy the employees. These decisions are meant to satisfy the employees, to keep them happy. The decisions are not the mandatory ones, but the ones that show that the organization is taking extra effort to keep their employees happy (Lalitha & Priyanka, 2014).

        The core idea of the category *sustainable development* is focused on the future. It tries to meet the present needs. However, it does not harm the needs of future generations (Rogers et al. 2012).

        Circular entrepreneurship is connected with a circular economy. The first one implies searching for opportunities and exploiting these in a circular economy (Cullen & De Angelis, 2021. A circular economy aims to extend the life cycle of a product as long as possible. This contributes to more sustainable usage of products, in terms of production and consumption (Kirchherr, 2017).

        Social entrepreneurship is a part of entrepreneurship where actions to create social value is created. It is an approach where the organization could develop, finance, or implement solutions that contribute to social institutions. These institutions could be a municipality, community, etc. (Abu-Saifan, 2012).

        Fifthly, *employee training*. This category is about what organizations do to train and further develop their employees. Moreover, it also includes how organizations are selecting new employees and what they do to prevent employee retention.

        The sixth category is *co2 management.* As mentioned before, organizations within the construction sector are seen as the largest contributor to co2. Organization x is no exception to this rule. Therefore, good co2 management is crucial at this time. It implies that the organization must implement a co2 management strategy, where the aim is to look at the impact doing business has on the environment. Co2 management does not only include the emissions from cars, but also of what the impact of the product on the environment is. So, it is the total output of doing business.

        Corporate governance is split into two categories, namely behavioral patterns and a normative framework. The first one refers to what strategy and directions organizations are following in terms of performance (financial and non-financial) and how they treat their stakeholders. The second one concerns the rules organizations are following. These rules are created and issued by the legal systems (Claessens, 2006).

        Then, *waste management* is identified. According to Reno (2015), waste management is the strategy organizations have to successfully manage the waste from the point of collecting to the recycling or monitoring. Nowadays, waste management is considered important, because it is seen as a human right. Moreover, it can also be seen as an economic opportunity, because, for example, reducing the amount of waste results in fewer costs, which could be attractive for organizations. Waste management could also imply that organizations are trying to expand the life-cycle of a product, to limit the resources needed. So, waste management has a wide range of sections.

The ninth category is *financial performance*. This category does not imply that organizations are striving for maximum profit. The implication is that organizations are interested in how compliance with the CSRD affects financial performance. They are also interested in whether the financial performance is sufficient enough to cover up possible losses and risks. Therefore, the focus is not on the whole financial performance, but rather on the specific part that has a relationship with the CSRD.

Risk management is part of the decision-making and strategy of organizations. Addressing this type of management includes identifying possible threats to organizations, and actively coming up with solutions to avoid them. If organizations have successful risk management, it has an overview of potential risks and how to cope with them. Therefore, it is important for the longevity of organizations (Hopkin, 2018).

The next category is *relationship building.* With this, organizations are trying to build and/or maintain relationships with their stakeholders, or with potential stakeholders. The relevance of relationship building, in combination with CSRD, is mentioned in section 2.1.2.

Table 4: research design MB-model

Step	Unit of analysis	Unit of observation	Data collection method	Result
1. Identification of the challenges	ESG regulations	CSRD	Literature review	Overview of the new and changed ESG regulations
2. Identification of the stakeholders	Stakeholders	External stakeholders	Self-selection method	Competitors and non-competitors
		Internal stakeholders		Employees
3. Identification of the external subjects	Organizations complied with ESG regulations	Competitors and non-competitors complied with ESG regulations	Sustainability reports or annual reports	Overview of external subjects
4. Determination of the subject's internal importance	Employees of organization x	General managers of organization x	Semi-structured interviews	Overview of external subjects' internal significance
5. Gap analysis	The externally determining subjects and the criteria of the ESG regulations	The internally determined significant subjects and the corresponding ESG criteria	Steps 3 and 4	A structured overview with the comparison between the subjects is generated

Table 5: list of categories

Category
Employee welfare
Sustainable development
Circular entrepreneurship
Social entrepreneurship
Employee training
Co2 management
Corporate governance
Waste management
Financial performance
Risk management
Relationship building

4. Findings
This section will provide a detailed formulation of the MB model. The challenges, stakeholders, external and internal benchmark, and the gap analysis will be discussed. The findings are related to organization x.

4.1 Recognition of the Upcoming Challenges
This section will contain the upcoming challenges. The European Commission has implemented the Corporate Sustainability Reporting Directive (CSRD). Due to this, large organizations have to report their intention for sustainable entrepreneurship. Organization x is a large organization. Therefore, they have to comply with the CSRD. They have no knowledge about what to report on and what is classified as relevant for them. So, their main challenge is to research the significant subjects and how to implement these within their organization. Since they have no report, organization x wants to do a benchmark, to comply. This paper will provide a structured analysis of how and what to benchmark and how these results can be translated into complying with the CSRD.

4.2 Selection of the Relevant Stakeholders
This section will contain the process used to determine the relevant stakeholders. To select relevant stakeholders, this paper has used the self-selection method, as described in the research design section. In line with this method, the ESG team of organization x has determined that, in this paper, the relevant stakeholders are the employees. The reason for this is that the employees are highly valued by the organization. Their opinion matters. Also, the organization believes that to comply, the employees of the different subsidiaries are possessing the knowledge of to what extent the CSRD is implemented within the organization. The other stakeholders, as determined by the ESG team, are the competitors and non-competitors. A list of these is found in appendix II. It shows also whether an organization is classified as a competitor or a non-competitor. A restriction in selecting these organizations is that they have to comply (to some extent) with the CSRD regulations. Research is done on other organizations active in the building sector. These organizations are all reporting about how they are acting towards CSRD. Also, research has been done on organizations not active in the building sector. The reason for this is that by analyzing non-competitors, other valuable subjects could be identified.

4.3 The Analysis of the External Organizations and Internal Stakeholders
The findings regarding the external subjects are presented in this section. The data is retrieved from thirteen sustainability or annual reports. These reports were thoroughly analyzed. In doing so, valuable information was gained about what subjects other organizations regard as significant. The subjects are used for compliance with the CSRD, subsequently the ESG regulations. To provide a structured section, this paper discusses first the first cycle codes and then the second cycle codes. By analyzing the reports of thirteen organizations, this paper gained a lot of valuable information. The information is based on the subjects organizations use to comply with the CSRD and subsequently the ESG. The analysis provided this paper with 217 subjects. However, some organizations had the same subjects. Also, some organizations reported, for example, *"safety & health",* whereas others reported it as *"health & safety".* This was changed into one subject because the implication is the same, but the sequence is not. After scanning for these themes, the amount was narrowed down to 88 distinct subjects, which are given in Appendix V.

The external analysis provided 88 distinct subjects. These subjects are categorized, to provide a more structured analysis. This resulted in 11 categories. The categories with their themes are given in Appendix V. Certain categories were mentioned more often than others. In line with the research of Anand & Kodali (2008), this paper uses percentages to determine if the category and themes are classified as unique, best, or common. The percentages are internally determined. These percentages are given in table 6. Table 6 also presents how often a category is classified as common, best, or unique. This is provided under the section amount. It shows that 5 categories are regarded as common, 5 as best, and 2 as unique. Table 7 provides the category-specific analysis. Employee welfare will be used to provide an example to illustrate this table. The first column refers to the number of distinct themes that are categorized as employee welfare. So, in this case, employee welfare has 15 distinct themes. The column mentioned refers to the number of times the themes are cited throughout all of the reports. So, the 15 themes of employee welfare are mentioned 43 times. The percentage is determined

by dividing the number of the mentioned column by the number of themes. This results in 1.54%. The reason for this is that each category could be mentioned more since organizations could use multiple themes to report on. This makes the percentage more reliable and equal to each other. Once the percentage is determined, one variable should also be included. This is the presence of each category in the report. Employee welfare is mentioned in every report, thus in 13 out of 13 reports. This results in factor 1, which is multiplied by the percentage column. This results in the total column. For every category, this is done. The total percentages are then used to determine the classification of the categories. Employee welfare has a total percentage of 1.54. According to Table 6, this classifies as best. Table 8 provides a clear overview of how often a certain category is used in a report. It also makes a distinction between whether or not the organization used is a competitor or not. Each category and its respective theme(s) are given in Appendix 5. To illustrate the definition and implication of the categories, examples of the themes from the sustainability reports are used. The selection of the themes is done randomly. It only provides a better understanding of how and what external organizations report on.

The external analysis is used to determine the relevance of the categories derived from the internal analysis. A grading system from 1 (lowest) to 10 (highest) is used in the interviews. In this way, this paper received a reliable implication on what the participants are regarded as relevant. Table 9 provides an overview of the average grades of the participants. To provide an example of this, employee welfare is used. Table 9 shows that the average grade of own perception is 8,9. This implies that the internal participants' perception of how important the category is to them, is graded an 8,9, which is high. This could imply that employee welfare is important to them. The average grade of organization x is 8,8, which is also high. The implication here is that the participants graded how important employee welfare is within organization x. Since this is also graded high, the assumption is that this category is seen as important by the participants for organization x.

Table 6: an overview of the classification process

Classification	Range	Amount
Common	> 2	5
Best	Between	5
Unique	< 1	1

Table 7: Classification of the categories

Category	Themes	Mentioned	Percentage	Total*	Status
circular entrepreneurship	24	37	1,54	1,54	best
employee welfare	15	43	2,87	2,87	common
sustainable development	16	40	2,50	2,31	common
waste management	1	10	10,00	7,69	common
employee training	5	14	2,80	2,80	common
relationship building	1	1	1,00	0,08	unique
social entrepreneurship	17	37	2,18	2,18	common
co2 management	7	14	2,00	1,69	best
financial performance	1	5	5,00	1,92	best
risk management	1	4	4,00	1,23	best
corporate governance	6	12	2,00	1,08	best

*Total is adjusted to the presence in the reports

Table 8: competitors vs. non-competitors

Category	Competitor total	Non-competitor total	Total
Employee welfare	8	5	13
Sustainable development	7	5	12
Circular entrepreneurship	8	5	13
Social entrepreneurship	8	5	13
Employee training	8	5	13
Co2 management	7	5	12
Corporate governance	3	4	7

Waste management	5	5	10
Financial performance	4	1	5
Risk management	2	2	4
Relationship building	1	0	1

Table 9: average grades

Category	Average own perception	Average organization x	Average total
Circular entrepreneurship	7,4	6,8	7,0
Employee welfare	8,9	8,8	8,9
Employee training	8,1	7,9	8,0
Waste management	7,4	7,1	7,3
Co2 management	6,6	6,3	6.5
Risk management	8,9	8,8	8,9
Corporate Governance	7,7	7,3	7,5
Social entrepreneurship	7,3	7,8	7,6
Sustainable development	7,4	7,0	7,3
Relationship building	8,6	8,9	9,3
Financial performance	9.3	9.5	9,4

4.3.1 Employee welfare
This section will consist of the external and internal benchmark of the category *employee welfare.*

External benchmark
The findings showed that the category is common. The category is mentioned in every report, while it also has a relatively high amount of themes. Employee welfare could be seen as highly relevant because every organization reports on the category. The many different themes could implicate that there are a lot of different ways to report on this. Every organization could thus have a different implication on what they consider relevant for their organization. It could also indicate that this category is highly relevant for compliance with the CSRD. Employees are, within the construction sector, hard to get. So, organizations are not wanting their employees to leave. Therefore, to keep them, it is key to have high employee welfare. The reason for this is that a happy employee is not eager to go, since they are satisfied with the services provided by the organization. Also, happy employees are willing to work harder in the right environment, because they feel connected with the organization. Certain themes, which were found, were mentioned by multiple organizations. An example of a theme that is classified as common, is *safety & health*. A general description of this theme is given by BAM:

> *"BAM aims to prevent all occupational accidents. BAM is pleased to inform us that no fatalities have taken place during 2021. The company regrets the (serious) accidents that involved people whose safety BAM is responsible for".*

So, this theme aims to prevent accidents and to keep the employees safe and healthy. To achieve this, Boskalis uses the NINA safety program:

> *"NINA makes people more aware of their responsibility towards safety and stimulates a working environment in which safety, responsibilities and potentially hazardous situations are openly discussed and reported".*

This theme could be seen as highly relevant. Although this theme is mentioned often, it does not imply that this is also the best for the organization. Themes, such as *employees with distance to the labor market* and *privacy* could also be valuable for organizations. These are not often mentioned and are classified as unique and best, respectively. However, that does not imply whether or not they are relevant or significant. The investigated organizations are all mentioning employee welfare, and it is

explained by multiple themes. Therefore, employee welfare is relevant and significant for external organizations.

Internal Benchmark

After the determination of the external significance of employee welfare, the participants of this study were questioned to determine the internal relevance of this category. Table 9 shows that the participants graded this category high, which indicates that employee welfare could be internally seen as a relevant and significant category. This is further strengthened by the explanations of the participants. An analysis is done on both their perception of employee welfare, as well as on how this category is implemented within organization x. Their personal opinion was mentioned in quotes such as:

Personally, I think it's important how the employees feel. They should feel comfortable within our company. There must also be respect. Just treat each other normally.

I really do think about the well-being of the people. If they come here happy, they are happy with their work. People, that is what matters first.

These quotes address the significance of how they feel about the welfare of the employees. It suggests that organizations have to make sure that the people should be the first thing they care about. In addition, people have to be happy. However, the first quote also suggests that people are also contributing to other people's welfare. The key word is respect. This was mentioned a lot among the participants. The second quote suggests that the employees of organizations are aware of their well-being. Therefore, the internal contribution toward welfare is noticeable. The interviewees stated that the employee welfare is very important for organization x:

Organization x is a family business, which is reflected in everything. Despite the size, you are not a number. You should see employees leave with a smile, that they feel good, that they have a pleasant working environment.

The employees on the other hand are really appreciated here. Low-threshold, phlegmatic that's how you could describe it. Despite your size, you are not a number.

Organization x believes that economic development is a process that leads to the satisfaction of employees' basic needs, improves their quality of life, and enhances their self-esteem and respect for the environment while increasing choice.

Some participants associated employee welfare with a family business. This association is based on how the employees are treating each other, but also how the organization is treating the employees. Organization x does a lot for employees to feel comfortable and feel at home in their organization. The culture could be best described as mentioned in the second quote: low-threshold and phlegmatic. However, these are not the only implications of how the organization contributes to employee welfare. The third citation implies that the organization's economic development creates a higher quality of life for its employees. In this way, this addresses the relationship between financial performance and sustainable awareness. Due to the higher quality of life, the employees are becoming more conscious of their choices regarding sustainability. The phlegmatically of the employees is derived from the following quote:

Let's just act normal, then we're acting crazy enough. This is the strength of Ten Brinke.

Such a quote could be associated with the location of organization x, namely the east of the Netherlands. It was mentioned multiple times throughout the conversations. The reason for this is that some participants are located in this part of the Netherlands. However, interesting to notice was that also other employees mentioned this quote. This could imply that the culture of organization x

connects with people from other regions. So, this part of the culture is transferred and implemented by others.

4.3.2 Sustainable development
The following section will contain the external and internal benchmark of the category *sustainable development*.

External benchmark
This category is defined as common. Therefore, for external organizations, sustainable development is regarded as relevant and significant. The United Nations has issued 17 sustainable development goals (SDGs). These are meant to provide a guideline for the different economic, social, political, and ecological aspects of sustainability. Organizations can choose what SDG(s) apply to their organization. They could choose for example 1, but also 10. The often mentioned SDGs are *industry, innovation, and infrastructure; sustainable cities and communities;* and *responsible consumption and production*. This is foreseen because these SDGs are highly correlated with the construction sector. Since the findings are mostly based on organizations within the construction sector or have a link with this sector, this paper anticipated the result. The themes, provided by the report, are used to contribute to the SDGs. Sustainability development did not have many themes. However, a theme that was mentioned multiple times throughout the reports, was *innovation*. In the context of sustainable development, innovation refers to changing the products, services, and/or production. These changes should result in environmental and social benefits, and also more profits. This explains why it is mentioned more often. A nice example of this theme is given by TBI:

"*One example of intensive collaboration and innovation in timber construction, in which TBI aims to be the market leader. Together with 'SAWA', we are developing the first terraced timber residential building*".

This building has the highest possible sustainability score. Some themes are connected. Some organizations used *energy transition,* while another company used *energy neutral.* Both these themes are related, but the implication is different. So, they both report on energy, only they use different measurements. One organization used *energy management*, which is the overall term for energy reduction and energy transition. This company used energy management because it reported on energy in a much broader way than other organizations. The findings provide more detailed and specific themes. This could indicate that it is more reliable and relevant to provide a more detailed report. The energy transition is also used in the category of co2 management. However, organizations are reporting differently on this theme. In sustainable development, the theme of energy transition implies that organizations are developing different strategies through innovation.

Internal benchmark
The internal benchmark provided some contradictions. The majority of the participants labeled sustainable development as important. However, this is in contrast with how important it is for organization x. Though, some participants explained that it was also important for the organization. The reasons why participants find it personally important, but not for the organizations are:

However, nowadays, many buildings are designed with solar panels, green facades, and heat recovery systems.

Organization x is not at the forefront of developments. We prefer to follow rather than invent it ourselves. It is not really paid attention to, although I personally think it is important.

We are not at the forefront of sustainable development, although there is great interest in such things. We just don't make them up ourselves.

Again, the culture of organization x is noticeable here: they do not want to be the trendsetters of certain developments. The developments are seen as interesting, but not much is done with them. Only

the necessary or important developments are implemented within the corporate structure. The aim is not sustainable development. The first citation is a good example of the following strategy. Projects are designed according to the current hype. Due to the current trend, organization x decided that it would also be useful for them to implement this. The following citations mention why sustainable development could be a useful category to consider:

You can sell projects by doing something slightly different from the competition. The developments are part of that. The better the development, the better the project, and the more interesting it is for the investors.

Sustainable development is the only way to success in the coming years. Organization x has already committed to transforming real estate buildings into 'green investment products' and marketing them worldwide.

According to the interviewee, doing something different than competitors is what creates value for the organization. Nowadays, investors are not only looking at profit maximization. They are becoming more interested in what the product has to offer in terms of sustainability. If a certain project is not sustainable enough, it is not interesting for them to invest in. The second citation implies that the only way to have success is due to sustainable development. It mentions that the organization is already active in developing sustainable innovations for future projects and that it can implement that in the market. However, this contradicts with other participants:

I have no knowledge of sustainable developments within organization x

This quote stresses the awareness of certain categories within the organization. So, employees could not know what the organization is doing in terms of sustainable development. Due to this, the determination of the importance could be affected and therefore be less reliable. Employees who are aware could regard this category as more important for the organization than employees who do not know anything. Therefore, it has to be careful in the assessment of this category.

4.3.3 Circular entrepreneurship
The external and internal benchmark of *circular entrepreneurship will be discussed in this section.*

External benchmark
It is classified as best. Furthermore, circular entrepreneurship is a category that is mentioned in every report. External organizations are thus using the category and are often using the themes. Therefore, this category could be considered relevant for external organizations. Circular entrepreneurship had relatively many different themes. *Digitalization and industrialization* is a theme that is mentioned often by different organizations. The relationship between this theme and circular entrepreneurship is that organizations are implementing digitalization into their manufacturing chain. By doing this, computers are determining which resources could be used for this process. With this, organizations are using resources that otherwise would not be used. This is cost-effective for organizations since there are fewer resources wasted. The implication and goal of this theme are given by Uzin Utz:

"Our superordinate goal is to turn the digital transformation to our advantage. Our processes are digitalized, so they are very structured. Automation makes work much easier in many areas, and our employees and customers can focus more heavily on their core tasks".

So, Uzin Utz shows, by reporting this, that they are seeing the positive effects of digitalization. They are using this development to their advantage. With the digitalization, the organization also showed an impact on the employees and customers. Their work becomes much easier. Easier work could result in more employee and customer satisfaction, which is significant for employee welfare. In this way, they are not only active in circular entrepreneurship but also in employee welfare. An example of how Ballast Nedam has digitalized is found:

"We use VR, 4D models, laser scanning, machine learning, and artificial intelligence".

With, for example, machine learning, they imply that due to the continuous use of the machines, these are learning an algorithm that influences the output. Due to this, the machines are using less waste, because the machines are aware of the previously used materials.

Internal benchmark
Externally, circular entrepreneurship was determined a significant and relevant category for organizations to report on. However, the results from Table 9 provided a relatively low grade in this category. The participants, on average, indexed that their perception of circular entrepreneurship was higher than how important it is within organization x. This moderate grade could indicate that for employees as well as for organization x, this theme is not that relevant and significant. This is strengthened by the following citations.

Circularity is important, but not the most important. Consideration should be given to reusing items, but not at the expense of price.

Overall, this was the implication of the importance of circularity. The participants are aware that circularity is becoming more and more relevant. However, it is not regarded as a highly important theme for them and within the organization. The reason for this is found in the culture of organization x:

We don't have to be a trendsetter in circular entrepreneurship. Just follow the regulations and no more than that.

Organization x is more oriented toward financial performance, while as a billion-plus organization, it could do much more. They should consider the long-term of certain projects, to maintain sustainable projects. The focus must not only be on the cash flow.

I think circular entrepreneurship is smart work. Demolish buildings, and reuse the rubble. Saves on hauling again.

Approximately half of the participants reported that although they see the importance of circular entrepreneurship, they do not regard it as most important, and thus not significant or relevant. The reason for this is the culture of organization x, which is mentioned in the second quote. They do not want to be a trendsetter. They are doing what they have to do, and nothing more. Another part of the culture is that the aim is on the price, revenue, and profit. Everything is relevant until it goes at the expense of money. Organization x could have a higher impact on the circular entrepreneurship:

We have a direct influence on circular entrepreneurship. When building projects, it is determined in advance what we can use and what not. There are also actions over which we have no influence because we work with subcontractors. Keeping track of everything exactly is difficult.

So, the citation suggests that the organization has a direct influence on circularity. However, this influence is limited by the subcontractors. This limitation is the result of the business strategy of the organization. They are designing and coordinating the project, but the subcontractors are responsible for the construction. Often, multiple subcontractors are working on one project. Therefore, it is hard to have direct influence over everything. The consequence is that the subcontractors are doing something which is not how organization x has determined it, which could have different impacts on the organization. This could explain why employees are regarding circular entrepreneurship as not that important.

4.3.4 Social entrepreneurship
Section 4.3.4.1 and 4.3.4.2 will contain elaborations on the external and internal benchmark of *social entrepreneurship.*

External benchmark
This category is regarded as common. It is reported in every report. Therefore, this category could be seen as relevant to external organizations. This could imply that it should also be relevant for organization x. TBI links this category with circular entrepreneurship. They use circular entrepreneurship as a strategic pillar for social entrepreneurship. Due to innovation in the circularity of products, the organization is trying to create a larger positive impact on society. A theme that is seen as the core idea of social entrepreneurship is *social impact*. The social impact of organizations is not the effect on the community, but also the well-being of employees, individuals, and families. Van Oord reported that

"as a family-owned company, we care about creating a sustainable world. Customer intimacy and partnering are key".

This could imply that social entrepreneurship is connected with a family-owned organization. However, the results show that every non-family-owned organization has reported on social impact. So, the assumption is that this theme is not bounded to family. An example of how a non-family-owned organization implements the social impact theme is given by Boskalis. They report that

"Boskalis is also actively pursuing opportunities for positive social impact in the area. We will engage with local schools on STEM-related (science, technology, engineering, and math) activities, work with local charities, conduct regular beach clean-ups and employ local graduates and apprentices".

This citation shows that also non-family-owned organizations are being active in their social entrepreneurship. In this case, Boskalis has a significant input on their social impact. Therefore, social entrepreneurship does not have to be family-bounded, which could indicate that it is relevant for all sorts of organizations.

Internal benchmark
Social entrepreneurship received moderate grades from the participants. In their perception, it was graded lower than their perception of how important it is within organization x. The following citations imply this moderate grade:

We are doing something in terms of social entrepreneurship through the Organization x foundation. Personally, I think this is not the most relevant for business operations, but it's good that we at least do something.

Social entrepreneurship is important, but a healthy company is much more important. This is not necessary to be a good company. It is good that we do, but no more than that.

These quotes show that although the participants believe that the category is important, it is not as most important for organizations to do good business. Organization x has its foundation and through this foundation, it is doing something. However, this is not the determinant for an organization to be a good organization. Though, the following quote suggests a contradiction:

Giving back to society should be a top priority. Some people have it bad, so do something for them too. This only helps you further as a company.

This implies that social entrepreneurship should have top priority. The reason for this is that there are people in need, who need help, and organization x has the capacity to do so. By implementing this, the participant believes that it will help the organization further in its development. Organization x has developed certain projects in third-world countries:

The construction of infrastructure buildings and the establishment of cultural education centers in countries such as Ghana, Sri Lanka, Mozambique, and now Namibia, where their inhabitants can be

self-sufficient is an example of sustainable implementation. As far as Europe is concerned, green buildings with low energy consumption and certified by international organizations should be a focus for Organization x in the coming years.

So, this participant is aware of the actions of organization x. The organization has built certain projects in third-world countries, to further help the people in those countries. The reason why this participant is aware of those actions is that he/she has an active attitude, whereas the other participants are not that interested in those developments. This quote also implies that the focus of social entrepreneurship should not only be focused on the third world, but also on Europe, due to the current developments in Ukraine and Russia. According to the interviewee, the organization could have an impact on this, because the focus is on building with low energy consumption.

4.3.5 Employee training
This section will contain the elaborations on the external and internal benchmark of the category *employee training*.

External benchmark
The category is seen as common. It is mentioned in every report. Employee training does not have a lot of different themes. The reason for this is that every organization is mentioning that they have certain programs to train their employees. However, they only mention it one time throughout their report. This is logical because the category is specific. Therefore, the organization could treat this as relevant, because it is mentioned in every report. *Employee development and talent management* is a theme that is the core of the other themes. Some organizations refer to it as *knowledge* development and some to it as *employee training.* Nedap is one of the organizations that invests a lot of time in employee development and talent training.

"*Next to the Nedap Introduction training (for new employees), we offered the Nedap Survival Skills training (focused on personal development) and the program Personal Leadership. We also developed virtual versions of various courses and training…In our sustainability policy, our ambition for training and development of employees made explicitly".*

This reference clarifies the importance of training within Nedap. What is also interesting to mention, Hornbach invests, besides in their employees, also time and money in training their customers. This program is called Hornbach Meisterschmiede.

"*This offers information on how to use the products, for example, or explain DIY projects on a step-by-step basis".*

The reason for doing this is that Hornbach ensures good adoption of their products. Also, it helps train regular customers in ensuring the delivery of the highest quality Hornbach products.

Internal benchmark
The interviewees regard employee training as important, according to their perception. However, it was not graded as most important. Their perception of how important it is for organization x is approximately the same. The little difference could be explained by:

Employee training is also significant. Growing up is what attracts people to stay. However, Organization x does too little with this. No attention.

I find this very important myself. Schooling should be promoted. This is certainly being done, but it could be even better.

These citations suggest that the employees find employee training important in their perception and also important for organization x. However, organization x could have done more to make the employees aware of the possibility to increase their knowledge or to motivate them to do the training.

The organization is promoting it but should do more, according to the employees. The first citation also suggests that training is important if organization x wants to attract people.

Every month I receive an overview of who is doing what in terms of training or courses. You can see that it is slightly declining, but we do stimulate it. For example, it is now also allowed during working hours.

This citation implies that employees are trying to motivate other employees to take courses and other training possibilities. Organization x has implemented the possibility to take courses during working hours. In this way, employees do not have to do their courses in their own time, which could create less motivation. Furthermore, this citation shows that the organization is trying to promote schooling. More examples are not given, which shows that the organization could indeed do better, which was mentioned in the previous citation.

Personally and I think for such a large company, that we pay a lot of attention to that. But also a lot is invested in it. I have also completed training within Organization x.

This quote shows that some participants were satisfied with the schooling within the organization. They mentioned that the organization is paying a lot of attention to it and investing much in the subject. This is a little contradictory to the previous citation since they mentioned that the organization is not doing enough, while this citation implies that the organization is doing enough. The knowledge of the subject could be the reason behind this.

4.3.6 Co2 management

The sixth section is about *co2 management.* The internal and external benchmark of this category will be given.

External benchmark

The category is classified as best. 12 reports specifically mentioning the co2 management. Although TBI is mentioning information regarding the co2, the implication is different compared to the other organizations. Other organizations are specifically mentioning the category, alongside their goals and strategy regarding the co2 management. TBI reports themes and categories and is then mentioning what the impact of co2 is. So, co2 is used to show how much reduction they have saved and how much it eventually cost. Due to this difference, it is not regarded as co2 management. However, since all organizations are reporting on co2 management, be it in a different way, the relevance of this category is high. The category has different themes, which share some characteristics. One organization reports with the theme *of the energy transition,* while the other uses *energy reduction*. The energy transition is also mentioned in the category of sustainable development. However, this paper noticed that there is a difference in how these are reported. The implication of energy transition in sustainable development is given in the sustainable development section. In co2 management, energy transition is reported as those organizations are using existing systems, instead of being innovative. So, the difference is whether organizations are innovative or not. Heijmans is using both implications of the energy transition. The company has created Heijmans Energy.

"*This team is in founded in 2020 to contribute to the accelerated energy neutralization of the Netherlands in the built environment. Heijmans sees the energy transition as an integral assignment, in which knowledge in the field of area development, realization and renovation of the built environment and energy infrastructure together has to come".*

So, this team is created especially for the energy transition. In this way, Heijmans is trying to create a competitive advantage on this theme. However, the organization is also using existing systems.

"*Together with GMB and De Vries & van de Wiel, Heijmans set up the Zero-Emission Network Infrastructure (ENI), with the goal is the energy transition in the infrastructure sector with four years to speed up".*

So, in this way, Heijmans is also using the innovations developed by other organizations, to further strengthen their own. Therefore, they are not only being innovative, but they are also using the innovative systems of other organizations, to create the most sustainable innovation. Other organizations investigated in this paper are choosing either to be innovative or to use the innovations of others. So, there are different options to implement.

Internal benchmark
Co2 management received the lowest grades from the interviewees. Thus, implying that in their perception, this category is not regarded as important. The same holds for what they think is important for organization x. The reason why they feel like it is not important is given in these quotes:

The standard is still diesel, for company cars. This is mainly in Germany, where electric cars may not be fully possible, but even think that a fully electric car is not possible in the Netherlands.

We collect our concrete 500 kilometers away, while there is also one in Dusseldorf, for example. The one further away is cheaper so we'll take it away from there.

Co2 management is insufficient. A mobility plan is currently being updated. But whether this will have the right impact on the staff, I have my doubts.

I think we have to act, but the choice must be conscious. Are electric cars the future, or are more sustainable options be shortly available?

The first citation refers to a general view of the participants. Although they think that electric cars are more sustainable, it does not meet the standards of the participants. The reason for this is that they travel a lot with the car, and do not want to stop every now and then since electric cars do have to recharge more often than other cars. Therefore, it is still the standard within the organization. The participants also noticed that organization x does not want to reduce the transport kilometers, due to the price. Again, the financial performance is determinative. The organization is working on a mobility plan, to reduce its co2. However, there are doubts about whether this plan is achievable. One interviewee was doubting whether such a plan was the most sustainable path because the interviewee questioned whether electric cars are the most sustainable, or if other options are a better strategy. So, these quotes suggest that there is doubt whether co2 management should be prioritized. However, a participant regarded the co2 management as high, stating that:

Such constructions in third-world countries help residents to become part of the sustainability meaning and its segments. As for Europe, we are all dealing with high energy costs due to the recent supply chain crisis of COVID and the war in Ukraine. This reminded us how important it is to be energy efficient.

This citation suggests that organization x should be more active regarding the co2 management, due to the developments in other countries. Due to this, energy prices have increased, resulting in more costs. If the organization had good co2 management, the co2 could be reduced resulting in fewer costs. So, the participant stated that such developments reminded us that co2 management could be important.

4.3.7 Corporate governance
The following section will contain insights on the external and internal benchmark of *corporate governance*.

External benchmark
This category is classified as best. Moreover, it is mentioned in 7 reports, which is moderate. Mostly the non-competitors used this category. Only 3 out of 8 competitors are using corporate governance. This could imply that this category is not seen as relevant within the construction sector. It could also imply that organization x could develop a competitive advantage in this category because competitors

are not addressing corporate governance. Therefore, corporate governance could be relevant to report on, but also not relevant. Organization x could consider the relevance of corporate governance. *Compliance* is used to give an example of this category. The meaning of compliance is given by Uzin Utz:

"For the Uzin Utz Group, it goes without saying that we do not just abide by the law, we also base our actions on ethical principles and an appreciation of shared values. This creates a foundation of trust among our employees, customers, shareholders, and other stakeholders".

So, Uzin Utz complies with both categories of corporate governance. The organization has founded the Uzin Utz compliance group to maintain its compliance of the organization towards corporate governance. The category of corporate governance has a significant relationship with the codes of conduct. The reason for this is that the latter refers to the set of rules that organizations implement to ensure corporate governance.

Internal benchmark
This category has moderate grades. The reason for this is that some participants regard corporate governance as significantly higher than the average, while some also graded it significantly lower than the average grade.

We always try to comply with the rules, which the company does not. Think we've got everything watertight. It's dangerous if we don't get this right.

This quote implies that it is necessary to comply with corporate governance since it could harm the organization. The interviewee believes that when organization x does not comply, it could even be dangerous. Therefore, everything must have a contractual agreement.

I'm not too concerned with following the rules. Assume that Organization x's protocols ensure that this is enforced.

Other participants regard this category as important, but not the most important. This citation shows that employees believe that the organization provides protocols that ensure compliance with corporate governance. So, the employees should not be worried about corporate governance, because the organization is doing it for them.

Just because someone says something they're doing according to the law, doesn't mean it actually happens. Difficult for us to determine that.

The difference in rules is clearly shown on paper. So in theory it's all good. However, practice sometimes deviates. This is due to unforeseen events.

These citations imply that it is difficult for organization x to comply with corporate governance. The reason for this is that the organization does not have an influence on everything and they have to deal with uncertain events. This also indicates that some interviewees do not regard the category as that significant, because sometimes there is no compliance. Theory and practice differ, as mentioned in the third quote.

4.3.8 Waste management
This section is about the internal and external benchmark of *waste management.*

External benchmark
Classification is common and waste management is mentioned in 10 reports. The theme organizations are using to report on this category is *waste management.* Organizations could determine the relevance based on the number of reports that mention this category. Since this is classified as common, waste management could be seen as a relevant category to report on. Every non-competitor reports on this

theme, while 5 out of 8 competitors are mentioning waste management. So, there is a potential competitive advantage for competitors. The reason why some competitors are not mentioning this category is that they focus more on the circularity of the product, instead of the waste, or the other way around. Some organizations are mentioning both. De Vries & Verburg is an example of an organization that mentions both, due to their relationship. Circular entrepreneurship and waste management are closely related to each other because part of circular entrepreneurship includes how to manage waste. The report of De Vries & Verburg provides a relevant example of how these categories are linked:

"When using circular or bio-based building materials, in addition to a technical cycle, a biological cycle also takes place with the use of certified wood. By using as much certified wood as possible as a 'bio-based' building material, circularity is promoted. Wood is easy to regrow and produces hardly any waste.

This quote shows that, due to combining the essentials of circular entrepreneurship and waste management, the organization reduces its waste and provides a sustainable solution for its project. De Vries & Verburg stated that by doing this, the products could be re-used, to ensure the natural resources. Volkerwessels is an example of an organization that only mentions waste management. This organization is intending to realize waste-free construction sites.

"The idea is to give as much 'waste' that arises during construction as possible a new high-quality application or, if this is not possible, to recycle it into a raw material for a similar material/building material/product".

This quote represents the meaning of waste management. Volkerwessels immediately collects the waste from the construction sites, to give the waste 'new' life. This results in less useless waste, which could, in return, be less costly.

Internal benchmark
Waste management is seen as a category with moderate importance. The analysis showed some outliers to the top and bottom. The personal perception is regarded as higher than the importance within the organization x. The following quotes suggest that waste management is seen as important, but that it is not always correctly done:

We do try to separate the waste, but I cannot say whether this always happens exactly.

Separating waste is an activity with little effort. However, it has to be facilitated. This is not sufficient enough at organization x.

These quotes suggest that the intention is to separate the waste, but that it does not happen in the right way. According to the interviewees, the facilitation is not good enough. With facilitation, they imply that there are, for example, enough cans, but that it is not clear what waste has to go in that specific can. The second citation also indicates that separating waste is not a lot of work. This is further strengthened by the following citation:

Separating waste is a small effort. You do this out of good manners. Here too it should not be at the expense of everything.

The first two sentences of this quote also indicate that separation is little effort and that people should do it because it is a normal thing to do. The last sentence refers to the implication that organizations should implement waste management. However, it should not be at the expense of financial performance. This is, again, typical for the organization, since it has previously been mentioned in the categories. Some participants indicated that organization x is applying good waste management:

Waste from construction sites is sorted. This is also mandatory. The waste is also sorted at the offices. We simply do a lot of recycling.

This implies that organization x is applying waste management at the construction sites and their offices. The first one is mandatory, due to contractual agreements. Moreover this quote, the interviewee mentions that organization x does a lot of recycling, while the previous quotes suggest that waste management could be more than now is done.

4.3.9 Financial performance
The following section is about financial performance and its internal and external benchmark.

External benchmark
Financial performance is classified as best and found in 5 reports. The only theme is *financial performance*. In this light, the relevance could be determined based on the number of reports that mention financial performance. 4 competitors are mentioning this category, while only 1 non-competitor mentioned it. This could imply that it is relatively more significant for the construction sector than it is for the non-competitors. A competitor, BAM, reports on financial performance because:

"BAM believes that sustainable business contributes to solid financial performance. A solid financial performance provides BAM with the means to undertake transactions with its supply chain partners, leading to the possibility to develop new activities and to pay BAM's employees and shareholders".

With this quote, BAM implies complying with the CSRD will result in a solid financial performance, which they need to undertake new developments. These new developments could be meant to further strengthen their sustainable business, which will again result in a solid financial performance. This circle could be continuous. TKH is the only non-competitor to report in this category. The implication is a bit the same:

"Creating added value ... with a focus on the development of the company".

The cash generated from doing business will be reinvested in the development of the employees, technologies, and innovation. Therefore, the aim of TKH is the same as BAM, namely to further develop the organization. However, the report of TKH does not imply that they acknowledge a relationship between sustainable business and solid financial performance. They rather invest the money, to be more sustainable.

Internal benchmark
Financial performance is the most important category, according to the participants. This category was often associated with other categories, due to the impact of other sustainable categories on financial performance. The general idea of this category is given by the following quote:

Financial performance has to be the most important because we are doing business here. Sustainability could enhance financial performance, by creating more interesting projects.

This shows that the internal participants are seeing possibilities to create a higher financial performance by complying more towards sustainability, due to projects becoming more interesting. Because of the connection with other categories, other quotes will further implicate the importance of financial performance and the reason why.

4.3.10 Risk management
This section will contain the external and internal benchmark of *risk management*.

External benchmark

Risk management is classified as best. It is mentioned 4 times in the reports. The theme is the same as the category. So, organizations could look at the number of reports that present this category. In this way, the category could be seen as not or less relevant for organizations. However, it could also imply that there is a possibility to gain a competitive advantage. Hornbach reported on this theme the following:

"All material non-financial topics were subject to a risk assessment to ascertain whether our business activities, supply chain, or customers gave rise to any material risks for the aspects defined in §289c HGB. Our group-wide risk management did not identify any risks requiring a report at the HORNBACH Holding AG & Co. KGaA Group.

This quote is a good summary of the representation of this category throughout the reports. Every non-financial aspect of the organization is subject to a pre-determined list of risks. In this way, organizations are trying to reduce and/or hedgehog potential risks. Therefore, they are prepared to minimize the impact. The meaning of this category is presented by TKH:

"*It aims to use processes to identify at an early stage any opportunities or risks driven by economic, geopolitical, environmental, sustainability, social and technological trends".*

By implementing such processes, the organization gains a roadmap that provides the organization with an overview of what strategy to apply in what situation. This ensures continuous improvement and the creation of value.

Internal benchmark

Internally, risk management was regarded as a very relevant and significant category. It scored high on the employee's perception, as well as how important it is for organization x. In the perception of the employees:

Very important. You do this every day with the choices you make. Tradeoffs between costs and benefits.

High priority within the organization (risk management). Think that you are unconsciously and consciously very busy with this. Make the right decision every time.

These citations address the fact that everybody does risk management. Not only on a business level but also a personal level. Even though you think you are not doing it, unconsciously, you are always busy with the tradeoffs between costs and benefits. Risk management, in terms of the construction sector, includes:

If we look at risk management, we try to build as good quality as possible, so that you are not constantly chasing complaints. Also that you have no risk or chance of damage. That is simply one of the biggest losses within the company.

So, organizations are determining the risks of certain projects and are making the tradeoff between the benefits and costs. This citation discusses the tradeoff between the costs and benefits of the material. If the organization goes with the cheaper material, there is a higher risk or chance of damage, which results in a higher loss. So, the impact in the short-term is lower than in the high-term. The previous categories provided quotes that organization x tends to focus more on the short-term, due to the financial aspect. However, there is no evidence found that this is the case for this category. There is evidence that there is a long-term vision: The motivation for this is that:

You do risk management per job. This differs per building and region. Sometimes projects need to be upgraded. This continues even after a project. At the moment, the long-term is also becoming more and more important.

We are working on limiting all risks, but you cannot exclude them completely. We are not there every day, every hour of the day, so it becomes difficult.

Risk management is the most important within the organization. You must have to assess risk management because without having this in mind, you cannot make good choices as a company. You are continuously scanning the various risk factors.

The third citation is the core of why risk management is important for organization x, as seen by the interviewees. Multiple participants pointed out that this category is very relevant and significant for the organization, due to the constant threats and risks the corporation is exposed to. It is not some list of risks that is the same for every project. It differs per region and per project since every region and project is different. Risks can never be eliminated, due to uncertainty about the future. Moreover, one cannot be present at all times to make sure that risks are avoided. However, by applying risk management, it can be reduced to a minimum. Also, it helps employees make better choices, based on the data of the assessment. The first citation discusses that even though a risk assessment is applied, it should be continuously updated because changes in the long term should also be considered. These changes are forthcoming out of the environmental changes. Certain information regarding risks is not available in the present but becomes in the future.

4.3.11 Relationship building
The external and internal benchmark of *relationship building* is provided in this section.

External benchmark
Only 1 organization has mentioned this category, which results in the classification being unique. De Vries & Verburg is the only organization that mentioned this category. They report the following:

"Because sustainable entrepreneurship is custom work, which is partially determined by our stakeholders, a continuous dialogue with them is very important. In this interaction with parties, opportunities become visible, risks can be reduced as a result of these conversations and/or meetings and direction can be given to us sustainability policy".

This presents the importance of building a sustainable relationship between the organization and stakeholders. The stakeholders are an important part of an organization, and involving them shows that they are heard. Also, it could provide an organization with new insights, because the stakeholders could also have valuable knowledge. So, it keeps the stakeholders satisfied, and the organization could profit from such a dialogue.

Internal benchmark
According to the participants, relationship building is regarded to be important. The importance for organization x was determined to be higher than in their perception. The reason why this category is important for the organization, is given by the following quotes:

Sustainable relationships are very important because it involves a lot of money. If the relationship is less, you will meet each other. You have to be reliable. All relationships are important. In bad times, then you really need each other.

The building block of business. You won't get anywhere without relationships. Especially in the traditional construction sector, you are very dependent on your employees and clients. This should always be number 1.

Relationship building is just important. We have many subcontractors and clients in different regions. You need everyone equally as much.

You have good and bad times. In good times you can get everyone, but when things go bad you also need each other.

Multiple interviewees mentioned that relationship building is fundamental for organizations to do business because organization x depends on sustainable relations. Moreover, every relationship is important and should be treated equally. The second citation mentions that this category is important in the construction sector since organizations are dependent on employees and clients. This is further strengthened by the fourth quote, which implies that you need everybody in good times, but also in the bad times. The financial performance of organization x was also mentioned in the first citation. According to the participants, the association between relationship building and financial performance is that a sustainable relationship is important because it involves money. So, again the importance is determined by the financial performance.

4.4 Gap analysis
This section will provide the findings of the gap analysis. Elaborations are given on the crucial categories, improvement opportunities, less relevant categories and possible competitive advantages. Furthermore, this analysis will be used to determine whether the categories are relevant for organization x, based on internal importance and external importance. Figure 1 depicts the result of the gap analysis. On the y-axis, external relevance is provided. The x-axis shows the result from the internal benchmark.

4.4.1 Crucial categories
The categories within the green area (figure 1), are the crucial categories. In this paper, these are the employee training and welfare. Employee training is a category that is mentioned by every external organization and regarded as relevant by the internal participants. Due to this, this category is seen as relevant and important. This results in employee training being a category on which organization x should report and which should be implemented. The internal relevance is not regarded as the highest but it is significant enough. This implies that there is room to further improve the internal importance. However, it should not have priority, since other categories need more focus on improvements.

The analysis of employee welfare provided the same results: externally and internally, this category was regarded as important. This category was mentioned often, while having a relatively low number of themes, thus resulting in an important category. The internal analysis further strengthens this, since the grades are high and the quotes provided various reasons for this category to be determined as important. Organization x does a lot to create the highest employee welfare. Furthermore, the characteristics of the organization, such as the low threshold, contribute to this, resulting in a work-friendly environment. Therefore, organization x should report and implement this category.

So, the result of the external and internal benchmarks provided that employee training and employee welfare are crucial categories. Therefore, organization x should report on those, since they are regarded as important. Furthermore, the organization should also keep the category up-to-date, so that it remains well implemented within their organization.

4.4.2 Improvement opportunities
The categories surrounded by the blue line, are categories that are relevant but need improvement. Waste management, social entrepreneurship, and sustainable development are the improvement opportunities in this case.

Internally, waste management was not regarded as highly important, while the external reports provided a high significance. The general implication internally was that waste management was important and good that the organization does something with it, but they were not sure whether it always happens thoroughly. The participants noted that waste management was mostly done because it is mandatory. The external analysis showed that almost every organization does report on this category, with only one theme: waste management. The reports showed that the external organizations are committed the waste management because it is an important trend at this moment and they do not want to miss this out. Since it was previously shown that organization x is a follower, it could go along with the hype. Also, externally, this category is relevant. However, internally, it was regarded as less

important. Therefore, organization x should report on this category, based on the external benchmark. However, it should focus on improving the category, to increase the relevance for the internal participants.

Social entrepreneurship is relevant for external organizations but less relevant for internal participants. The external participants mentioned a lot about the category, implying that there are actively busy with their social contribution. In this way, they hope to gain a better image of the organization, one which shares the standards of the customers and other people. Social entrepreneurship is also implemented within organization x. They have their foundation. The moderate grade in this category is the result of the awareness the employees have of this foundation. They know that it exists, and they sometimes contribute to it, but are not aware of the results of this foundation. Since they do not know that, they believe that it is not that important for organization x. Some participants are aware of the developments, resulting in a high grade. This explains the moderate grade. So, the external benchmark showed that the category is relevant to report on. The internal benchmark showed that organization x has to create more awareness so that the internal importance will increase.

Sustainable development is externally determined as important, while it was internally regarded as moderate. This is the result of the strategy and culture of organization x because organization x is not a trendsetter. Whereas other organizations are busy being the most innovative, organization x is following the trend and hype. This was mentioned by the internal participants. The category is relevant to report on, which is provided by the external benchmark. The internal benchmark showed that it is not important for organization x, since they are followers and not trendsetters. However, this does not imply that organization x should not report on it, because some participants pointed out that by applying certain developments, projects become more attractive to buyers.

Due to the categories being externally determined as relevant, and internally less important, social entrepreneurship, sustainable development, and waste management should be improved. The external relevance showed that organization x should report on the theme. The internal analysis provided that organization x has not adequately implemented the categories. So, the focus of organization x must be on improving these categories. In this way, the categories become more relevant and important to the internal participants, which will result in these categories becoming crucial and well-implemented.

4.4.3 Possible competitive advantages
Financial performance, relationship building, and risk management are within the purple line. This indicates that those categories are possible competitive advantages.

Risk management is internally regarded as highly important, and externally determined as moderate. The internal participants regarded this as high because they mentioned that sustainable risk management is important for the decision you made. Organization x has to deal with risks and to do so, risk management is applied by the participants. The participants also mentioned that risk management is something you do every day because it is a tradeoff between the benefits and costs of certain events. This resulted in a high internal relevance. On the other hand, the results provided low external importance. The reason for this is that only 4 external organizations have reported on this matter. So, due to this, organization x could not report on the category. However, the internal relevance showed that organization x should report on this. The organization could gain an advantage, due to the missing of risk management in other reports.

Since relationship building is also within this line, implying that this category could be considered internally relevant. Externally, however, it was determined as not relevant. The difference in importance between the external and internal benchmark with relationship building was high. In the external analysis, the category was not relevant nor important, while the internal analysis showed that it was important. Only one external participant mentioned relationship building, together with sustainability. The internal participants stated that relationship building is very important for organization x since relations are what the organization keeps going and helps them doing business. Therefore, organization x could report on this theme, since the internal benchmark provided that it is very relevant and important for them. Although the external analysis showed otherwise, it could more relate to its employees, so it could make an advantage out of this category.

The last category is financial performance, which is internally regarded as the most important. On the other hand, externally it was not that important. The reason for this is that most external organizations failed to include sustainability within their financial performance, resulting in low relevance. However, internally, financial performance was mentioned a lot. Nothing was implemented if it goes at the expense of the financial performance. Due to the high internal importance and the low external relevance, organization x could gain a competitive advantage. Therefore, it should report on this theme.

So, to summarize, the reason, for these categories being possible competitive advantages, is that these are internally determined as important, but externally not. So, not many external organizations are reporting on those categories or have not determined these as relevant. If organization x is going to report on relationship building, financial performance, and risk management, they could provide an advantage for organization x, which is beneficial for the business.

4.4.4 Less relevant categories

The red line is used to point out the less relevant categories, which are co2 management, circular entrepreneurship, and corporate governance.

Circular entrepreneurship is externally determined as best and scored a moderate grade on internal importance. The reason for this is that the external benchmark showed that although every external participant reported on this, it has less relevance due to the usage of many different themes in relationship with the number of times it is mentioned. So, organization x has to be careful in determining what and how they could report on this category. Since it has not the highest internal importance, it is not relevant to spend much attention on circular entrepreneurship. The internal benchmark provided reasons for this: organization x is not a trendsetter and spending too much time on circular entrepreneurship is not interesting due to the financial performance. Therefore, this category should be considered less relevant. Organization x could report something about circular entrepreneurship, but the focus should be more on other categories.

The analysis of the co2 management provided that, internally and externally, it is not regarded as the most important. The participants of the internal benchmark implied that it is not important, because there is not much action regarding this category. Although organization x is busy with, for example, a mobility plan, there is not much further going on. Also, the participants were prioritizing less sustainable solutions, since it is more practical. The external participants are prioritizing co2 management, because of the current trend in the world of being more environmentally friendly and reducing co2. However, the external analysis provided that this category had not the highest importance, due to the developments and changes in regulations that are connected with co2 management. So, this benchmark provides not have the highest importance. The internal benchmark shows that the employees' importance and relevance are not high. So, for organization x, it is not relevant to spend much on reporting this category.

Externally and internally, corporate governance was regarded as moderate. The general belief of the internal participants was that corporate governance is necessary to comply with certain laws and regulations. They mentioned that there are protocols within the organization to prevent breaking the regulations. However, as some participants noticed, it is hard to keep the regulations, since there are forces that are not influenced by the organization. The external analysis provided that the relevance of the category was more towards non-competitors. This could imply that corporate governance is not that important and not that relevant for the construction sector. However, it could also imply that there is a lack of compliance towards corporate governance, which resulted in fewer competitors mentioning this category. Therefore, the organization should be careful with this category. The result of the external benchmark is that the organization should not report on corporate governance. However, this could be skewed since most non-competitors report on this theme, while the research was primarily focused on the competitors. The internal importance is not that high. So, organization x could not report on this category but has to be careful due to the skewness. Therefore, it would be relevant to further develop the category.

To conclude, co2 management and circular entrepreneurship are not regarded as relevant. Therefore, organization x should not spend much on reporting these. Also, the organization should not be active in the further development of those categories. Corporate governance is also not regarded as

relevant. However, due to the skewness, the organization should be a bit more active in the development than with circular entrepreneurship and co2 management.

Figure 1: GAP analysis
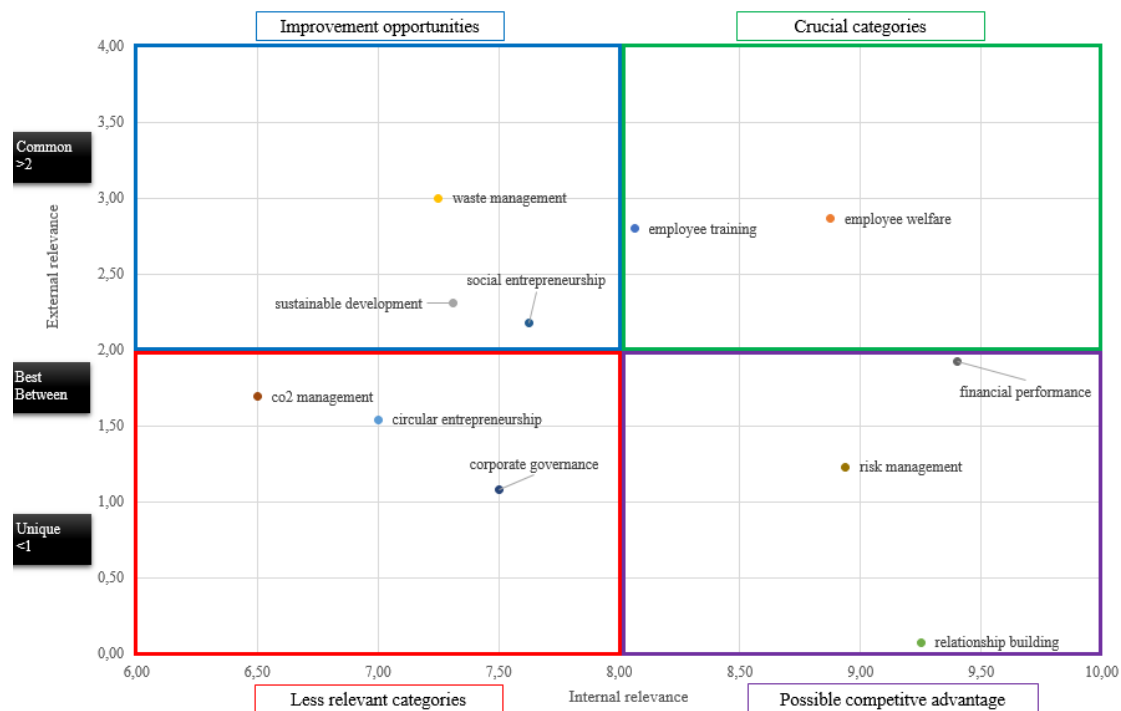
5. Conclusion

The European Commission has issued the Corporate Sustainability Reporting Directive (European Commission, 2020). It entails new regulations that are meant for large organizations (European Commission, 2003). Ameashi & Grayson (2009) and Boffo & Patalano (2020) indicate that organizations are facing many challenges due to the new regulations. By complying with those, organizations could benefit (Whelan et al., 2020; Kenton et al., 2020; Jukemura, 2019). Not complying results in negative effects for the organization (Fatemi et al., 2018). To comply with the CSRD regulations, a benchmark strategy (Mertins et al., 1995) could be implemented. The reason for this is that Anand & Kodali (2008) and Bhutta & Huq (1999) used the external and internal benchmark to solve their challenges. This implicated that benchmarking is a useful strategy. Organizations should not only use either the internal or external benchmark. The reason for this is that when using only one, organizations are missing relevant data and the risks of failure are higher. (Anand & Kodali, 2008; Bhutta & Huq, 1999). This paper noticed these risks and developed the MB model. However, the research of Anand & Kodali (2008) and Bhutta & Huq (1999) lacked a step, which is a stakeholder analysis (Freeman, 1984; Macharis, 2005). So, the MB model is a combination of the internal and external benchmark, and the stakeholder analysis. This resulted in a model with 8 steps, which large construction organizations could use to further improve their compliance with CSRD. The stepwise construction of this model provides the organizations with an overview of the challenges, stakeholders, relevant categories and themes, action plans, and possible feedback. This research aims to investigate the effects of internal and external benchmarking on compliance with the CSRD, which resulted in the following research question: *How can large construction organizations use internal and external benchmarking to improve their compliance with the CSRD?* Through extensive research on the CSRD and internal and external benchmarks, the research showed that these could provide a solution for large construction organizations to comply with the CSRD.

For this paper, semi structured interviews are held, because it provides new and insightful data to collect(Longhurst, 2003). It has a qualitative approach, because the research is interested in analyzing non-numerical data (Denzin & Lincoln, 1994). The study is based on the case of large construction organization x. The employees and external organizations are the sub-units that are used for the analysis. This results in the study to be an embedded single case analysis (Yin, 2003).

The external benchmark part of the MB model could be used to determine relevant categories and themes. Large construction organizations could apply the external benchmark to investigate competitors. However, the findings also showed that researching non-competitors could also be beneficial because new and different categories and themes could be derived. Due to the categorization method with percentages, large construction organizations could determine whether a category is regarded as common, best, or unique. The internal benchmark part of the MB model could be used to determine the internal relevance of the different categories and themes derived from the external benchmark. In this way, large construction organizations are aware of how the different categories are implemented within their organization and what categories are relevant to report on. Therefore, based on the benchmarks, those organizations are aware of what categories are relevant for their organization. The categories are helping large construction organizations to comply more with the regulations of the CSRD.

5.1 Contributions

The CSRD with its regulations and benefits is the start of changes made by organizations because there is a possibility that they cannot operate in the same way they always did. While existing literature focused on CSRD (Henisz et al. 2019; Pagano et al. 2018) and the forthcoming challenges and benefits, there was no clear solution on how to deal with the challenges (Amaeshi & Grayson, 2009; Boffo & Patalano, 2020). This study dove into the gap created by the existing literature, to provide a solution. This has resulted in the MB model, which in return resulted in an analysis that has provided eleven categories that, if used correctly, could improve the organization's compliance with the CSRD. The discoveries contribute in several ways. Firstly, this paper is built on the existing literature on CSRD and on what challenges CSRD provides for organizations (Amaeshi & Grayson, 2009; Boffo & Patalano, 2020). However, these studies lacked solutions for the challenges and what the benefits are for organizations when complying with the CSRD responsibilities. This study contributed to this literature, by creating an overview of what the challenges are and what the benefits are when solved. Furthermore, this paper provides practical implications to deal with the challenges, specifically for the construction sector. This has not been done before. The existing literature acknowledges that the CSRD regulations are providing organizations with challenges (e.g. Amaeshi & Grayson, 2009). However, they failed to give a comprehensive understanding of what organizations should do to overcome these challenges. This paper will address the challenges and provide a model to guide organizations toward a suitable solution. The model, that is created, is called the MB model. The result will be a roadmap for organizations to help them in complying with the ESG regulations. Since such a model does not exist, this paper will provide organizations with different methods and new insights. Therefore, this paper will combine the existing literature and provide a new and modern roadmap for compliance with ESG and CSRD. Thirdly, by assessing the MB model, this study showed that it could be a useful tool to determine what categories and themes are relevant for organizations. Gaining this information, organizations are more aware of what they should do, to further strengthen their position regarding CSRD. Also, due to the CSRD being relatively new, organizations are not having the knowledge and information to understand the CSRD and how to deal with them. This paper provides literature that explains the challenges, the benefits if solved and how to properly deal with the CSRD. Such literature does not exist. Finally, this paper is contributing to the existing benchmark literature (Mertins et al., 1995; Bhutta & Huq, 1999; Anand & Kodali, 2008). These papers showed that benchmarking could be a relevant tool for existing challenges. However, it did not mention how benchmarking could be used for sustainability, CSRD, and ESG. This paper has shown that benchmarking theory could be used in this way. So, it used existing literature to create a benchmark model, which could be used to present solutions to challenges that were not mentioned in the papers.

5.2 Discussion

The literature, as discussed in table 1, provided that organizations have to comply with the ESG criteria, as proposed by the CSRD. The criterion is a match with the categories found in this paper. The term used is different, but the core implication is the same. This is expected because every organization has to comply with the same set of regulations. Table 2 provided an overview of different challenges organizations could face. Some challenges are also found in organization x, such as the short-term long-term, and poor communication skills. However, this is not expected. The reason for

this is that every organization is different, and therefore, faces different challenges. The expectation of table 2 was that it is just a general overview of some challenges that could happen. So, the literature found on the challenges proves to be reliable. Therefore, there is a possibility that organizations could also face other challenges.

The MB model proved to be a useful tool to identify challenges and create a solution, based on a benchmark and stakeholder analysis. The theory used to create this model is useful and reliable since the outcome of the model provided significant and relevant data. The extraction of the data of the external benchmark went very well. A lot of data is collected and proved to be relevant since it was used by different literature. This type of benchmark went well. The internal benchmark could be used differently. Interviews are used to determine internal relevance. However, interviews are time-consuming, so not every employee of organization x could be interviewed, since there are more than 1000 employees. Due to this, the relevance of the collected data decreases. A solution to this is to do a survey, instead of an interview. In this way, a larger sample could be asked, so the reliability would increase. Also, it contributes to employee welfare, since employees are wanting to be heard. The internal benchmark also provided different perspectives on the categories. This difference is the consequence of the location and the age of the participants. Organization x is operating in multiple countries. Due to this, some categories received different perspectives. An example is co2 management. This was in one country regarded as highly important, while it was moderate in another country. The age gap also showed differences in perspectives. The younger generation tends to be more focused on the CSRD which gives it higher importance. Although the older generation addresses the importance, they are less willing to be active in CSRD, since it goes at the expense of the financial performance.

The results showed that organization x could be described as a conservative organization. Multiple participants mentioned that the organization is a follower and not a trendsetter. According to literature (Baumgartner & Ebner, 2010) a conservative organization's strategy of sustainability is that it is an efficiency strategy: the focus is on cost-efficiency. This strategy requires the commitment of the employees. Thus, the literature is connected with organization x. The reason for this is that throughout the analysis, cost-efficiency was regarded as very important. However, it also requires commitment, which was, according to the internal benchmark, not very high. But, some internal participants implied that they wanted to commit. So, the organization could gain some more commitment, which further strengthens its conservative strategy.

The GAP analysis provided a difference in the importance between the external and internal participants. The category is relationship building. The reason for the low external relevance is the consequence that most organizations failed to give the relationship between relationship building and sustainability. One organization provided a comprehensive description of how a sustainable relationship could contribute toward sustainability. Therefore, the literature provided a weak relationship. However, the internal analysis provided a significant relationship. The reason for this is that the employees of organization x are getting along with the conservative strategy, which requires a high commitment. The high commitment could only be sustained if the organization has a good relationship with others. Therefore, it is no surprise that this category is regarded as important in the internal analysis.

5.3 Managerial implications
The first five steps of the MB model provided a comprehensive analysis of what the challenges for organization x are. Furthermore, the internal and external benchmarks showed what categories are regarded as a relevant, not relevant, possible competitive advantage, or improving opportunities. This is depicted in figure 1. Thus, the first five steps could be assessed to determine what categories are relevant for organizations. This relevance could be used to determine whether or not organizations should report or develop these categories. Since the MB model has 8 steps, organization x should proceed with the remaining three steps to provide successful implementation of the model. In step six, the organization has to develop and implement action plans. This is based on the gap analysis. The gap analysis showed that 2 categories are crucial to report on, 3 are less relevant, 3 could provide a possible competitive advantage and 3 categories must be further improved. Based on this, the organization has to develop an action plan. This action plan contains a detailed strategy of how and what to report on the category. Once it has created a reliable and sustainable action plan, the

organization could implement it. Action plans for the categories are: crucial categories should be reported. The organization has to select themes it wants to use for the report. The potential competitive advantages should be reported since they could be beneficial. Again, themes have to be selected. The less relevant categories should be not reported. However, further development could be useful in the future if the categories become more relevant. The cost-benefit trade-off is important here. The improvement opportunities should be reported and further developed. Once the implementation is done, organization x has to review and feedback on the action plans. The reason for this is to make sure that the action plan is used correctly and that it has the right effect. Organizations have to determine standards so that the action plan could be reviewed. If it passes the standards, the implementation was a success. If the implementation did not meet the expectations, the organization has to go to the final step. The final step is recalibration. In this step, organization x could change the implemented failed action plan. In this way, the mistakes made in the previous step could be adjusted, so that the implementation of the action plan will succeed in the end.

Other organizations could also apply the MB model. The identification of the challenges and stakeholders should be done in the same way as this paper uses them. The reason for this is that organizations are having the best awareness of what their challenges are. Also, organizations know what stakeholders are relevant and important to them, so the identification must be done by themselves. The identification of the external subjects depends on what the organization has identified to be its main challenges and stakeholders. Based on these, organizations have to determine the data collection method. The same holds for the internal benchmark: based on the results of the external benchmark, organizations have to determine the data collection method. The gap analysis must be done in the same way, since it compares the results from the internal and external benchmarks. This is not dependent on the method, but rather on the result. The remaining steps of the MB model are dependent on the organization. Organizations could have different implications on how and what to do regarding action plans. Also, organizations could have different standards, which results in differences in feedback and review. Due to the possibility of action plans and standards being different, the recalibration is also different.

5.4 Limitations

The results from this research could be used for future studies. Therefore, limitations could be contributing to new research. The first limitation is that this study uses thirteen organizations for the external benchmark. In the construction sector only, there are a lot more organizations that could be used for the research. Also, firms from non-competitive sectors could be used. So, the sample size is relatively small. Therefore, future research could be done on more organizations, to determine more accurately the importance of the different categories. Secondly, the interviews were held with thirteen participants. Organization x has over 1000 employees, so the sample is small. Therefore, if it wants to further strengthen the findings, more employees should be interviewed. Thirdly, the focus in this paper is focused on the external and internal benchmarks as a strategy. However, other strategies could be applied to further improve compliance with the CSRD. So, this paper is limited by the possibilities of the benchmark. Finally, the results of the analysis provided in the findings section are biased towards organization x. Therefore, it becomes more complex to assess the same results by other organizations. Thus, future research suggestions would be to apply the same method to different organizations, to determine whether the outcome could be used by multiple organizations.

6. Acknowledgements

7. References

Abu-Saifan, S. (2012). *Social entrepreneurship: definition and boundaries*. Technology innovation management review, 2(2).

Alkhatib, K. (2014). *The determinants of forward-looking information disclosure*. Procedia-Social and Behavioral Sciences, 109, 858-864.

Amaeshi, K., & Grayson, D. (2009). *The challenges of mainstreaming environmental, social and governance (ESG) issues in investment decisions.* Cranfield University.

Anand, G. & Kodali, R. (2008)*. Benchmarking the benchmarking models.* Benchmarking: An International Journal, 15(3), 257-291. https://doi.org/10.1108/14635770810876593

Atz, U., Van Holt, T., Douglas, E., & Whelan, T. (2019*). The Return on Sustainability Investment (ROSI): Monetizing Financial Benefits of Sustainability Actions in Companies*. Review of Business, 39(2)

Bartels, W., Honoré, C., Lu, F.I., Hell, C., Austin, E. & McKenzie, M. (2014). *The essentials of materiality assessment*. Sustainable Insights.

Baumgartner, R. J., & Ebner, D. (2010). *Corporate sustainability strategies: sustainability profiles and maturity levels.* Sustainable development, 18(2), 76-89.

Baumüller, J., & Sopp, K. (2021). *Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications*. Journal of Applied Accounting Research.

Berkeley, S., Singleton, J. & Wildsmith, H. (2003). *Speaking the same language*. Arthur D. Little.

Bhandari, P. (2020). *What is Qualitative Research? Methods & Examples*. Introduction of Research Methods.

Bhutta, K. S., & Huq, F. (1999). *Benchmarking–best practices: an integrated approach.* Benchmarking: An International Journal.

Billio, M., Costola, M., Hristova, I., Latino, C., & Pelizzon, L. (2021). *Inside the ESG ratings: (Dis)agreement and performance. Corporate Social Responsibility and Environmental Management*. 28.

Boffo, R., & Patalano, R., (2020), *ESG Investing: Practices, Progress and Challenges*, OECD Paris,

Brugha, R., & Varvasovszky, Z. (2000). *Stakeholder analysis: a review.* Health policy and planning, 15(3), 239-246.

Callon M. & Munieza F, (2005) *Economic Markets as Calculative Collective Devices*. Organization Studies. 26(8). 1229-1250.

Camp, R.C. (1989), *Benchmarking the search for industry best practices that lead to superior performance*, Quality Resources

Campbell, D. & Slack, R. (2011). *Environmental disclosure and environmental risk: Sceptical attitudes of UK sell-side bank analysts*. The British Accounting Review. 43(1). 54–64

Chevalier, J. M., & Buckles, D. J. (2008). SAS2: A guide to collaborative inquiry and social engagement. SAGE Publishing India.

Claessens, S. (2006). *Corporate governance and development*. The World bank research observer, 21(1), 91-122.

Crane, A., & Matten, D. (2004*). Business ethics, a European perspective: Managing corporate citizenship and sustainability in the age of globalization.* Oxford: Oxford University Press

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Sage Publications Inc.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches.* Thousand Oaks, CA: SAGE Publications.

Cullen, U. A., & De Angelis, R. (2021). *Circular entrepreneurship: A business model perspective*. Resources, conservation and recycling, 168, 105300.

Denzin, N., & Lincoln. Y. (1994*). Handbook of Qualitative Research*. Sage Publications Inc.

Dorfleitner, G., Utz, S., & Wimmer, M. (2018). *Patience pays off – corporate social responsibility and longterm stock returns*. Journal of Sustainable Finance & Investment, 8(2), 132–157. https://doi.org/10/ggk2kd

Doyle, D. (2021). *A Short Guide to the EU's Taxonomy Regulation*. S&P Global

Earl, B. R. (2011). *The Basics of Social Research. Belmont*, CA: Wadsworth.

European Commission. (2003). *SME definition. European Commission*. Retrieved from: https://ec.europa.eu/growth/smes/sme-definition_nl

European Commission. (2020). *Retail Financial Products. European Commission*. Retrieved from: https://susproc-jrc-ec-europa-eu.ezproxy2.utwente.nl/product-bureau/product-groups/432/home

European Commission. (2021*). Corporate sustainability reporting*. European Commission. Retrieved from: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

Fatemi, A. & Fooladi, I. (2013). *Sustainable finance: A new paradigm*. Global Finance Journal, 24(2) 101–113.

Fatemi, A., Glaum, M., & Kaiser, S. (2018). *ESG Performance and Firm Value: The Moderating Role of Disclosure*. Global Finance Journal, 38, 45–64. EconLit. https://doi.org/10.1016/j.gfj.2017.03.001

Fernández, M. S., Abu-Alkheil, A., & Khartabiel, G. M. (2019). *Do German Green Mutual Funds Perform Better Than Their Peers?* Business and Economics Research Journal, 10(2), 297–312. https://doi.org/10/ggkrbb

Finnigan, J.P. (1996), *The Managers Guide to Benchmarking*, Jossey-Bass. San Francisco. CA

Freeman, R. (1984). *Strategic management: a stakeholder approach*. Boston, MA: Pitman

Geber, B. (1994), *Benchmarking at Kodak: How To Measure a Maintenance Unit*. Lakewood
    Publications

Gerring, J. (2004). *What is a case study and what is it good for?*. American political science review,
    98(2), 341-354.

Gioia, Dennis A., Kevin G. Corley, and Aimee L. Hamilton. 2013. *Seeking Qualitative
    Rigor in Inductive Research: Notes on the Gioia Methodology*. Organizational Research
    Methods 16 (1):15-31. doi: 10.1177/1094428112452151.

Global Alliance for Buildings and Construction. (2018). *Global Status Report*. Global ABC. Retrieved
    from:
    https://www.worldgbc.org/sites/default/files/2018%20GlobalABC%20Global%20Status%20R
    eport.pdf

Hang, M., Geyer-Klingeberg, J., & Rathgeber, A. W. (2019). *It is merely a matter of time: A
    metaanalysis of the causality between environmental performance and financial performance.*
    Business Strategy and the Environment, 28(2), 257–273.

Hemmler, V. L., Kenney, A. W., Langley, S. D., Callahan, C. M., Gubbins, E. J., & Holder, S. (2022).
    *Beyond a coefficient: An interactive process for achieving inter-rater consistency in
    qualitative coding*. Qualitative Research, *22*(2), 194-219.

Henisz, W., Koller, T., & Nuttall, R. (2019). *Five ways that ESG creates value*. McKinsey Quarterly

Hopkin, P. (2018). *Fundamentals of risk management: understanding, evaluating and implementing
    effective risk management*. Kogan Page Publishers.

Ielasi, F., Rossolini, M., & Limberti, S. (2018). *Sustainability-themed mutual funds: An empirical
    examination of risk and performance*. Journal of Risk Finance, 19(3), 247–261.
    https://doi.org/10.1108/JRF12-2016-0159

Išoraitė, M. (2004). *Theoretical aspects of benchmarking theory*. Public Policy and
    Administration, 1(9), 21-26.

Joshi, A. & Rahman, Z. (2015). *Factors Affecting Green Purchase Behaviour and Future Research
    Directions*, International Strategic Management Review, 3(2). 128-143.
    https://doi.org/10.1016/j.ism.2015.04.001.

Jukemura, P. (2019). *Why ESG investing seems to be an attractive approach to investments in Brazil*.
    ING-Scuola di Ingegneria Industriale e dell'Informazione

Khan, M., Serafeim, G., & Yoon, A. (2016). *Corporate Sustainability: First Evidence on Materiality*.
    The Accounting Review, 91(6), 1697–1724. https://doi.org/10.2308/accr-51383

Kelessidis, V. (2020). *Benchmarking. INNOREGIO: dissemination of innovation management and
    knowledge techniques*. Report produced for the EC funded project

Kenton, W., Scott, G. & Courage, A. (2021). *Financial performance: a Fundamental Analysis*.
    Investopedia.

Kirchherr, J., Reike, D., & Hekkert, M. (2017*). Conceptualizing the circular economy: An analysis of
    114 definitions*. Resources, conservation and recycling, 127, 221-232.

Kingdom, B., Knapp, J., LaChance, P. & Olstein, M. (1996). *Performance Benchmarking for Water Utilities*. AWWA Research Foundation American Water Works Association. 91-102

Kumar, A., Antony, J., & Dhakar, T. (2006). *Integrating Quality Function Deployment and Benchmarking to Achieve Greater Profitability*. Benchmarking: An International Journal, 13(3), 290-310.

Lalitha, K., & Priyanka, T. (2014). *A study on employee welfare measures with reference to IT industry*. International Journal of Engineering Technology, Management and Applied Sciences, 2(7), 191-195.

Linneberg, M. S., & Korsgaard, S. (2019). *Coding qualitative data: A synthesis guiding the novice*. Qualitative research journal.

Longhurst, R. (2003). *Semi-structured interviews and focus groups*. Key methods in geography, 3(2), 143-156

Lucarelli C., Mazzoli C., Rancan M. & Severini S. (2020*). Classification of Sustainable Activities: EU Taxonomy and Scientific Literature*. Sustainability. 12(16). https://doi.org/10.3390/su12166460

Lynch-Fannon, I. (2004). *Employees as corporate stakeholders: Theory and reality in a transatlantic context*. Journal of Corporate Law Studies, 5(1), 155-186

Macharis, C. (2005). *The importance of stakeholder analysis in freight transport*. European Transport. 114-126

Markovic, I. (2019). *Gap analysis: What it is and why it's important in project management.* TMS outsource

Matwiejczuk, W. & Gorustowicz, M. (2017). *Determinants of cyclical changes within the construction sector*. Ekonomia i Prawo. 16. 459. 10.12775/EiP.2017.032.

McKinsey Global Institute. (2020). *Reinventing Construction*. McKinsey Global Institute. Retrieved from: https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Operations/Our%20Insights/Reinventing%20construction%20through%20a%20productivity%20revolution/MGI-Reinventing-Construction-In-Brief.pdf

Mertins, K., Kempf, S. & Siebert, G. (1995). *Benchmarking techniques*. Fraunhofer-Institute for Production Systems and Design Technology. 223-229.

Miles, Matthew B., and Michael A. Huberman. 1994. *Qualitative Data Analysis*. 2nd edition ed. Thousand Oaks, CA.: Sage.

Nielsen. (2005). *The Sustainability Imperative*. Nielsen. Retrieved from: https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/Global20Sustainability20Report_October202015.pdf

Oleksiv, I., Lema, H., Kharchuk, V., Lisovych, T., Dluhopolskyi, O., & Dluhopolska, T. (2020, September). Identification of Stakeholders Importance for the Company's Social Responsibility using the Analytic Hierarchy Process. In 2020 10th International Conference on Advanced Computer Information Technologies (ACIT) (pp. 1-4). IEEE.

O'Se, C. & Holland, C. (2021). *Corporate Sustainability Reporting Directive: What the new CSRD means for you*. KPMG. Retrieved from:

https://home.kpmg/ie/en/home/insights/2021/04/corporate-sustainability-reporting-directive-csrd.html

Pagano, M. S., Sinclair, G., & Yang, T. (2018). *Understanding ESG ratings and ESG indexes*. In Research handbook of finance and sustainability. Edward Elgar Publishing.

Panzeri, S., Magri, C. & Carraro, L. (2008). *Sampling Bias*. Scholarpedia. 3(9). 4258

Purwanto, A., Fahlevi, M., Pramono, R., Purba, J., & Juliana, J. (2020). *Benefit of Benchmarking methods in several industries: a systematic literature review*. Systematic Reviews in Pharmacy. 11. 508-518.

Qu, S. Q., & Dumay, J. (2011). *The qualitative research interview*. Qualitative research in accounting & management.

Reno, J. (2015). *Waste and waste management*. Annual Review of Anthropology, 44, 557-572.

Rivera, J. J., Bigne, E. & Curras-Perez, R. (2016). *Effects of Corporate Social Responsibility perception on consumer satisfaction with the brand*. Spanish Journal of Marketing - ESIC, 104-114

Rogers, P. P., Jalal, K. F., & Boyd, J. A. (2012). *An introduction to sustainable development*. Routledge.

Rolstadås, A. (2013). *Benchmarking – Theory and Practice*. Springer Science + Business Media, LLC. 223-229.

Saldaña, J. (2013). *The coding manual for qualitative researchers + qualitative data analysis: A methods sourcebook*. Sage Publications.

Salmons, J., & Wilson, L. (2008). *Handbook of research on electronic collaboration and organizational synergy*. Hershey, PA: IGI Global.

Scott, C., & Medaugh, M. (2017). *Axial coding*. The international encyclopedia of communication research methods, 10, 9781118901731.

Sekhar, S.C. (2010). *Benchmarking*. Department of Business Administration, St. Ann's College of Engineering and Technology. 4(6). 882-885

Singhania, M., & Saini, N. (2021). *Quantification of ESG Regulations: A Cross-Country Benchmarking Analysis*. Vision. https://doi.org/10.1177/09722629211054173

Somers, M. J. (2001). *Ethical codes of conduct and organizational context: A study of the relationship between codes of conduct, employee behavior and organizational values*. Journal of Business Ethics, 30(2), 185-195.

Vehovar, V., Toepoel, V., & Steinmetz, S. (2016). *Non-probability sampling*. The Sage handbook of survey methods, 1, 329-45.

Vishwanathan, P., van Oosterhout, H. (J.), Heugens, P. P. M. A. R., Duran, P., & Essen, M. (2019). *Strategic CSR: A Concept Building Meta-Analysis*. Journal of Management Studies, joms.12514. https://doi.org/10/gf3hq9

Wallace, C. (2017). *What is negative screening*? ESG investing. Impactive.

Walker, W. E. (2000) *Policy Analysis: A Systematic Approach to Supporting Policymaking in the Public sector*, Journal of multi-criteria decision analysis 9: 11-27.

Whelan, T., Atz, U., & Casey Clark, C. F. A. (2021*). ESG and Financial Performance*. Centre for Sustainable Business, NYU-Stern.

Wu, J., Lodorfos, G., Dean, A., & Gioulmpaxiotis, G. (2017). *The Market Performance of Socially Responsible Investment during Periods of the Economic Cycle—Illustrated Using the Case of FTSE*. Managerial and Decision Economics, 38(2), 238–251. https://doi.org/10.1002/mde.277

Yin, R. K. (2003). *Case study research, design and methods*, 3rd ed. Newbury Park: Sage Publications.

Yin, Robert K. (2018). *Case study research and applications: Design and methods* (6th Ed.). SAGE.

8. Appendix
Appendix I: Interview protocol
Background information
- Function of the interviewee
- Location of the subsidiary

Sustainability knowledge

What is your idea about what sustainability includes?
- Why?
- How?

On a scale from 1 to 10, how important is sustainability to you?
- Why?

On a scale from 1 to 10, how important is sustainability within Ten Brinke?
- Why?

What does Ten Brinke do, in order to bring attention to the employees about sustainability?
- Why?
- How?
- How often?

Determination of relevant subjects

What subjects of sustainability do you determine as significant for Ten Brinke?
- Why?
- How?

On a scale from 1 to 10, how important do you determine the following subjects and why? (the description of the categories is presented on the following page(s).
- Circular entrepreneurship
- Employee welfare
- Employee training
- Waste management
- Co2 management
- Risk management
- Corporate governance
- Social entrepreneurship
- Sustainable development
- Relationship building

On a scale from 1 to 10, how important, do you think, are the following subjects for Ten Brinke and why?
- Circular entrepreneurship
- Employee welfare
- Employee training
- Waste management

- Co2 management
- Risk management
- Corporate governance
- Social entrepreneurship
- Sustainable development
- Relationship building

Could you explain to what extent the sustainability subjects are implemented within Ten Brinke?
- What?
- Why?
- How?

What sustainability subjects, do you think, should Ten Brinke improve?
- Why?
- How?

Internal contribution to CSRD

What does your vision of sustainability for Ten Brinke look like?
- Why?
- How?

Do you have any contribution to the sustainability of Ten Brinke?
- If yes
  - What?
  - Which?
  - How?
- If no
  - Why?

Are you interested in playing a role in contributing to the sustainability of Ten Brinke?
- If yes
  - What?
  - Which?
  - How?
- If no
  - Why?

Appendix II: List of organizations

Organization	Sector	Revenue (in million €)	Employees	Family Business	Large Organization
1*	Construction	289	190	Yes	No
2*	Construction	7.315	17.966	No	Yes
3*	Construction	2.957	13.830	No	Yes
4*	Construction	2.012	6.300	No	Yes
5*	Construction	6.448	17.000	Yes	Yes
6*	Construction	1.748	4.700	No	Yes
7*	Construction	1.677	4.912	Yes	Yes
8*	Construction	947	2.000	Yes	Yes
9**	Plastic Frames	1.142	6.200	Yes	Yes
10**	Technology	1.289	5.583	Yes	Yes
11**	Technology	207	760	No	Yes
12**	Floor systems	383	1.340	Yes	Yes
13**	Distributor	5.456	22.000	Yes	Yes

*Competitor
**Non-competitor

Appendix III: List of codes

Code
Circular entrepreneurship
Employee welfare
Sustainable development
Waste management
Employee training
Relationship building
Social entrepreneurship
Co2 management
Financial performance
Risk management
Corporate governance

Appendix IV: Steps of MB-model

Step 6: Develop and implement action plans. In this step, the unit of observation is the comparison made in the previous step. This comparison has provided the organization with certain strong points and weak points regarding the ESG regulations. The organization should collect data on the strong and weak points, to gain valuable information on why they are strong and weak. By analyzing this information, the organization is able to establish functional goals. These goals should be translated into action plans. These action plans should be discussed with the internal stakeholders, to gain their support and trust. Once the action plans are notified as acceptable, the organization could implement the action plans.

Step 7: Feedback and review. The units of analysis are the action plans and the internal stakeholders. The units of observation are the implemented action plans and the stakeholders, which have sufficient information regarding the action plans. Data should be collected on the present stadium of the organization. This can be collected by gaining information from an expert with the knowledge. A comparison could be made between the goals and the present stadium. By implementing this, the organization knows which action plans have contributed towards a positive and negative effect. This effect can be reviewed. Also, feedback could be given by the right stakeholders, on why the action plans have worked or not. The feedback and reviews will contribute to continuous improvement. Strong points could be further strengthened and weak points could be solved.

Step 8: Recalibration. The units of observation are the reviews and given feedback. Data should be collected on the feedback and reviews. This data should be thoroughly analyzed, in order to gain the right effects of the steps and action plans. Based on this, the organization could determine that recalibration of certain steps or action plans is necessary. Flaws and mistakes in the action plans or steps are identified and are changed, which could result in a different effect.

Overview of the steps

Step	Unit of analysis	Unit of observation	Data collection method	Result
6. Develop and implement action plans	Gap analysis	Strong and weak points	SWOT analysis	Relevant action plans
7. Feedback and review	Action plans	Strong and weak points	Information from the expert	Overview of the influence of the action plans
8. Recalibration	Feedback and review	Relevant feedback and review	Step 7	Solve the flaws and mistakes

Appendix V: Overview of themes and categories

circular entrepreneurship	co2 management	corporate governa	employee training	employee welfare	financial performance
resource management	co2 management	corporate governanc	employee education and	integrity	financial performance
circular entrepreneurship	Decarburization	compliance	employee recruitment, d	safety and health	
project and product quality and control	emissions	work rights	employee development a	employees with distance	
digitalization and industrialization	sustainable equipment and logistics	diligence	employee education and	equality, diversity, and inclusion	
responsible supply chain management	emission reduction	anti-corruption	knowledge development	sustainable employability	
circular building	energy transistion	fair competition		attract talent	
integral designs	fuel management			employee involvement	
it applications				privacy	

relationship building	risk management	social entrepreneurship	sustainable development	waste management
stakeholder dialogue	risk management	cooperation	innovation	waste management
		charity foundation	biodiversity	
		social involvement	clean water and sanitation	
		global events	climate change adaption	
		human rights	sustainable procurement	
		social impact	energy transistion	
		stakeholder dialogue	water quality	
		customer orientation	climate change mitigation	
		digitalization and ind	hydrogen economy	
		public policy	energy management	
		social return	greening financing	
		co-creation with part	water usage	
		community engagem	technological development	
		social investments	energy reduction	
		customer satisfaction	economic sustainability	
		ethical task	energy neutral	
		integrity		