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Decoding Sustainability Disclosure: Financial Institutions' Quest for Data

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Abstract

This thesis investigates how data collection process is structured in financial institutions reporting financed emission. It explores a perspective of financial institutions as external users of sustainability reports, that has not been widely represented in the current literature. The qualitative single-case study explores how professionals extract and interpret ESG data, by analysing thesis' findings through the sensemaking perspective. The findings contribute to the current literature threefold. Firstly, they uncover how ESG data collection process is structured and what assumptions regarding legitimacy guide professionals. Further, they highlight the role of the leader in shaping homogenous assumptions. Lastly, they present effects of institutional pressure and internal strive for conservative reporting on data collection process.

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Key words: Sustainability reporting, Sensemaking, Data collection, Financed emissions, ESG

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1. Introduction

On 22 April 2016 global leaders signed an international treaty aimed at initiating collaborative efforts on counteracting climate change and its devastating impacts. Paris Agreement, as we know it today, set a list of long-term goals, one of which postulated a "substantial reduction of greenhouse gas emissions to hold global temperature increase to well below 2°C above pre-industrial levels" (United Nations, n.d.). Despite the ongoing efforts undertaken in the last decade, the extent of emissions reduction has been insufficient to realize overarching goals by 2050.

Carbon Accounting addresses the issue of climate change. Carbon accounting has been described as a system that employs accounting methods to collect and analyse climate change-related data, further utilized in decision making by both internal and external stakeholders (Tang, 2017, p.11). It classifies emissions as direct emissions, deriving from sources owned or controlled by a company, and indirect emissions, which derive from company's operations coming from sources that are owned or controlled by another company (PCAF, p. 13). Current reporting on GHG emissions spans from disclosing information in the company's annual report or as a separate sustainability report, which can further be categorised as voluntary and mandatory reporting. Companies disclose sustainability-related information on own websites and in other publicly disclosed documents (He et al., 2021). Nonetheless, lack of report standardization hinders efficient evolution of carbon accounting. Increasing number of reporting standards and decentralization of the institutions governing them, presents yet another issue. As reported by EY in 2021, there are "over 600 ESG reporting provisions globally with many having different interpretations of sustainability" (EY, 2021, p. 3). Moreover, international organizations, e.g. International Maritime Organization, set industry-specific standards on how to report.

Green transition of companies, which facilitates creation of sustainable economy, is greatly dependent on financial institutions providing required financing to customers' low carbon projects. Moreover, European Banking Association (EBA) emphasised growing importance of ESG risks and their effect on all traditional categories of financial risks (EBA, p. 3). Minimum standard on ESG risks require financial institutions to establish internal procedures and methodologies allowing to identify and evaluate factors that drive ESG risks (EBA, p. 6). In the spirit of a universal preconception "if you can't measure it, you can't manage it", ensuring collection of adequate information constitutes a major milestone on a road for green transition

and ESG risks management. EBA specifies financed emissions as one of the metrics used to monitor ESG risks and assess ESG performance over time.

Given the plethora of issues, this thesis explores how the process of data collection is structured in a financial institution reporting financed emissions leading us to pose the following research question:

How do analysts in financial institutions make sense of clients' sustainability reports to report financed emissions?

To answer this question, a qualitative single-case study was conducted. We interviewed seven professionals working for a European bank, hereafter pseudonymised as "GreenBank". We draw the research on interviews and sector-specific guidelines to investigate main barriers, internal process structure and set of assumptions shaping data collection. Through the lens of sensemaking perspective, this thesis uncovers how clients' ESG data is extracted, interpreted and incorporated in financial institution's sustainability report, within the context of unstandardized practice of sustainability reporting described in the literature (Senn & Giordano, 2020; Cho & Patten, 2008). Theoretical framework integrates Maitlis and Christianson (2014) model, supplemented with features of Weick et al. (2005) and Maitlis (2005) organizational perspective. The framework was chosen given great importance of data extraction strategies, influence of underlying assumptions and role of a leader on shaping the practice. Our study's findings contribute to the current literature by describing how data collection process is structured in a financial institution and presenting a perspective of sustainability report's external user, other than greatly described investors' perspective (Jonsdottir, 2022; Amel-Zadeh & Serafeim, 2018). The findings show how factors other than audit shape analysts' perception of legitimacy. We present a novel finding on pivotal role of manager in aligning homogenous assumptions and showcase how institutional pressure can reduce accuracy. Moreover, we supplement current literature on ESG data extraction (Du Rietz, 2014) by presenting a novel perspective on utilization of AI for extracting information. While current literature focused on the perspective of reporting entity (Talbot & Bailar, 2015; Jabot et al., 2025), our findings on usage of clients' sustainability disclosure to report own scope 3 emissions, conceptualize a path forward for evolution of sustainability reporting.

Hereafter, we define non-financial disclosure as "sustainability reporting", in line with Directive (EU) 2022/2464 of the European Parliament. It is used interchangeably with "sustainability disclosure" due to the abundance of other data sources than CSRD reports.

Contained there information on environmental, social and governance factors is called ESG data.

2. Literature Review

Literature to date lacks explorative studies on how ESG analysts engage with clients' sustainability disclosure in financial institutions, obtained specifically for reporting own financed emissions and facilitating client's green transition. To develop a comprehensive understanding of current state of knowledge, we will draw literature review from multiple perspectives related to the practice.

2.1. Sustainability in Financial Reporting

The integration of sustainability considerations has been one of the most significant developments in contemporary accounting practices. The literature presents multiple perspectives on the motivations driving sustainability reporting. It highlights that underlying intentions can shape the content of reports. While sustainability reporting has been inclined to demonstrate corporate responsibility, several scholars have proclaimed that, in practice, it serves as a legitimization tool (Adams, 2004; Gray et al.,1996; Unerman, 2000). Thus, allowing organizations to accommodate the expectations of stakeholders and comply with institutional pressures, rather than truly account for their social and environmental impact (Bebbington et al., 2008; Deegan et al., 2002; Cho et al., 2012). This dual nature of sustainability reporting, as both an instrument for accountability and legitimacy, raised concerns about the comparability of the disclosed information (Rozkowska-Menkes et al., 2024). Regardless of institutional pressure and stakeholder expectations, the production of trustworthy sustainability data remains intrinsically difficult. Previous research showcased that gathering sustainability data is challenging for companies (Adams & Frost, 2008; Kaspersen & Johansen, 2016; Troshani & Rowbottom, 2024). Cederberg & Sjögren (2025) argued that reliable sustainability measures are the foundation for the future of sustainability reporting.

It has been widely studied how the capabilities of companies affect the data presented (Adams & Frost, 2007; Senn & Giordano, 2020; Troshani & Rowbottom, 2024). Organizations collect data on their social and environmental impacts to provide basis for more informed decision making (Adams & Frost, 2007). Several studies have confirmed that details in annual integrated reports given to potential users are often very poor (Senn & Giordano, 2020; Cho & Patten, 2007). Senn & Giordano (2020) investigated that environmental expenditures, i.e. "resources

devoted to prevention of risk and pollution", is perceived by managers as vague, as voluntary disclosure might not follow any specific requirements. They further reinforced the findings of Laine et al. (2017) that future investments related to environmental impact are very arbitrary and subjectively allocated. Thus, information about environmental expenditures is often reported for the sake of reporting, rather than disclosing genuine investment plans, which further obfuscates trustworthiness.

Several studies focused on investigating which companies and why they report for sustainability, yet little was done to study how process of collecting data looks like (Bebbington & Larrinaga, 2014). Whilst accurate and comparable sustainability data is very much needed, its reliability and transparency are subject to massive criticism (Boiral et al., 2019). Yet, sustainability reporting lacks structured processes and frameworks (Troshani & Rowbottom, 2024). In a recent study, it was found that organizations can choose their own ways of collecting social and environmental data (Kaspersen and Johansen, 2016). These long processes often varied from site-level data capture to group consolidation. Several instances resulted in missing data trails and inadequate internal flows of information, leading to an increased risk of imprecise data (Kaspersen and Johansen, 2016). Unlike traditional financial reporting, sustainability reporting methods are based on differing frameworks, often chosen at company's discretion, resulting in selective and inconsistent disclosures (Troshani and Rowbottom, 2024).

Literature investigated the disconnection between the information disclosed and the significant challenges faced by companies (Boiral et al., 2019; Talbot & Boiral, 2015). To rationalize and legitimize GHG emissions, companies adopt various strategies, such as neutralization strategies (Talbot & Boiral, 2015). These neutralization techniques can include promotion of systemic views, which exaggerate positive environmental impact of undertaken actions (Talbot & Boiral, 2015). This results in disclosures that may appear material, but in reality, fail to capture the complexity of issues confronted in practice. Moreover, a tendency for partial representation prevails, often highlighting one dimension, while obscuring others (Russel & Thomson, 2009). "Insufficient, incomplete, inconsistent, and unverified emissions make it difficult to evaluate the true impact of companies' carbon emissions policies" (Young-Ferris et al., 2015, as cited in Jabot et al., 2025, p. 4). Jabot et al. (2025) explored how frictions between economic and environmental measures are handled in an organization with an embedded environment-oriented strategy. The case company utilized displacement strategy, in form of disclosing "avoided", rather than actual emissions, to rapidly ignore total carbon emissions

during growth periods of the firm. Furthermore, the study highlighted the inability to quantify firm's actions directed to preserve the environment, such as buying land to protect from deforestation. On the other hand, the design of non-prescriptive evaluation criteria of companies, aiming at facilitating organizations to disclose more freely in qualitative terms, aided the processes of financialization of social and environmental reporting (Arjaliès et al., 2023). Financialization is defined as the process by which one only considers sustainability issues that become financially material (Arjaliès et al., 2023). Non-prescriptive means of disclosure, as part of the construction of Principle for Responsible Investment (PRI), would allow companies to become more flexible in reporting. With this shift, companies would be able to express their values without being pressed to adapt reporting methods that consist of quantified metrics.

In summary, previous research on sustainability reporting explored drivers of disclosure practices and determinants of information disclosed. Researchers also contrasted the way organizations' internal skills affect reporting depth and accuracy and the evolution of expertise in response to regulatory pressures. Lastly, the literature acknowledged the fundamental difficulties associated with assessing sustainability performance, the tendency of displacing uncomfortable knowledge and the facilitation of simpler reporting practices for companies. However, to the best of our knowledge, existing literature appears to present limited knowledge on how organizations conduct data collection process, when their reporting is fully dependent on analysing their clients' unstandardized and ambiguous disclosures. We will investigate that process in the context of a financial institution collecting data for reporting financed emissions (scope 3). Senn & Giordano (2020) called for further research on how external stakeholders interpret and use sustainability disclosure. Nevertheless, given the goal of understanding how the analysts use and interpret their clients' disclosures, we focus now on previous literature describing analysis of sustainability data.

2.2 Practices and Barriers of ESG Data Analysis

Our understanding of that nephralgic area was aided by Du Rietz (2014) research on investors' ESG analysis. How the analysis is structured is deeply rooted in what analysts deem to be an epistemic object, i.e. model input, and how the model is structured (Du Rietz, 2014). Greatly emphasised lack of standardized data and incomplete information hinder the process of data collection. The author points out that the variations and shifts in analysts' practice also stem

from the fact that information is not just readily available but that it's inherently tied to analysis process (Du Rietz, 2014). Firstly, the author observed a widespread tendency of analysts to "inherit" certain ways of performing analysis from their colleagues and following established methodologies (Du Rietz, 2014). Ways of collecting the data and defining what information to look for are simply part of the routine; they become taken-for-granted and, although adjustments are made, analysts are not informed on the reasons for certain choices underlying the model construction (Du Rietz, 2014). How then does it happen that analysts find appropriate accounts that fit into the models and what happens in the absence of accounts? As author points out, the predefined categories serve as variables, which direct what information shall the analyst look for, whereas the variables might be decided upon the affiliation to group of companies, e.g. based on the industry. As summarized by Cederberg (2019) "a lot of the work consists of filtering out key information while disregarding other – and of identifying what might be "missing" pieces of information". What exactly guides and aids analysts to be able to identify some information and disregard other? How exactly does their reasoning looks like?

The literature extensively documents barriers to the use of ESG, putting particular emphasis on issues of data quality, standardization and reliability. Global survey's results by Amel-Zadeh & Serafeim (2018) indicate that investors often encounter difficulties arising from lack of standardization in reporting practices and inadequate detail of disclosure. Moreover, ESG data is perceived as challenging to quantify and not reliable due to lack of external assurance. As a result, the perceived low quality of available data frequently limits its relevance and utility in the investment process. These concerns are echoed in a study by Jonsdottir et al. (2022). Notably, investors highlight that disclosure omits crucial information or presents immaterial information. Scepticism is further raised, as market participants express low levels of trust in self-assessed reports, deeming disclosed information not suitable for inclusion in investment decision. Urgency of expanding external audit practice was in line with Amel-Zadeh & Serafeim (2018) findings. To explore inherent roots of some of the aforementioned issues, Kotsantonis and Serafeim (2019) highlight important aspect relating to ESG measurement and data. As they note, "The primary goal of ESG metrics is to capture as accurately as possible a firm's performance on a given ESG issue. Only when this goal is achieved will investors be able to use the data to hold companies accountable for their ESG performance" (Kotsantonis and Serafeim, 2019). Evidence from their study reveal robust heterogeneity in disclosed ESG data in both terminologies and units of measurement, with more than twenty distinct

approaches relating to the measurement of the same issue. Emerging landscape of ESG disclosure is further worsened when considering inconsistent reporting. Kotsantonis and Serafeim (2019) highlight data gaps that analysts need to continuously address. To put it in numbers, only 15% of the companies from their analysed sample recorded certain ESG information, even though it was deemed a material issue for 9 out of 11 industry sectors (Kotsantonis and Serafeim, 2019). Authors suggest that to combat the issue of comparability, science-based climate targets "could provide companies with a clearly defined pathway to future-proof growth by specifying how much and how quickly they need to reduce their GHG emissions" (Kotsantonis and Serafeim, 2019). In their view, this issue derives from lack of standardization and regulation around sustainability disclosure, resulting in inconsistent reporting - issues commonly raised by investors (Amel-Zadeh & Serafeim, 2018; Jonsdottir et al., 2022). Notably, in case of GreenBank's analysts, availability of the data and its quality constitute a robust aspect of data collection process, suggesting similar issues prevalent in their practice.

To conclude, previous literature explores underlying barriers in analysis of sustainability disclosure for investment decisions. It highlights the difficulties of recognising appropriate environmental accounts due to lacking standardized reporting methods. The heterogeneity of sustainability reporting leads to inadequate detail of disclosure, which further complicates the analysis. Yet, as many studies focused on its practicality in investment decisions, existing literature lacks the perspective of how it is used and interpreted when it comes to incorporation in own reporting. With our thesis, we aim to explore what the process of collecting relevant data for own sustainability reporting purposes looks like and how professionals deal with the problems related to ESG data, so that an organization can fulfil its regulatory obligations.

2.3 Identification of Research Gap

To answer identified future research call from Senn & Giordano (2020), in this thesis we investigate how sustainability disclosures are analysed by an external stakeholder, namely a financial institution. We chose to explore their data collection process due to financial institution's important role in shaping sustainable economy. Moreover, we aim to elaborate on the use of sustainability data outside of the investment decisions, but on how such data is being collected and interpreted for own sustainability reporting purposes. Financial institutions' disclosures are heavily reliant on their clients' reporting (Arjaliès et al.,2023) and not

complying to regulatory expectation could result in sanctions and, most likely, public scrutiny. By addressing the posed research question, our thesis investigates the intersection between sustainability reporting and practice, as well as barriers related to ESG data analysis. In this way, we aim to provide a new perspective on how sustainability data is collected and interpreted when it comes to financial institution's sustainability reporting practice. Not only will we understand the process, but our thesis can further contribute to many sustainability reporting entities in shaping their perception of what information is important for a disclosure and why such information is deemed credible in external stakeholders' eyes.

To understand how professionals in GreenBank analyse customers' disclosure of ESG data, we use a Sensemaking perspective. Sensemaking perspective, originally introduced by Weick (1995), has been a widely studied subject both in organizational management and accounting research (Kraus & Strömsten, 2012). The framework is highly relevant and useful in the context of our research, since we want to uncover how the process of data collection is structured and, most crucially, what thought process, assumptions and possibly other factors guide professionals through ambiguity of sustainability reporting. Sensemaking provides a lens through which we can understand how that interplay of assumptions affects actual decisions behind the process. We draw our analysis on integration of literature on organizational sensemaking by Maitlis and Christianson (2014) and Weick et al. (2005).

2.4 Theoretical Framework

Sensemaking has been given multiple meanings (Maitlis and Christianson, 2014), however, hereafter we will define sensemaking as Maitlis (2005): "Sensemaking is a process of social construction (Berger and Luckmann, 1967) in which individuals attempt to interpret and explain sets of cues from their environment. [...] sensemaking allows people to deal with uncertainty and ambiguity by creating rational accounts of the world that enable action." For a detailed explanation of the concepts we utilize, please refer to Table 1.

Maitlis and Christianson (2014) characterized sensemaking in three phases: extracting cues, creating interpretations and acting. As sensemaking is inherently recursive, these steps should not be viewed as linear but rather as interdependent movements in which actors notice cues, interpret them, and develop certain understanding over time (Sanberg and Tsoukas, 2015). Hence, we take that assumption into account when examining how analysts work with and interpret sustainability reports, which are ambiguous and vary in levels of completeness.

Initiation of the process happens due to discrepancy between one's expected state of the world and its actual state, in a form of violated expectations (Weick et al., 2005). They materialize in cues, characterized by Weick (1995) as "simple, familiar structures that are seeds from which people develop a larger sense of what may be occurring". To put it differently, these are the points of reference, issues or events that set out a specific direction of the sensemaking process. Cues bear uncertainty, which can be understood as lack or incomplete information, and ambiguity, which defines a situation in which more than one possible interpretation is possible to explain it. As that part of sensemaking plays a crucial role in how analysts in GreenBank analyse ESG data, we implement an in-depth explanation proposed by Weick et al. (2005) on how it happens. Individual interacts with their environment and other subjects to "create a stream of events that they pay attention to" (Orton, 2000, cited in: Maitlis & Christianson, 2014, p. 84). The process materializes in two steps, noticing and bracketing. Individuals notice and bracket their environment by choosing portions of the environment for a closer attention (Weick et al., 2005).

Weick (1988) describes a product of individual's interaction with their environment as "an orderly, material, social construction that is subject to multiple interpretations", containing real objects whose symbolic meaning and significance are the subjects of interpretations. Creating interpretations entails choosing appropriate meanings to reduce both ambiguousness and uncertainty (Weick, 1979). Meanings are selected either from contextual implications or from previous experiences (Weick et al., 2005).

By acting, more cues and stimuli are created, allowing individuals to learn more about the situation (Weick, 1988 cited in Maitlis & Christianson, 2014). According to Maitlis and Christianson (2014), that reciprocal exchange, between individual and environment (in form of extracting cues, giving them interpretations and ultimately acting) is a key component of sensemaking, as it distinguished sensemaking from mere interpreting. "Actions enable people to assess causal beliefs that subsequently lead to new actions undertaken to test the newly asserted relationships. Over time, as supporting evidence mounts, significant changes in beliefs and actions evolve" (Weick et al., 2005). Important feature of sensemaking is clarified by Weick et al. (2005) quote; sensemaking is based on preconceptions, i.e. individual's beliefs, resulting in actions usually further strengthening these preconceptions (Weick, 1988). Deriving from the notion that individuals' base actions on own preconceptions and further fuel them with evidence derived from action's results, Weick et al. (2005) points out that sensemaking

doesn't constitute what is most accurate, but rather what is most plausible. Cristofaro (2022) summarized "Therefore, this activity is oriented to find consistency; thus a plausibility of the story over time (or narrative rationality) that has been built in light of what occurred and been interpreted". Crucial implications derive from sensemaking's feature, as we hypothesize that credible data collection requires accuracy.

Finally, we supplement the theoretical framework with findings of Maitlis (2005) to understand a pivotal aspect of sensemaking, raised by Maitlis and Christianson (2014), on how intersubjective meanings are constructed in organizations. Sensemaking differs in organizations based on a rationale of how much leaders and stakeholders are engaged in the process. One form of organizational sensemaking was characterized as "Restricted Organizational Sensemaking". This type of sensemaking includes high level of sensegiving from the leader with limited sensegiving on the side of other stakeholders. The resultant produces unitary and narrow accounts, leading to the prevalence of single interpretation and single action plan for resolving such issue (Maitlis, 2005). Unitary accounts feature a single understanding prevalent among organization's members. It is narrow in a sense of including limited perspective attributed to the product of sensemaking process of a leader and commonly most important stakeholders. Such sensemaking between leaders and key stakeholders usually takes place in scheduled meetings with stakeholders, rather than being an ongoing process. Understanding the macro level of sensemaking in GreenBank allows for a broader comprehension of underlying process, since, as mentioned above, sensemaking is inherently a social process.

Concept	Definition
Cues	Issues, events and, broadly speaking, details of the environment that trigger sensemaking. Cues could be anything that bears ambiguousness or uncertainty, like a numerical value in a sustainability report that is unexpected, i.e. does not correspond to data collector's expectations.
Preconceptions	Individual or collective beliefs and assumptions, usually deriving from past experiences. Preconceptions shape and influence all steps of sensemaking. Preconceptions can constitute an assumption that when collecting data, individuals tend to be conservative or company's commitment to Science Based Target Initiative makes their sustainability report more credible
Extracting Cues	Process consists of two steps: noticing and bracketing (described below). It happens when individual becomes aware of some portions of the environment that bear uncertainty and ambiguity and violate their expectations. Extraction of cues can range

	from becoming aware of a discrepancy of client's emission in the model, to inspecting if a company belongs to Science Based Targets Initiative.
Noticing and Bracketing	Crucial components of the initial step of sensemaking - extracting cues. Relates to individuals becoming aware of cues and limiting certain portions of their environment for a closer inspection. Process is highly dependent on the preconceptions that individual has. The act could be exemplified as choosing which report to use as a data source (bracketing), based on assumptions of source prioritization of choosing audited sustainability report (preconceptions) and finally observing what are scope 3 emissions (noticing).
Creating Interpretations	Interpretations can be created on individual and collective level, as sensemaking is inherently a social model. It is an act of choosing the most plausible meaning of an ambiguousness of extracted cues from the environment. Created interpretation could be illustrated by a situation in which attaining a certain target does not seem plausible for a data collector but is interpreted as credible if a client belongs to Science Based Target Initiative, since the underlying preconception is that association to SBTi serves as another form of external verification.
Acting	Any action that is a resultant of the previous steps of sensemaking. Acting usually confirms previous preconceptions, as extracted cues and created interpretations derive from them. Results in more cues being created and allows to learn more about a situation. An action can constitute a decision of an individual to look for another source of information, if the currently analysed document lacks clarity.
Restricted Organizational Sensemaking	One of the modes of organizational sensemaking, characterized by Maitlis (2005). It features high degree of sensegiving from the leader and low degree of sensegiving from other stakeholders. Sensegiving is characterized as “attempts to influence others’ understandings of an issue” (Maitlis, 2005). That organizational sensemaking has an outcome of unitary and narrow accounts and actions, characterized as an account with "single, dominant interpretation of the issue [...] incorporating only the leader's perspective" (Maitlis, 2005).

Table 1: Sensemaking perspective: concepts and definitions

3. Research Methodology

3.1 Research Design

This investigation will utilize qualitative case study method with semi-structured interviews to explain existing barriers and processes behind data collection. An explanatory case study was chosen based on fulfilment of criteria presented by Yin (2009). Firstly, we aim to explore a “contemporary phenomenon within its real-life context” (Yin, 2009). We believe that the context of data collection is highly relevant due to ambiguity of sustainability reports, which leaves professionals with a high degree of discretion when it comes to the actual process. In that sense, our study aims to fill a knowledge gap observed in the literature, as there is a lack of knowledge on how the data collection process is conducted.

For our study, we chose the analytical interview approach (Kreiner & Mouritsen, 2005). With the use of analytical interview framework, we aim to obtain an input from the respondent which

would effectively contribute to the new knowledge production. In essence, the interviewee's answer was not treated as a final answer but approached with follow-up questions aimed at deconstructing the interviewee's perception of the reality (Kreiner & Mouritsen, 2005). The framework holds a promise that the respondent becomes reflective in terms of their own answers, so mutually we could begin "theorizing over the possible meaning and character of organizational practices previously taken-for-granted" (Kreiner & Mouritsen, 2005). Such interaction helped us deconstruct these taken-for-granted meanings and concepts that prevail in an organizational setting. Moreover, follow-up questions served as a catalyst for building in-depth understanding to which we opt by utilizing case study research design.

We used systematic combining grounded in abductive logic. Suggested by Dubois & Gadde (2002), systematic combining is "a process where theoretical framework, empirical fieldwork, and case analysis evolve simultaneously". This is in line of the concept of "matching", that is, systematic combination can be understood as continuous interaction between theory and empirical observations (Dubois & Gadde, 2002). They further describe "matching" as a non-linear process where the researchers cyclically shift between the framework, the data sources, and the emerging analysis with the goal of matching theory and reality. Abduction starts with a puzzle or a surprise (Bell et al., 2019). As the topic of this thesis was motivated by a gap in existing literature, the abductive approach seemed appropriate as it is perceived favourable when the goal is to uncover new findings (Dubois & Gadde, 2002).

3.2 Data Collection

3.2.1 Primary Data

The primary data collection for this thesis has been the sourcing of empirical observations drawn from semi-structured interviews. Use of this method allowed us to uncover the same themes across all the interviews, but at the same time facilitated the interviewees to expand on the interesting or surprising answer given to the main question (Qu & Dumay, 2011). The format of asking follow-up questions proved to be critical in gaining an in-depth understanding of sensemaking of professionals about sustainability reports.

3.2.2 Semi-Structured Interviews

Semi-structured interviews were guided by a predefined interview guide (see Appendix 8.1 Interview Guide). After conducting the first two interviews, the interview guide was reassessed

to include some of the questions that arose during the initial interviews. Due to participants' various roles in the company, questions were also adjusted to address participant-specific issues, to gain information unique to their role. Interview guide consisted of open-ended questions which allowed for more elaborate and personal answers. We also strived for honest and personal opinions; hence questions were not disclosed to participants prior to interviews. Participants received information prior the interview about the purpose and theme of our study. The structure of the interviews was consistent among all the interviews, beginning with the brief introduction of our research project, following with a question about the interviewee's position within the company and their responsibilities, and finishing the interview with a question on the solution to the main challenge that interviewee faces in their work. As noted by Saunders (2019), initial remarks about our research and an inquiry about participant's role fostered a more relaxed and friendly atmosphere, facilitating the interview. Interviews were conducted both in person and via Microsoft Teams meetings (for details see Appendix 8.2 Interview List).

Sample selection

After choosing GreenBank, we have contacted professionals working with company's sustainability reporting. Our first interviewee suggested several individuals we could contact for the next round of interviews. Their role within the company's sustainability unit provided them with a valuable insight into which individuals would be most suitable to address our topics of interest. Therefore, we utilized the snowball sampling technique, which proves to be appropriate when members of investigated populations are hard to identify (Saunders et al., 2019). Due to GreenBank's pan-Nordic operations, it was initially hard to distinguish which individuals were involved in practices relating to sustainability reporting and had relevant knowledge regarding it, hence, besides inherent biases snowball sampling possesses (King et al., 2019), it was the most appropriate technique to utilize. Shortly after conducting our first interviews, we uncovered different organizational dimensions, all contributing to the sustainability reporting, hence we booked interviews with individuals holding different roles within the company. Ultimately, we interviewed 7 professionals involved in: ESG data collection and reporting, company's sustainability strategy setting and dialogue with clients of GreenBank. This presented an opportunity for a more nuanced, multi-faceted perspective, which contributed to increasing validity of this study. Additionally, prior to conducting the interviews with professionals from GreenBank, we conducted an interview with an industry expert, who specializes in sustainability reporting and audit, hence allowed us to gain

substantial knowledge about current issues and landscape of sustainability reporting. The interviews lasted on average 52 minutes and were both held in person and online via Teams. We conducted one follow-up interview due to new information about the process that emerged after conducting all the interviews.

3.2.2 Secondary Data

The study also includes secondary data analysis, specifically annual reports, company's materials relating to ESG and other relevant, publicly disclosed documents, and reporting methodologies GreenBank has adopted to report on financed emissions. Prior to conducting the interviews, we gained substantial knowledge of the European Banking Authority (EBA) guidelines on the management of ESG risks, as well as European Commission (EC) materials relating to CSRD. Moreover, we got familiar with the PCAF methodology which helped us understand the procedures our case organization is expected to follow when assessing and reporting for emissions. Secondary data collection proved to increase quality of our interviews additionally. During the interviews, we demonstrated our knowledge to participants, which enabled us to engage in meaningful discussions, facilitated by relevant follow-up questions, leading to a deeper understanding of the topic.

3.3 Data Analysis

As mentioned above, abductive reasoning has guided the empirical analysis of this thesis. What puzzled us as the research process began was the many elements and metrics the interviewees look for before starting collecting relevant data and assessing clients' transition plan maturity. We therefore began examining which sensemaking perspective would offer the most analytical traction of our empirical data. Thus, abductive reasoning helped us strengthen the plausibility of the conclusions we have drawn.

Data analysis started immediately after conducting the first two interviews and continued until a several days after the last follow-up interview was held. The first interviews were more exploratory, so we uncover the topics and patterns we want to further study and get recommended suitable professionals to conduct our interviews with. Later discussions became more grounded in theory and focused given the topic. All interviews except one were conducted in English. Additionally, one interview held in Polish was translated to English. For interviews

held in person, the discussions were recorded on a mobile device and then transcribed using Microsoft Word. After transcribing the interviews using that tool, all transcriptions were read through and adjusted for errors by one of the researchers. Using this method of transcribing ensured that we did not lose any nuances or details from our discussions (Bell et al., 2019). The transcription process aided us in familiarizing ourselves with the data, which constituted an initial step in data analysis, as recurring themes and patterns began to emerge. The coding process began as soon as we started conducting our first interviews. We chose to utilize thematic analysis, which consists of coding data by recurring themes or patterns observed across the data set. Thematic analysis, as noted by Braun & Clarke (2006), is thought as "the foundational method for qualitative analysis" and allows for a systemic approach by offering an orderly process of analysis (cited in Saunder et al., 2019, p. 651). Transcripts were color coded based on recurring themes and later the quotes were divided in a separate file, allowing for easier retrieval of the data. After initial color coding, quotes were categorized based on the part of the process they related to. For further detail please review to Appendix 8.3 Codes Frame. As we were expecting, sensemaking worked best, and although we have not chosen the underlying assumptions, we were already oriented on how to start coding the empirics. Later, once we adjusted our theoretical framework, minimal changes were needed to reclassify few quotations.

4. Empirical Analysis

4.1 Background Information

The interview with an industry expert highlighted persistent challenges organizations face in sustainability reporting. They emphasized that when it comes to data collection, particularly of scope 3 emissions, it is "far more complex than simply requesting it" - Industry Expert. For a company to produce credible figures, a strong cooperation between a client and its suppliers must be in place, since most suppliers lack the knowledge, systems and procedures to report their emissions, making the implementation process resource intensive. Such cooperation is primarily characterized by a long-term commitment and is performed via workshops and educating suppliers. Moreover, despite growing regulatory expectations, few firms are ready to meet evolving sustainability standards. Furthermore, due to rapidly changing regulatory expectations, companies face several issues. Most prominent of these is the fact that before companies fully adapt, the requirements change again, making the implemented processes

outdated and not fully adequate. Another highlighted issue pertained to internal budgeting constraints, which often delay investments in necessary tools and systems unless legal mandates require reporting within a defined timeframe. In the light of the latest Omnibus package, which freed up majority of companies from mandatory reporting, it proved to be especially troublesome and further delay projects into capabilities critical for sustainability reporting. Moreover, important feature of sustainability reporting was highlighted – interview underscored that sustainability report's features greatly reflected company's overall vision and strategy:

> The general company strategy and vision are the most important in what is outlined in sustainability reports; is it about increasing earnings, reducing risk or saving the world?

Turning the focus towards our case, GreenBank is one of the largest financial institutions in the Nordic region. Today, it provides a wide range of retail, corporate, institutional and wealth-management services across Europe. Despite international presence, Nordic market is its strategic core. It has more than 30 000 employees (as of 2024) and millions of customers, both private and corporate. GreenBank is also a publicly traded company, which makes it a subject to extensive reporting requirements. Altogether the four business areas allow GreenBank to service a broad array of customers. Ensuring regulatory compliance and managing different type of risks are at the core of the institution's operations. As GreenBank owns a loan portfolio of over 300M euro at fair value through profit and loss (FVTPL) to the public (including retail and corporate clients), it is subjected to direct supervision by the European Central Bank (ECB), while regulatory changes have a strong impact on its strategy. In terms of sustainability reporting, their indirect environmental impact, particularly financed emissions, comprise over 99% of total emissions. Moreover, it is also committed to Science-Based Targets Initiative (SBTi) to become a net-zero bank by 2050. In this context, it becomes highly relevant to understand how professionals perform data collection. Due to clients' sectorial variety, analysts make sense of different standards of sustainability reports to collect data.

4.2 Input Data and Model Determine Cues

We start the analysis with initiation of the data collection process. Firstly, finding the relevant information presents the first challenge, as many of the companies report sustainability data voluntarily, which implies that reporting is not done under CSRD framework. As professionals emphasised, it presents a real challenge since such reports lack coherent structure, presenting

an obstacle to efficiently extract data. Looking at a bigger picture, CSRD reports are "the expected" - professionals working with financial reporting expect structure, which builds their preconceptions on sustainability disclosures. Based on this notion, voluntary sustainability reports are different from expected reality, sparking the sensemaking process. Our initial interview highlighted to our surprise, that beside emissions data, a data collector (named DC hereafter) also extract clients' targets, needed to assess their maturity in relation to transition plan (described later), hence we expand our analysis by including that additional information to present more nuanced account of data collection process. Moreover, some companies disclose emissions data and targets in different documents or do not report at all. Hence, data collectors (DCs), sometimes must look through all publicly available information that customers disclose.

> I usually start with collecting historical CO_2 emissions; so, I look for CO_2, GHG gases, these key terms and if I can't find anything, I'll scroll through the report to find a section for climate emission reporting. [...] And then if I can't find anything there, I'll go through the company's website, to see if there is anything. - Data Collector 1

Initial step in data collection serves as a mode of bracketing, part of extraction of cues described by Maitlis & Christianson (2014) and Weick et al. (2005). The DC limits their environment to inspect its portions in closer detail. Bracketing is guided by source prioritization. As interviewees emphasised, the highest priority holds audited annual report, whereas the lowest priority is assigned to estimates, such as industry estimates. Second step of portioning the environment exhibits itself via key words search. We draw on Weick et al. (2005) notion of preconceptions to explore what guides the choice of key. Collection of data from prior reports points DCs to include the key words that were most prevalent in other examined reports, such as "GHG emission", "Scope 1/2/3", "%", "target". Key words serve as cues, portions of environment that allow sensemaking to happen. That important finding reveals the role of previous experiences on sensemaking and its consequence on accuracy, namely, that by bracketing one's environment by key words search, a DC risks omitting important information that could be conveyed with synonymous expressions. Implications for that are especially important in the light of qualitative information, which can differ greatly in its phrasing. We uncovered that DCs acknowledge the inherent flaw of that strategy, as it might result in inaccurate search, nonetheless, it is still the most prevalent among DCs.

> When you see ambiguity [in the sustainability report], you try to just look for the most common thing, like operational control is the most common way of reporting. So, I tend to lean that way and just try to find something to support me. And it's the same with targets. Like, there are

> specific sentences that you see, and instantly you recognize, like, that's the target and you move on […] So I guess that could be a little bit biased in a sense, because if I look up "Target", then I'm only going to find targets with the word "Target" in it. So, I guess through the pattern recognition, you tend to... it's like a self-confirming bias almost. - Data Collector 2

Another widespread data extraction practice includes usage of AI-powered tools. It features similar characteristics to the process described earlier, however, differs in the timing of when a DC starts to deliberately engage in it. In this scenario, the DC extracts cues of already bracketed documents that AI tool is providing, hence, sensemaking process is not fully dependent on the DC, but on the technology's choice of relevant information. One implication of that finding points us to understand AI usage as an additional bracketing device, from which DCs extract given cues, delegating the first component of sensemaking to the tool. Moreover, all DCs use the same AI model, hence bracketing is more homogeneous among professionals, leading to the whole process being less reliant on individual's experiences, which can differ between DCs, as they engage with different clients' sustainability reports. On the other hand, AI suggests what can be the case for elements that the model requires to be collected (organizational boundary of the reporting entity), which might not be a correct suggestion. The overarching implication suggests that AI-powered tools embed professional's sensemaking to rely on homogenous bracketing provided by AI, instead of own bracketing.

> Being completely honest, because we have so many companies to do and we're meant to try to keep a fast pace, we do use AI to kind of help skim through the document. We have a prompt ready to ask about sustainability reports. And if it doesn't see that there is a clear specification of operational or financial, or equity [control], it suggests what it thinks it is based on a sentence, that it quotes. And then based on my judgment, I would either add that or not. So most commonly companies report using operational control. So, if we see that... if I see that a company states explicitly, "we are reporting for company under our control", that doesn't necessarily say operational, but I tend to assume it is [like that] just because that's [how] the majority [report] and it tends towards that meaning. - Data Collector 2

Once the emissions and target data has been obtained, the DC transfers them into GreenBank's proprietary software. Due to confidential nature of the model, we were unable to obtain its detailed description, however, one feature that guides the sensemaking process relates to units of collected data. That model function inherently defines which emissions or target are deemed material for the reporting practice, i.e. can be understood as a tool to build DC's preconceptions on what is deemed material.

> Sometimes companies report very random intensities like CO_2 per egg produced. And sometimes our platform does not allow us to report with those specific units. -Data Collector 3

In summary, the picture that emerges is that DCs face a great deal of ambiguity and uncertainty when it comes to clients' sustainability data. As ESG Collection Manager described: "We do not have a database that is standardized and everyone reports in this in the same way, unfortunately". Nonetheless, DCs develop certain strategies to structure sensemaking, by firstly bracketing their environment, namely by source prioritization, key terms search and usage of AI-powered tools.

4.3 Signals in the Noise: Factors Increasing Credibility of Clients' Sustainability Reports

4.3.1 The Uncertain Nature of Data Collection Creates Complexity

Due to the unstandardized ways of customers' sustainability reporting across different industries, data collection inherently remains a hard task. Many companies need to report according to specific sectorial requirements, which can lead to collecting information of a very heterogeneous, descriptive nature. Our interviewees mentioned that GreenBank is a signatory of Partnership for Carbon Accounting Financials (PCAF), which is an industry-led initiative, under which financial institutions are guided on how to report financed emissions.

> Data collection is a very complicated process, because you have many standards. Depending on the sector, there are different requirements on the companies, on how they should report when it comes to sustainability. – ESG Collection Manager

Guided by PCAF, DCs are supposed to collect unverified emissions (PCAF, p.57), hence perceived trustworthiness of customers' disclosures guides the collection processes.

> In this data overload we look for the most credible data sources available. Because you have a lot of to collect for our customers on their emissions to be able to calculate financed emissions and there is a very specific standards that tells how banks should measure their financed emissions, it's the PCAF methodology. – Data Collector 1

The practice requires continuous verification and a systematic assessment of whether the information is reliable. A DC starts by cross-checking multiple data. Yet, numerous data sources not always reveal complete data. Professionals highlight that they encounter unclear reporting and noticeable errors - whether intentional or accidental – show the extent of unreliability.

> Yes, sometimes it is not very clear what the company is reporting; companies also make mistakes in their reports. I don't know whether they are deliberant or accidental. But sometimes we do see mistakes, like obvious mistakes. – ESG Collection Manager

To summarize, this section highlights that data collection happens in a very uncertain environment. GreenBank heavily relies on their clients' disclosures that lack important figures and details. Moreover, the credibility of the disclosures is questionable as players in different industries tend to report in many ways, guided by sector-specific methodologies. Thus, given the complexity and heterogeneity of sustainability data, the question is how professionals interpret and extract the credible data to accurately reflect their own financed emissions.

4.3.2 Granular Data and Third-Party Verification Indicate Credible ESG Data

As highlighted in the section above, it is crucial to understand what DCs' vision of good reporting and commitment is. The first preconception signalling accurate data is a more detailed report and disaggregated data – it signals that a company is treating sustainability reporting as a serious matter, showing commitment to report and transparency.

> I think overall, one of the signals that I get in my brain, which signals validity is more detailed reporting. When a company has location-based, market-based and categories for Scope 3, I feel like there's a higher chance of them being accurate with the reporting than a company that snaps: "Hey, this is how much CO_2 we reported", doesn't mention scopes and there's one big number. Where did you get that number from? I don't know. – Data Collector 2

Hence, the thoroughness of reporting practice acts as a system that organize activities by applying consistent accounting rules and contextualizing information. This effectively shapes DC's sensemaking of cognitively verifying that a customer, who is transparent and apply detailed methods of accounting for emissions, has developed a reasonable capability to appropriately estimate numerical values.

Moreover, before starting to collect the relevant data, DCs think of a presence of external verification of a company's disclosure: "…having this kind of 3rd party verification shows, me at least, that they are a bit more serious, that this is a bit more adequate." – Data Collector 1. External verification in this case acts as a preconception that gives directions to DCs on how to proceed with the reports. One main element DCs look for is the audit statement. Traditionally audit statements have served to enhance credibility of corporate disclosures, and its own meaning have formed those preconceptions of the DCs that an audited disclosure is

reliable enough to inform external stakeholders. By retaining audit as part of the methodology used to report on the organization's financed emissions, in addition to the universal service of audit, the presence of such statement is a strong preconception for the DCs.
Furthermore, other external verification methods are observed as preconceptions for the DCs. They can have the form of a third-party validation. They perceive other substantive science-based target pathways that guide corporations towards decarbonization goals as confirming genuine commitments. As DCs strive for maximal accuracy in their data collection, SBTi validation is signalling that a company has moved beyond the symbolic intent and is devoting resources to achieve environmental goals. Thus, if a company has verified targets through SBTi, they are assumed to be treating initiatives and reporting practices seriously.

> So, the golden standard for us would be the SBTI targets, because that would mean that they are confirmed, verifiable targets, and it means that if they are confirmed on SBTI, that they are taking actionable approaches to reaching that target - Data Collector 3

Thus, preconceptions about external verification and validations facilitate the process of bracketing, as they are in the base of what DCs carve out from the massive information they are dealing with, to ensure that the data collected is not just a routine, but a process in which they strive for maximal accuracy.

In summary, there are preconceptions that guide the bracketing process. These are forms of external validation that a company has obtained to increase legitimacy in external reporting. The underlined preconceptions give direction to the DCs on how to extract cues in the uncertain environment they operate in. It allows them to filter out information, which further guides them on selection of cues they need to look for. However, to strengthen the preconceptions and ensure that they are going to be used in future sensemaking, it is crucial to understand these cues, i.e. collected legitimate data objects.

4.3.3 Interpreting credibility cues in sustainability data

In this sub-section we are seeking to explore how the DCs make sense of what is already bracketed and what is that they find important and confirms the credibility to the information they have at disposal. While audit statements have traditionally served to enhance the credibility of corporate disclosures, they do not automatically guarantee that the information disclosed is accurate or complete. Many audit statements are ambiguous, by offering general

assurance statements without further describing the methodological due diligence of the verification. This is particularly the case when disclosures include general audit statements rather than rely on limited assurance approach that provides more explicit evaluation of the reported data. Therefore, DCs explicitly inspect the phrasing and contents of the auditor's statement. They take a critical look at the level of assurance provided and audit's clarity.

> […] one of the things that we make sure to look at, to try to find to legitimize our data, is the audits. I don't find them extremely comforting because the way that they're phrased… And a lot of the times when you read the actual text itself, these reports aren't necessarily checking that they've collected the data correctly and like reporting the same as what the auditor got. It just means that nothing out of the ordinary was found when checking the emissions data. - Data Collector 3

Furthermore, when it comes to choosing which targets should be collected, DCs look for specific cues that lead them to create the most plausible interpretations and make a decision to either collect them or not. Identifying relevant targets is far different then extracting predefined data points. As targets are often more non-structured and vary across companies and industries, DCs rely on subtle cues to guide created interpretations when straightforward data is not available. Cues do not emerge as clear signals, but rather as collection of reference points that DCs must interpret. Adopting targets from international organizations, such as IMO, is an example of such indirect reference. Thus, the ambiguate nature of reported targets requires them to "read between the lines" and extract meaning from indirect signals such as commitments to frameworks or policies rather than explicit quantified and time-bound targets.

> Then when it comes to targets, while the emissions should be more or less structured, emissions reduction targets are semi-structured because we collect time bound and quantifiable emissions reduction targets and these should have: quantified percentage reduction, a base value, target year, base year; but we do experience that the emission reduction targets are not always that straightforward and sometimes you need to read between the lines. Because there are cases when companies do not specify the targets themselves, but rather they specify commitment to some specific framework or some specific standard, that kind of guides [them] to have targets [...] So we would have to go to this framework and see what targets there are. – Data Collection Manager

Those indirect references are cues that DCs utilize to create interpretations, which allows them to trace disclosed commitments back to external frameworks to extract relevant quantified targets and make sense of partially complete disclosures.

To sum up, relying purely on their preconceptions, DCs might wrongly assess the data. They need to investigate the preconceptions and follow phrasing, contents, and meanings of what initially signals "credibility". In fact, it turns out that sustainability reports can include third-party verification certifications, which do not provide any validation due to the lack of credible assurance methodology.

4.3.4 Validating through assessing clients' maturity in transition plan

DCs are responsible for evaluating the maturity of customers' transition planning. The assessment model is qualitative in nature and requires DCs to answer the model's questions based on their own judgement. The assessment is very much based on subjective interpretations and greatly depends on the maturity of the client's reporting practices. This section will help us see how that cues are being chosen appropriate meanings so that DCs reduce ambiguousness and uncertainty (Weick, 1979). Furthermore, we are going to explore how once those cues are given meaning and are later reused in future sensemaking.

The process is mainly interpreting the selection of relevant cues that are feasible for feeding the model and later, that interpretation will allow the DCs to make conclusions whether a company fulfils a particular criterion. To present the big picture, we will first go through the cues that are extracted. Once again, these are quantified emissions, targets, governance matters related to sustainability, previous and planned actions for reducing emissions, and audited disclosures.

> We mainly look at their emissions, their targets and what targets our customers have set, and then of course, if they have some kind of governance in place, whether they have implementation plan in place, whether they are planning to reduce their emissions, and if yes, what kind of actions they are planning to take. And whether they have emissions and targets that have been audited and validated. – Chief Expert of Sustainability

At first glance, the cues seem straightforward, and once extracted, easy to be selected. Yet, all the interviewees describe the model as very subjective, since when answering questions of the model, they need to reason themselves to formulate a specific answer. That practice creates space for DCs to create personal interpretations without model constraints.

> I mean, it's more qualitative because you use sentences […] but that one is a lot more subjective. There are also some arbitrary rules about whether this project has been ongoing or whether it's planned for the future, so it counts or not. I think that you'd find a lot more mistakes or

> differences in answers between people, just because you're not looking at a table and reporting a number, you're reading the report, understanding their initiatives and then that kind of, you have to broadly figure out whether that means that they've filled in this checklist or not. So that one I'd say is more subjective. – Data Collector 2

Thus, the transition plan assessment enforces extraction of cues through the very own and independent preconceptions of the analysts and allow us to understand what kind of information they independently find relevant for creating interpretations when assessing a customer's maturity of transition. This part is therefore crucial for us to see how they create interpretations and what are the cues that have formed their understanding of sustainability in general.

The presence of quantified elements relating to planned activities is valuable for DCs. When targets are backed up by quantified information, they become a signal that the company has moved beyond the symbolic intent and is devoting resources to achieve these targets. Concrete numerical values serve as evidence that climate goals are integrated into managerial incentives and financial planning. To DCs such quantification testifies that the organization is embedding decarbonization at a deeper operational level, thereby reinforcing created interpretations used to assess maturity of a client.

> What makes it more credible in my opinion is when they [show] how significant is ESG component in renumeration scheme, does it pertain 20% of bonus or 10%, or how much? If it's a small amount (which I don't think they would disclose like 1% because it doesn't look good), if it's more like 20%, it again shows me they take ESG seriously and they aim to work towards their goals, because if the company doesn't care as a whole, the upper management will, because it ties their bonus at the end of the year… also if the company discloses a numerical value of how much they want to spend on this kind of investment [related to reducing emissions], again, it just shows me that they are looking into it more than just on a surface level, like "oh, it looks good on paper". - Data Collector 1

By seeing numerical values tied to achieving targets, DCs tends to find it more trustworthy that a company will go beyond "stating" and start "acting". While qualitative statements serve as an indicator that a company is considering ESG material, they often remain too vague to reflect the extent of the commitment. By comparison, when companies disclose numerical value, DCs recognizes that the company is not only declaring ambitions but rather connects its operations to stated objectives. Qualitative disclosures are insufficient when it comes to the evaluation of

the actual contribution a company declares to have undertaken. They show awareness of the grand challenges, yet are not considered significant enough to serve as a basis for interpretation.

> …as far for oversight board it is kind of good to know, but we do not know how much power the board has and how they communicate it to us through sustainability or annual report, how much power they have in effect. – Data Collector 2

On the other hand, the selection of only quantified, measurable targets has led DCs to narrow down cues' extraction and disregard non-quantified verified targets that actually matter and are backed up scientifically.

> Companies have a lot of targets that we don't have in [internal data collection tool]. Some are just out of frame. We don't collect any targets on waste or energy use, or the ones about number of suppliers that are SBTI confirmed or verified. So those types of targets, we don't take it into consideration. – Data Collector 2

Although earlier we found out that SBTi confirmed targets are deemed reliable, we observe how such meaningful, verified and non-quantified cues are excluded, not because they lack relevance, but because they do not have a predefined slot in the data collection tool. In practice, DCs overlook meaningful elements of a company's transition plan because the nature of such targets cannot be expressed in numerical terms.

To conclude, the space for subjectivity had an impact on our interviewees' understanding of sustainability. By breaking free from critical sensemaking components, i.e. internal collection models, they have formed understanding on what is the crucial information that can be translated to transparent and trustworthy disclosure. The selected cues are in the form of quantified, structured data points that communicate what company's targets are, what past and future actions are undertaken to reduce emissions, and how are sustainability-related issues tied to management control. Quantified information tends to convey more and structure activities better, unlike narrative disclosures, that signal awareness rather than concrete actions and plans. Yet, when meaningful validated targets are at disposal, they are being disregarded as they fall outside the scope of the organization's frame of reference.

4.4 Role of the Leader in Organizational Sensemaking

Leader's role was greatly emphasised during situations when DC lacks knowledge on how to proceed. These situations happen when DC faces a situation that they did not encounter before

or the situation is ambiguous enough, that multiple ways to proceed are possible, a type of action that causes "flow of action" to become unintelligible (Weick et al., 2005). To find a way to proceed, all interviewees turn to their manager. We can conclude overarching social characteristic of sensemaking, exhibiting itself here. By this collective action, organization emerges, since prevalent communication between DCs and their manager result in collected creation of interpretations that are homogenous.

> Whenever I feel like I cannot be objective or when my decision can clash with some common consensus, or I have a doubt what I deem material, or immaterial and what other people might think, I ask my manager. It's not that the manager is 100% objective and will always be right, but I am not going to decide something for myself, [something that] my manager might not agree with and then I'll have to go fix it later. I'll take what my manager will say. - Data Collector 1

Hence, we conclude that the manager highly engages in sensegiving whereas stakeholders, i.e. other DCs, engage in low levels of sensegiving. As Data Collector 2 emphasised "So then you're just learning that the next time you see it, you do it just because they told you that's how it's meant to be". Maitlis (2005) characterized Restricted Sensemaking by such engagements in sensegiving. To continue, Restricted Sensemaking involves the leader's discussions with key stakeholders. In case of GreenBank, ESG Collection Manager engages in comprehensive communication regarding collected data with Financed Emissions Owner, who is responsible for delivering financed emissions via external reports, i.e. GreenBank's integrated report.

> I'm sort of the coordinator [...] making sure that we follow the methodology and the rules that we have, and if we have some issues, then we figure out, how do we solve it, and do we need to establish a new principle on how to tackle that issue in the future and so on. So, a lot of small things that come up, we work together very often. - Financed Emissions Owner

In these private meetings, leader and a key stakeholder engage in a collaborative sensemaking process to tackle arising issues and seek possible solutions, whose sensemaking product will be further distributed to DCs. As Maitlis (2005) described, narrow and unitary accounts are produced, i.e. one common understanding is shared between professionals, which is based on sensemaking process of a leader and selected key stakeholders. One implication of Restricted Sensemaking mode is that it reinforces homogeneous reporting practice, deriving from prevalence of unitary account. It aligns actions that DCs must undertake when encountering an

ambiguous information. Another implication of resultant account is that narrow account in fact may improve the overall quality of reported information. ESG Collection Manager and Financed Emission Owner possess substantially larger experience in comparison to DCs, which translates to their judgement being more informed. In effect, the disseminated narrow account allows data collection performed by DCs to be grounded in that expert judgement.

4.5 Prevailing Assumptions When Encountering Ambiguousness and Uncertainty

The analysis finalizes in uncovering the deepest, yet the most intangible layer of sensemaking, professionals' preconceptions, which inherently governs the whole sensemaking. When asked about the situations characterized by high level of ambiguity, the Manager explained that regulations guiding GreenBanks customers' reporting serve as a basis for interpretation of reported numbers, whereas sectoral aspects allow them to assess materiality of provided information. Nonetheless, the Manager notes that some level of subjectivity is sometimes present.

> Of course, sometimes we kind of need to get a bigger picture to understand, what the company actually needs and [what they] mean in this table. So, some sort of guessing game is present of course sometimes, and yes, we are more on a conservative side. - ESG Collection Manager

DCs choose interpretations during the "guessing game" based on the context and more broadly on perceived plausibility. This plausibility is influenced by the DCs' pre-existing beliefs and prior experiences (preconceptions), which materialize by uncovering a bigger picture. Moreover, as emphasised by Weick et al. (2005), professionals' perception is sometimes inaccurate, however, to solve issues, individuals do not need to always perceive accurately, but rather make sense of the situation in a way that will move a process toward "general long-term goals". In case of DC, "guessing game" is inherently subjective and will contain some level of inaccuracy, however, it results in pushing the task further, i.e. in increasing the amount of data collected. The point is particularly relevant for GreenBank's case, since all interviewees have mentioned GreenBank's internal target – having collected targets from a defined share of clients belonging to climate vulnerable sectors (for the sake of the argument, we will establish it at 95%).

> We will kind of stretch the reach of what is acceptable, of what can be a target in order to give them a target. It is our organizational pressure, because we want to reach our targets even when

> we both, me and my manager, disagree with this decision. We take it anyway because we want to reach the overarching goal of the company. - Data Collector 1

Multifaceted nature of sensemaking in organizations emerges, since having an internal target implies that individual's extraction of cues and creation of interpretations are modulated, i.e. strive for objectivity can diminish when success of reaching internal target is at stake. In this situation, we can observe two important factors acting as cues, which ultimately fuel sensemaking: internal target and industry in which customer operates. Presented mechanism shows great implication for strategy setting unit in organizations. Primarily, internal targets might hinder managers' and employees' accuracy, which, regarding accounting practice, might have detrimental consequences on report quality. Secondly, it points to the growing necessity of standardization of reporting, which effectively could improve report's accuracy, by eliminating situations in which such ambiguities arise.

To continue, we will shift the focus on data quality and uncovered assumptions that influence it. Firstly, preconceptions relating to interpretation of scope will be analysed. When client reports a single emission number, DC assumes that this number relates to emissions falling under scope 1, 2 and 3. DC creates the interpretation that a single reported number corresponds to the sum of emissions across all three scopes, as this interpretation is deemed more plausible. The alternative, that the number pertains to a single scope, is considered less plausible, as it would typically be explicitly labelled to indicate its association with a particular scope. Nonetheless, such interpretation creation might result in lower quality of data, as reported number is based on an assumption, rather than explicitly stated number. Moreover, high level of leader's (ESG Collection Manager) sensegiving with simultaneous low level of stakeholders (DCs) materializes in this unitary account, proving the benefit of Restricted Sensemaking mode, as it contributes to more homogenous data collection practices among all professionals. Nonetheless, this mode of organizational sensemaking also affect accuracy, as when everyone follows that assumption, inaccurate accounts prevail.

4.6 Cross-Verification and Data Quality Assessment: Tracing Other's Sensemaking Process

The chapter finalizes with analysis of finalization of data collection process - cross-verification and data quality assessment. Once the data is reported in proprietary model, each entry is cross verified by another DC. Besides collected information, entry in the proprietary model specify

source from which information derives. DC follows the source and manually checks if data recorded in model corresponds to the one in the source. Once mistakes have been reviewed, DC informs a person about present mistakes. Interestingly, our interviewee specified that when recorded information is ambiguous, DC includes quote in the model.

> They have a page number and sometimes people will leave a quotation, if it's kind of vague, where the values come from, but oftentimes it's just in a table […] If there's a mistake, I will change it myself and then once I'm done for all the emissions and targets, I will let them know [person for who I'm reviewing] that there were some mistakes and then we're done. – Data Collector 1

Cross-verification process can be seen as repeating other's sensemaking: reviewer's environment is already bracketed since source is inserted in the model, as well as quotes from which DC creates interpretations. Reviewing corresponds to making sure that the right cues were extracted and to check if appropriate interpretations were created.

> When you're looking at all these different companies all day, it's just human nature, people will make mistakes. And that's why we have this review process, in which we catch, most, if not all of these numerical errors. – Data Collector 1

At this stage, DCs' preconceptions have a chance to clash, since professionals are confronted with each other's sensemaking. As emphasized in interview, that rarely happens, proving presence of homogenous assumptions. One instance when preconceptions clashed was mentioned regarding review done by Data Collection Manager. Here once again we observe Restricted Organizational Sensemaking at play with high degree of sensegiving from the leader.

> I asked my manager how I should collect this and they told me that we don't collect biogenic emissions. I didn't really ask any further questions. But since then, I just have followed this rule that we don't collect biogenic emissions. – Data Collector 1

Once the cross-verification has been performed, Financed Emissions Owner (hereafter named FEO) begins data quality analysis based on PCAF methodology, which assigns highest score to both verified and unverified reported emissions, pointing to a crucial implication about unverified data - judgement of actual credibility of unverified customer's data bases on the sensemaking of professionals in financial institution. To begin, FEO brackets their environment by looking for discrepancies. FEO guide it by preconception: "we usually suspect that the trend is quite stable when you look at customer emissions, so there wouldn't be huge drops". Hence, deviations from a stable level serve as sensemaking initiator. Additionally,

unexpected units trigger it as well, as FEO expectation is violated, resulting in closer inspection of referenced document. Analysis of the document leads to selecting most plausible interpretation. Hereafter, FEO mentioned several if-then assertions constituting a pathway for creating interpretations. Firstly, if the reported information was wrong attributing to DC's human error, then they manually change model's input. Secondly, if the information was recorded correctly (but the value still appears "not to make sense"), then they remove the input from the model as their underlying assumption is that the customer mistakenly reported that value. After removal, industry estimate is used as FEO described that in that way they stay more conservative. Thirdly, FEO mentioned that if such information is coming from a large corporation, then they ask the company responsible to discuss that value with the company itself. Presented findings leave the possibility that minor under- or overstatements by customers are not detected, since they do not deviate majorly from expected levels. It further implies growing threat of introduction of inaccuracies in reported financed emissions and importance of external verification, able to diminish such results.

In summary, findings suggest that cross-verification resembles following other's sensemaking process and checking its accuracy. Data quality assessment bears high level of uncertainty and ambiguity and requires professionals to engage in extensive sensemaking. It points to importance of underlying expectations, which, only when violated can result in sensemaking initiation. Crucial implication for financial institutions emerged here, as deep understanding of customers' operations, shaping professionals' assumptions, is needed for credible and accurate reporting of financed emissions. Moreover, created interpretations are shaped by underlying assumption of being conservative and it is a social, interorganizational process, exhibiting itself in external communication with the customer. The finding highlights importance of long-term cooperation between financial institutions and their customers, necessary for financed emissions reporting.

5. Discussion

The following section discusses how data collection process is structured in financial institution reporting financed emissions, supplemented by additional perspective on collecting clients' targets. Firstly, we highlight how model and strategies of data collection shapes what data is recorded. Further, we explore assumptions emerging the absence of sufficient assurance. Lastly,

we highlight influence of leader on homogenizing assumptions and institutional pressure on report's accuracy.

5.1 Initial Steps of Data Collection Are Shaped by the Model and Bracketing Strategies

GreenBank's case challenges assumptions in literature on sustainability reports, which often highlights presence of immobilizing barriers to use ESG data, like lack of utility (Amel-Zadeh & Serafeim, 2018) and omission of material information (Jonsdottir, 2022). Data collection process contrasts these findings through presence of clearly defined, multi-step process grounded on prescriptive PCAF methodology and based on a set of collective assumptions and organizational collaboration. In the light of regulatory requirements, responsibility of reporting credible environmental impact falls on GreenBank's structure of data collection process, despite the presence of unstandardized reporting (Amel-Zadeh & Serafeim, 2018) and heterogeneity of disclosed information (Kotsantonis & Serafeim, 2019).

Just as other ESG data collection process, GreenBank's methodology is greatly dependent on the used model that prescribes what information to extract (Du Rietz, 2014). Model forms preconceptions in DCs as it limits the variety of inputs that can be recorded. Extracted cues are GHG emissions and environmental targets, homogenised among DCs by availability of prescribed units in the model. Prevailing model narrows down number of documents to analyse, thereby reducing information overflow, according to Du Rietz (2014). Our findings point to the prevalent strategies used to bracket the environment, i.e. choose sources based on source prioritization strategy and extract data by using predefined key terms, associated with a certain information. Defining relevant key terms is based on previous experiences, highlighting how they shape present practice of sensemaking process. Negative implications deriving from that strategy are highly acknowledged by the interviewees, as they highlight own bias deriving from possibility to omit data. Additionally, DCs utilize AI-powered tools to bracket the environment. This is where our thesis presents novel perspective on ESG data analysis. Use of AI-powered tools is understood as additional bracketing device, limiting sensemaking process to engage with the AI output search, instead of directly engaging with sustainability report. Usage of AI is perceived as a way to alleviate negative consequences of key words search and supplement analysis – AI search is not only dependent on key words search but possibly base on other techniques of text analysis. At the same time, an apparent tension arises, since the output of AI search is subjected to scrutinized inspection, indicating selective usefulness of the tool at its

current stage of development. DCs share the same predefined prompts in their AI model, hence possibly leading to homogenised data collection practice. Nonetheless, AI tends to suggest cues whose interpretation might not always lead to creating appropriate interpretations, hence AI's influence is hard to fully assess. With a great need for process optimization and increased accuracy, our findings point to a need of more research in that field.

Thus, our thesis presents how professionals engage with and utilize clients' sustainability reports to record financed emissions, despite unstandardized and heterogenous data. However, model and bracketing strategies are insufficient to explain how professionals address these challenges to create interpretations, hence it's crucial to understand underlying assumptions that allow to overcome them.

5.2 Beyond Audit: Factors Affecting Legitimacy of Sustainability Disclosure

Sustainability reporting has been proclaimed to merely serve as a legitimization tool (Rozkowska-Menkes et al.,2024) and failed to demonstrate corporate responsibility (Adams, 2004; Gray et al.,1996; Unerman, 2000). In contrary to lack of utility deriving from insufficient audit practice (Amel-Zadeh & Serafeim, 2018), professionals in GreenBank possess assumptions, guiding data collection process to assess legitimacy. This aspect highlights novel perspective in the literature by presenting account on what external users incorporate in practice to evaluate legitimacy even in absence of sufficient audit statements. One of assumptions relates to detailed and highly disaggregated, numerical data. Professionals focus on granular data, i.e. direct and indirect emissions, and do not collect any other CO_2 numerical values. This finding presents an interesting nuance, which contrasts with strategy utilized by case company in Jabot et al. (2025). In mentioned case study, a strategy to displace direct emissions was adopted and instead report for avoided (Scope 4) emissions. Our findings underscore that such disclosure would not be considered by a financial institution, bringing up a novel perspective to the current state of knowledge. By expanding understanding of sustainability report's external user perspective, we strive to conceptualize future sustainability report practice.

As suggested by Konstantonis & Serafeim (2019), lack of standardization of metrics in sustainability disclosure enhanced importance of science-based targets, which helps professionals to navigate in this heterogeneity. GreenBank's professionals treat SBTi as a signal that confirms level of commitment, namely validates plausibility of ESG targets. Necessity to assess plausibility derives from result of neutralization strategy, described by Talbot & Boiral (2015). It is a tendency to exaggerate the positive effect of organization's

actions, often aiming to enhance their image or reputation to increase legitimacy of ESG commitments. Hence, use of SBTi minimizes the effect of neutralization by only including targets whose plausibility is verified to some extent. Furthermore, presence of audit also signals credibility. Nonetheless, that preconception proves to put DCs in a vulnerable position in relation to evaluating credibility. DCs extract cues, such as the level of assurance to create an interpretation of whether audit proves reliable disclosures. DCs must be engaged in the sensemaking process continuously, since assurance statements differ in methodologies they adopt, for instance verification of methodology without data verification, only provides information if company followed GHG protocol or any other methodology calculation without testing underlying input data, whereas the adoption of International Standard on Sustainability Assurance 5000 checks the input data. That finding echoes Jonsdottir et al. (2022), who highlighted low levels of trust in sustainability reports. Additionally, our findings highlight DCs' reliance on quantified values to assess validity of targets. The finding contrasts Jabot et al. (2025), as quantified values of environmental expenses are perceived as subjective, leading to avoiding their disclosure by managers. We thus expand current literature on credibility assessment, by showcasing multiple sources of legitimacy in the eyes of professionals from financial institution.

5.3 Leader Directs Data Collection by Forming Homogenous Assumptions

While previous sections highlighted how use of model, strategies to look for data and assumptions underlying assessment of legitimacy all shape what data is collected, we now turn to explore how that becomes embedded in organizational sensemaking. While previous research highlighted collaboration between professionals, such as "inheriting" models from colleagues in by Du Rietz (2014) study, we present a novel perspective on leader's role in aligning homogenous assumptions. In contrast to Du Rietz (2014) findings, GreenBank's analysts were greatly informed on choices of model input data, achieved through high level of sensegiving from manager. We speculate that it can be attributed to the existence of PCAF, which partially prescribes a methodology for data collection and analysis. In that sense, existence of standardized methodology produces a more homogeneous and informed usage of ESG data, allowing to embed sensemaking and subsequent sensegiving of manager on preconceptions built on PCAF. Moreover, manager's high level of sensegiving paired with DCs' low level of sensegiving produces narrow and unitary accounts, surfacing by common set of assumptions that guide sensemaking of all professionals. The phenomenon is exemplified by cross-verification, which highlighted little differences in assumptions that DCs have. That

underscored novelty, in form of manager's influence on data collection process, present even more comprehensive picture of how data collection process looks like in financial institutions.

5.4 Consequences of Institutional Pressure

Our study captured another important factor affecting data collection process. As our interviewees observed, in a situation when reaching an internal target is at stake, level of subjectivity increases, allowing for creating interpretations that normally would exclude some information, implying diminished to some extent level of accuracy. Effects of such institutional pressures were emphasised by many scholars and are evident in our study, stressing some level of inability to credibly account for corporate impact on the society and the environment (Bebbington et al., 2008; Deegan et al., 2002; Cho et al.,2012). Coming back to the issue of standardization, increased subjectivity is only possible due to vague and ambiguous information being conveyed in sustainability reports. That finding points us to note a detrimental effect it has on the overall field of sustainability reporting. To get a bigger picture, diminished accuracy, resulting in lower quality of reported numbers, prevents financial institutions from meaningfully incorporating ESG data in setting a strategy and accurately evaluating risk, the very purpose of reporting financed emissions.

5.5 Increasing Accuracy by Repeated Sensemaking and Conservative Assumptions

Despite institutional pressure, GreenBank's data collection process consists of steps that assure accuracy. GreenBank's case challenges Jabot et al. (2025) findings, who demonstrated managers' tendency to displace uncomfortable carbon knowledge, by replacing a metric demonstrating unfavourable performance with a more favourable metric. In case of GreenBank, any divergence from assumed stable emissions is replaced to account for a more credible measure, like industry estimate, even when it leads to reporting higher emissions. An assumption of conservative and prudent reporting exhibits itself here, challenging prevailing assumptions in literature that organizations do not truly account for their impact (Bebbington et al., 2008; Deegan et al., 2002; Cho et al., 2012). A complex picture emerges, showing contrasting strive for objectivity and satisfying institutional pressures. Moreover, another factor affecting accuracy is attributed to cross-verification process, which eliminates human error. By following colleague's sensemaking process, DCs adjust mistakes, showcasing social nature of organizational sensemaking. That step of data collection presents how aligned assumptions increase efficiency and accuracy, presenting itself in homogenous set of assumptions guiding

all professionals to follow the same methodology. Nonetheless, such unitary and narrow account, simultaneously threats accuracy, as despite homogeneity, these assumptions might not always prove to be accurate, like in case of assumption guiding assigning all scopes to aggregated value of emissions (presented in Figure 1).

In conclusion, we found that professionals in GreenBank engage in very specific sensemaking processes which underlay data collection process, showed by example in the Figure 1. Their sensemaking presents an interplay between individual's assumptions and interaction with the environment, in the pursuit to reduce ambiguity and uncertainty, characterizing sustainability disclosure.

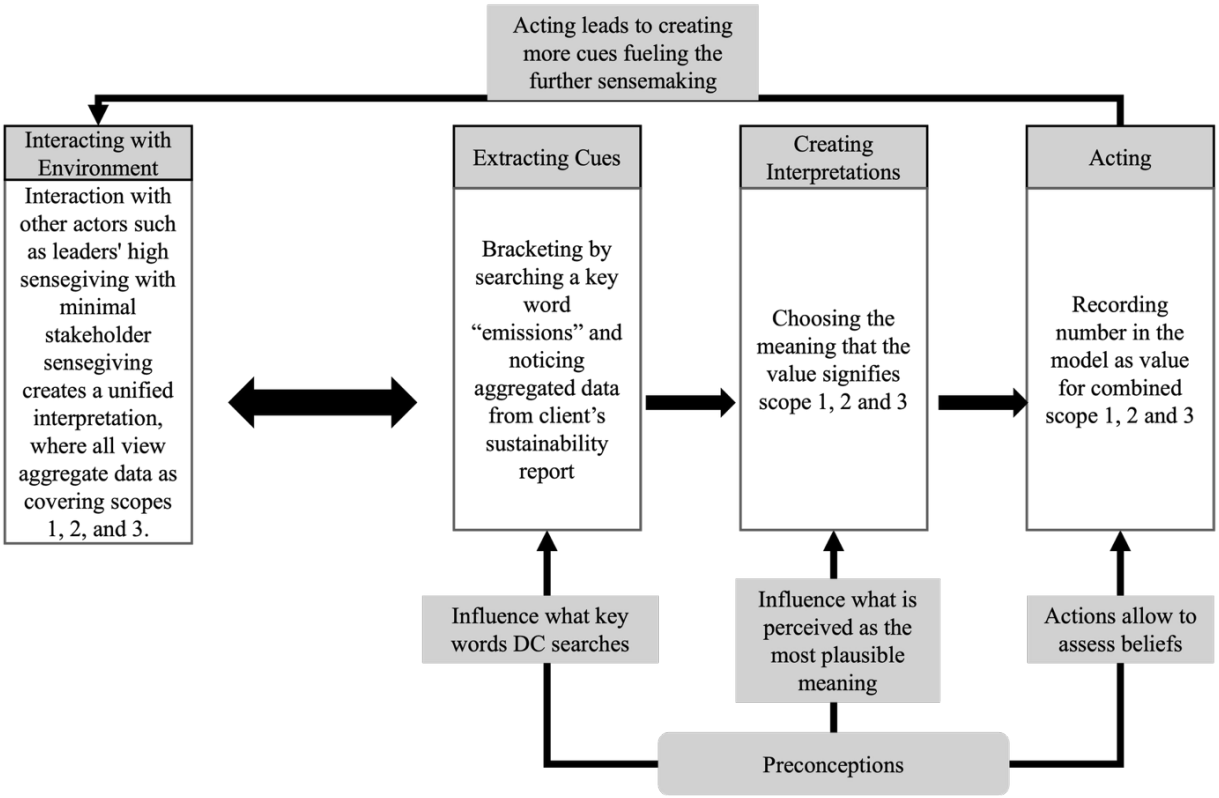

Figure 1: Visualization of the sensemaking process that DC engages in is illustrated by an example of how aggregate data are interpreted and collected. Organizational sensemaking is illustrated as a form of individual interacting with their environment. Firstly, DC extracts cues by noticing and bracketing through key words search. Later, creates interpretations, assigning aggregate value as including scope 1, 2 and 3, when sustainability report doesn't state that explicitly. Preconceptions show how pre-existing beliefs shape what keywords are searched, and which interpretations are considered most plausible. Diagram indicates that actions feed back into the DC's interaction with the environment, generating new cues and enabling actors to assess their preconceptions, thus fuelling further sensemaking and stabilizing the shared interpretation of emissions data.

Our study presents a novel perspective in the literature in relation to how sustainability reports are used by external users. Although the data is not of the quality that would allow steering decision making or setting strategy, methodology is structured and continuously refined, laying foundation for future reporting when GreenBank will be able to obtain high quality data. Our case study showcases that by supplementing customers with assessment of their transition plan, GreenBank promotes future outlook and long-term cooperation with clients, presenting financial institution's commitment and pivotal role in shaping the green economy.

6. Conclusions

6.1 Overview and Contributions

In consequence of pressing need to establish sustainable economy, financial institutions and other market participants actively engage in the evolving aspect of sustainability reporting. This thesis focused on ESG data collection, needed to report financed emissions and facilitate companies' green transition, from the perspective of financial institution. This study sheds light on the data collection process by a case study on GreenBank, a European bank, to address the research question: How do analysts in financial institutions make sense of customers' sustainability reports to report financed emissions?

Our findings answer the research question by showcasing how analysts' preconceptions reduce ambiguity of sustainability reporting, further allowing data collection process to happen. Analysts can find information by prioritizing which sources to use and further search these sources by looking for key terms, showcasing crucial component of sensemaking, namely bracketing. Process is guided by a set of assumptions, which based on experiences from analysing previous sustainability reports, emphasising how preconceptions serve to facilitate sensemaking. Moreover, to add further nuance we find that manager's high level of sensegiving facilitates homogenous reporting by further aligning set of preconceptions among data collectors. Surprisingly, we identified that institutional pressure, in form of internal targets, results in created interpretations to be more subjective, potentially leading to less accurate data collection. In the absence of prevalence of external assurance practice, our findings point out that created interpretation about credibility of ESG data is contingent on client's affiliation with SBTi, illustrating utmost importance of SBTi in not only credible reporting, but more broadly, laying foundation for sustainable economy. In relation to that topic, our findings foreground

that model used for data collection affects the process two-fold; firstly, searched information is predefined by the model, hence creating analysts' preconceptions. We speculate that analysts extensive understanding of the model derives from established PCAF methodology. Secondly, model limits sensemaking; analysts cannot derive some cues, for instance in form of non-quantified SBTi targets, possibly resulting in incomplete created interpretations, as some portions of the environment are left out. To continue, our findings suggest that the last part of data collection process, i.e. data quality assessment, is built on the strong conservative preconception, resulting in mixed level of accuracy: reported financed emissions have increased accuracy due to direct contact with some clients, but can also be diminished when "odd" inputs are replaced by industry estimates, both actions displaying strong conservatism. That last preconception is speculated to diminish inaccuracies arising from initial data collection process.

In conclusion, the study showcases a high level of sensemaking that analysts need to engage in while collecting ESG data. Study presents how created interpretations and bracketing strategies, resulting from ambiguity of sustainability reports, contribute to rising level of inaccuracy, but also allow for homogenous reporting. These findings contribute to current gap in research by showcasing how the process of ESG data collection is conducted. Moreover, we contribute to the literature by presenting account of financial institution reporting financed emissions, a perspective of external users of sustainability reports, whose account has yet not been showcased in the literature. It has a major impact on deepening understanding of how these reports are used, conceptualizing a way for a more informed evolution of the rapidly changing field of sustainability reporting.

6.2. Future Research and Limitations

One of the limitations of this study are spatial and contextual constraints which are inherent in conducting a case study. Observations are limited to only one organization and, although provide an in-depth understanding, might lack the basis for generalization to the worldwide industry. Moreover, in such a dynamic setting, when e.g. considering novel legislations, the time constraint of the study appears to be a major limitation, as with a new administrative setting, exploration's findings might prove to be outdated. Due to rapidly changing field of sustainability reporting, conducting a longitudinal study could yield robust insights into the practice and could grasp full effect of evolution of the landscape. The proposition alludes to the inherent limitation of our study, as it yielded a snapshot of how the practice takes place.

Moreover, we acknowledge the existence of response bias, which might obfuscate the research findings. Interviewees might want to present themselves and the company inaccurately, especially in the light of sustainability reporting context being full of ambiguity. A way to mitigate it we conducted interviews with employees holding various positions and interpreted data with caution applied to possible discrepancies of interviewees answers.

To continue, as uncovered in our findings, studies focused on usage of AI-powered tools could have two-fold benefit. Firstly, general insights into the practice development could extend beyond collection of sustainability data, but also relate to other financial related areas, such as market research. Such insights could also benefit scientific field, for instance in relation to epidemiological data. In relation to sustainability reports, uncovering how AI capabilities are built and used could input standardization efforts of sustainability reports, as undeniably, AI will play a crucial role in the collection of data, due to growing need for optimization of the process and diminishing inaccuracies. With a proven usefulness of sensemaking perspective, future studies could utilise it to uncover sensemaking process and its assumptions in other users of sustainability reports, such as investors or credit companies. Getting insights into assumptions laying foundation for sensemaking, could point into viable resolutions of ambiguousness of sustainability reports, since these assumptions are created when such ambiguity arises.

We also acknowledge that GreenBank has sustainability embedded deeply in its mission. We suggest that exploring other financial institution, who lacks that "green vision", could provide an interesting perspective on how data collection process is structured in absence of that drive for sustainability.

Lastly, future research could focus on exploring how financial institutions facilitate clients' green transition. As the Chief Expert of Sustainability says: "You need to take the customer into account very carefully when it comes to very small customers. If they haven't set any targets, it is desirable that they set the target. If they haven't started emissions calculation, it would be good to start with own operations first. But when it comes to reporting, it is good thing to do, but of course we are maybe recommending something like that, but we are not expecting. We cannot say: You have to report". Thus, investigating how financial institutions communicate, raise awareness and facilitate their clients' transition.

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8. Appendix

8.1 Interview Guide

The following list presents interview questions. Questions were tailored to focus on specific roles of interviewees.

1. What is your role and what are your responsibilities within that role?
2. How does the process of data collection look like?
    a. What do You look for in sustainability reports?
    b. Why do You focus on …
    c. How do you assess qualitative disclosure?
    d. Are all industries reporting under the same "guidance"? If not, what is this revolving standardization across industries?
3. What do you find challenging in the fact that companies report under different guidelines?
    a. How do You deal with variety of standards and metrics?
4. Is there anything you do to facilitate your customers to disclose ESG data?
5. What is the mission of the company in general and in relation to ESG matters?
6. If there is one thing that you can change (externally), so that your job becomes easier and will make your work more efficient, what would it be?

8.2 Interview List

List of the interviewers and background details of the interviews.

Interviewee	Date	Length (min)	Format	Role Description
Industry Expert	15.10.25	80	Physical	Associate Account Manager in company conducting sustainability disclosure audit
ESG Collection Manager	24.10.25	60	Physical	Manager of data collection unit; communication bridge between data collection and reporting units

Data Collector 1	25.10.25	75	Teams	ESG Analyst
Managing Partner	28.10.25	40	Physical	Management partner of sustainability strategy setting
Chief Expert of Sustainability	10.11.25	30	Teams	Communication with Business Banking clients about maturity of transition plans
Data Collector 2	12.11.25	60	Teams	ESG Analyst
Data Collector 3	19.11.25	30	Teams	ESG Analyst
Financed Emissions Owner	19.11.25	40	Teams	Data quality assessment and delivery of data to sustainability report
ESG Analyst 1 (follow-up interview)	22.11.25	20	Teams	

8.3 Codes Frame

List of codes that were utilized to analyse data with example quotes

Category	Codes	Example quotes
Data Collection Model & Tools	• Emissions data • Targets	“When it comes to the emissions data, those are quantified. Then when it comes to targets […] climate emission reduction targets are semi-strucutred, because we collect time-bound and quantifiable reduction targets and these should have % reduction, base values, target year, and base year."
Verification	• Legitimacy	"Companies under CSRD are forced, and when they have targets, it kind of gives more credibility they will carry through… Companies that are voluntarily reporting

	• Legislation • Maturity & Transition Plan Assessment	if they are very transparent, because they need not be, but choose to set a target and report on the target's progress, I think it gives a lot of validity to their target."
Management Intervention	• Troubles • Framework & Standards	"We use the GHG protocol and then we prefer ESRS. I had one situation when I asked my manager, there was this one company that was disclosing like GHG protocol and ESRS counting numbers and she told me to collect ESRS values."
Assumptions	• Troubles • Thinking • Customers	"Otherwise we remain objective, follow the standards, we need to be extremely explicit with emissions, target and goal, but when it comes to organizational goals, whether we give them target or not, then we can be more subjective and liberal and give them a target. When it comes to… if it's gonna be easier for us to achieve the goal we are more subjective and we are more liberal, we give companies the targets."

8.4 Use of Generative AI

Following the academic policies of the Stockholm School of Economics, our use of generative AI tools (ChatGPT version 5) was limited and conducted responsibly. The tool served mainly as a paraphrasing tool to refine phrasing, improve readability and enhance linguistic coherence. AI was occasionally applied to check grammar. Importantly, no text generated by AI was directly incorporated into the thesis, but rather critically assessed and served as a guidance. AI was not used for any part of analysis.