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Challenges and Solutions in Preparing the First Sustainability Report according to the Corporate Sustainability Reporting Directive (CSRD) Standards: a Case Study on ELLISSE S.r.l (BCUBE S.p.A).

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Abstract

This thesis investigates the initial implementation of the Corporate Sustainability Reporting Directive (CSRD) within ELLISSE S.r.l. (BCUBE S.p.A), a multinational logistics company preparing its first Sustainability Report for the year 2024. The study addresses the growing need for structured sustainability reporting in the EU and explores the practical challenges organizations may encounter.

The research aims to identify obstacles and propose solutions by analyzing the real-life case of ELLISSE (BCUBE), where the author participated as a Corporate Social Responsibility Intern. Through a qualitative and quantitative case study approach, the data was gathered via active observation, participation in internal processes, and retrospective analysis of reporting activities carried out in collaboration with the external consultancy of Up2You.

The results highlight key challenges such as limited initial awareness among employees regarding the specific data requirements, high workload for the data collection and some ambiguity, that caused some delay to the project. Solutions included improving stakeholder engagement, structuring training initiatives, and allocating more time to the project, taking into consideration that this was the company's first voluntary effort of sustainability reporting.

This thesis contributes to both academic literature and practical applications by offering a structured overview of the reporting process under the CSRD, aiming to guide companies approaching sustainability disclosure for the first time.

Introduction

In recent years, sustainability has emerged as a key component of long-term strategic planning and corporate responsibility. Companies are under increasing pressure from regulatory frameworks and stakeholder expectations to report on their performance in a transparent manner and to minimize their environmental and social impact. Corporate Sustainability Reporting (CSR) has become an essential tool for communication, accountability, and ongoing development in this changing environment. A significant milestone has been reached with the European Union's implementation of the Corporate Sustainability Reporting Directive (CSRD), which mandates that thousands of businesses throughout Europe disclose non-financial information in a more organized, comparable, and verifiable manner. The application of CSRD principles is still a complicated and unexplored field: the literature on how companies are handling the initial phases of CSRD implementation, including the difficulties they encounter and the tactics they use to comply with the new standards, is currently lacking due to how recent the Directive is.

This thesis seeks to address that gap by providing a practical and strategic exploration of the First Sustainability Report drafted by the Italian logistics company ELLISSE S.r.l (BCUBE S.p.A), after here referenced as ELLISSE (BCUBE).

As Corporate Social Responsibility Intern within ELLISSE (BCUBE), the author had the unique opportunity to gain first-hand access to internal processes, data, and decision-making structures, allowing for an in-depth and participatory case study. Through this immersive role, the author monitored the ongoing development of the sustainability report, identified bottlenecks, supported the collection and validation of data, and collaborated in stakeholder engagement activities, related to the Double Materiality Analysis, the Greenhouse Gas (GHG) emissions data collection and the data collection on the selected Material Themes, keeping in mind the research question *“What challenges does a company face when preparing its first Sustainability Report under the CSRD framework, and what solutions can be implemented to address them?”*.

The primary objective of this research is to critically examine the processes, challenges, and outcomes of the Sustainability Reporting efforts of ELLISSE (BCUBE) in light of the CSRD. More specifically, the study aims to:

- map and analyze the internal reporting processes, including stakeholder engagement and data collection,
- evaluate the integration of CSRD principles, particularly the Double Materiality Analysis and Scope 1, 2, and 3 emissions accounting,
- identify practical solutions and future recommendations that can guide other companies facing similar regulatory transitions, by making a retrospective analysis.

This thesis adopts a single-case study methodology, grounded in qualitative and quantitative primary data collected throughout the reporting project, through workshop outcomes, surveys involving stakeholders and direct contact with representatives to obtain internal data.

The structure of the thesis is the following:

- *Chapter 1* outlines the regulatory context and legislative instruments, focusing on the Corporate Sustainability Reporting Directive, with a mention to the new Omnibus simplification package proposal.
- *Chapter 2* reviews the academic and practical literature on Sustainability Reporting implementation, highlighting the introduction of Change Management for Sustainability Reporting, but also analyzing the European Sustainability Reporting Standards, the Double Materiality Analysis and Greenhouse Gasses (GHG) accounting and reducing.
- *Chapter 3* presents the company ELLISSE (BCUBE), object of the case study, and its position in the logistics sector.

- *Chapter 4* details the methodology, data collection practices, and analytical procedures used in the process of developing ELLISSE (BCUBE)'s first Sustainability Report.
- *Chapter 5* offers an accurate analysis and results of the process of drafting ELLISSE (BCUBE)'s first Sustainability Report, highlighting challenges and solutions throughout the whole project, then schematized in the *Conclusion*.

As the CSRD begins to reshape the European corporate reporting landscape, early implementations, like the one explored in this thesis, can give practical insights for other companies approaching their own reporting journey, by sharing a detailed and reflective account of this pioneering experience.

1. Background on Sustainability Reporting Legislation

Sustainability reporting is the disclosure of information about an organization's broader dimensions of performance and impacts and is often characterised by three main components: environmental, social and governance (ESG) (Aureli et al., 2020).

After the 2015 Paris Agreement on Climate Change and the adoption of the Sustainable Development Goals (SDGs) by the United Nations in 2015, societal awareness of the challenges of climate change and sustainable development has increased (Hummel and Jobst, 2024).

In December 2019, the European Commission introduced the 'European Green Deal', a set of policy actions that intend to make Europe climate neutral by 2050 (European Commission, 2019a). In response to the COVID-19 pandemic, in May 2020, the European Union (EU) announced a EUR 750 billion recovery package, of which the European Green Deal is an integral part (Europe's moment: Repair and prepare for the next generation, 2020).

Consistent with these developments, sustainability disclosure legislation evolved. The starting point for an EU sustainability reporting mandate was the Non-Financial Reporting Directive, known as the NFRD, which the EU adopted in 2014 (European Parliament and Council of the EU, 2014). The NFRD, that is the focus of *Section 1.1*, mandated the disclosure of non-financial (environmental, social, and governance-related) information for large EU-based public-interest companies with more than 500 employees, effective from the financial year 2017 (Hummel and Jobst, 2024), in a way that fosters resilient and sustainable growth and employment, and provides transparency to stakeholders (European Commission, 2017).

In November 2022, the EU adopted the Corporate Sustainability Reporting Directive (CSRD), which supersedes the NFRD from financial year 2024 onwards (European Parliament and Council of the EU, 2022). According to the European Commission, a revision of the NFRD was necessary because "there is ample evidence (...) that the information that companies report is not sufficient. Reports often omit information that investors and other stakeholders think is important. Reported information can be hard to compare from company to company, and users of the information are often unsure whether they can trust it" (Questions and Answers: Corporate Sustainability Reporting Directive proposal, 2021) (Ortiz-Martínez *et al.*, 2023).

The CSRD, that is discussed more in depth in *Section 1.2*, substantially increases the number of companies in scope of a sustainability reporting mandate and introduces more detailed reporting requirements, including the obligation to report in accordance with European Sustainability Reporting Standards (ESRS), the integration of sustainability information in the management report, an external assurance requirement, and digital tagging of the reported information (Hummel and Jobst, 2024).

Lastly, at the beginning of 2025, while this thesis was being written, a new proposal from the European Commission, in the form of the "First Omnibus Package", was redacted, proposing to scale back sustainability reporting obligations under the CSRD as well as due diligence obligations under the CSDDD (European Commission, 2025).

The Omnibus Simplification Package is the topic of *Section 1.3*.

1.1. Non-Financial Reporting Directive (NFRD)

In September 2014, the EU adopted the Non-Financial Reporting Directive (NFRD, Directive 2014/95/EU), which amended the Accounting Directive (European Parliament and Council of the EU, 2013a) and required the disclosure of non-financial and diversity information by large companies (and parent companies of groups) that are public interest entities (PIEs) with an average number of more than 500 employees (on a consolidated basis in the case of groups). According to the NFRD, its objective was to “increase the relevance, consistency and comparability of information disclosed by certain large companies and groups across the Union” on non-financial and diversity topics (Recital 21) and to stimulate “change toward a sustainable global economy” (Recital 3) (European Parliament and Council of the EU, 2014). The directive first became applicable for the financial year starting on 1 January 2017 or during the calendar year 2017 (Hummel and Jobst, 2024).

The NFRD extended the scope of management reports and required the inclusion of a non-financial statement encompassing the development, performance, position, and impact of activities related to at least the following areas: the environment, social and employee matters, respect for human rights, and anticorruption and bribery matters (Hummel and Jobst, 2024). The guidelines introduced the requirement for companies to report how sustainability issues affect their performance, position, and development (the ‘outside-in’ perspective or financial materiality) and their impact on people and the environment (the ‘inside-out’ perspective or environmental and social/impact materiality). This requirement is often known as ‘double materiality’ and is also maintained in the Corporate Sustainability Reporting Directive (CSRD) (Primec and Belak, 2022).

1.2. Corporate Sustainability Reporting Directive (CSRD)

The NFRD was repeatedly criticized for deficiencies regarding comparability, consistency, reliability of the information it requires and the limited number of companies in scope (European Commission, 2021e; La Torre et al., 2018; Mittelbach-Hörmanseder et al., 2021). (Hummel and Jobst, 2024).

The main weaknesses of the directive can be divided into two categories:

- lack of harmonization regarding integrated reporting and assurance,
- an excess of possibilities for companies to deviate from reporting requirements.

To prevent non-financial reporting from becoming a self-serving exercise, two elements are crucial: the assessment of materiality needs to follow a robust process, in which the methodology to define which non-financial information is material becomes critical; and the disclosure of non-financial information should be perceived as beneficial by companies (Primec and Belak, 2022).

These shortcomings paved the way for a substantial revision of the NFRD. In April 2021, the European Commission published a proposal for a new directive (European Commission, 2021d). A provisional agreement on the new requirements was reached in June 2022, and the Corporate Sustainability Reporting Directive (CSRD, Directive 2022/2464) was eventually adopted in November 2022 and published in the Official Journal of the EU in December 2022 (European Parliament and Council of the EU, 2022).

Compared to the NFRD, the main changes include:

- an extension of the companies in scope,
- an extension of the reporting requirements for a company's value chain,
- further specifications of the double materiality concept and reporting contents,
- requirements for the integration of sustainability information in the management report,
- the assurance and digital tagging of the information reported,
- requirements for the sanctioning regime for statutory auditors and enforcement (Hummel and Jobst, 2024).

Moreover, since NFRD did not specify any standards on how information should be disclosed, the companies used different frameworks like GRI (Global Reporting Initiative), SASB (Sustainability Accounting Standards Board), IIRC (International Integrated Reporting Council), and so on. The CSRD will stop this non-transparent and inconsistent practice by determining a uniform standard for information disclosure. European Financial Reporting Advisory Group (EFRAG) is the technical advisor to the commission in developing the draft EU Sustainability Reporting Standards (ESRS). Those sustainability reporting standards shall specify the information that undertakings are to report and determine the structure in which that information shall be notified.

The information must be announced in the annual report, in the same place as the financial information, and it is to be checked by external auditing. (Primec and Belak, 2022).

The CSRD has the following phased-in application:

- for financial years starting on or after 1 January 2024 (i.e. with publication in 2025): large undertakings which are public-interest entities exceeding on their balance sheet dates the average number of 500 employees during the financial year, already subject to NFRD,
- for financial years starting on or after 1 January 2025 (i.e. with publication in 2026): other large undertakings (*the case study analysed in this paper about ELLISSE (BCUBE) falls under this category. The company decided to start reporting a year prior to the compliance obligation, so for the financial year 2024*),

- for financial years starting on or after 1 January 2026 (i.e. with publication in 2027) (with the ability to opt-out for another two years) by small and medium-sized enterprises (SMEs) listed on EU regulated markets, small and noncomplex credit institutions with transferable securities admitted to trading on an EU regulated market, and captive (re)insurance undertakings with transferable securities admitted to trading on an EU regulated market, but excluding microenterprises.

In addition, from financial year 2028 onwards, EU branches and subsidiaries of non-EU undertakings are also subject to the CSRD if the non-EU undertaking has a net turnover of EUR 150 million in the EU for each of the last two consecutive years and either a large or listed EU subsidiary or an EU branch with a net turnover of at least EUR 40 million (European Commission, 2024; Hummel and Jobst, 2024).

A schematized summary of the main changes in sustainability reporting and of undertakings' compliance to the CSRD is shown in *Figure 1*.

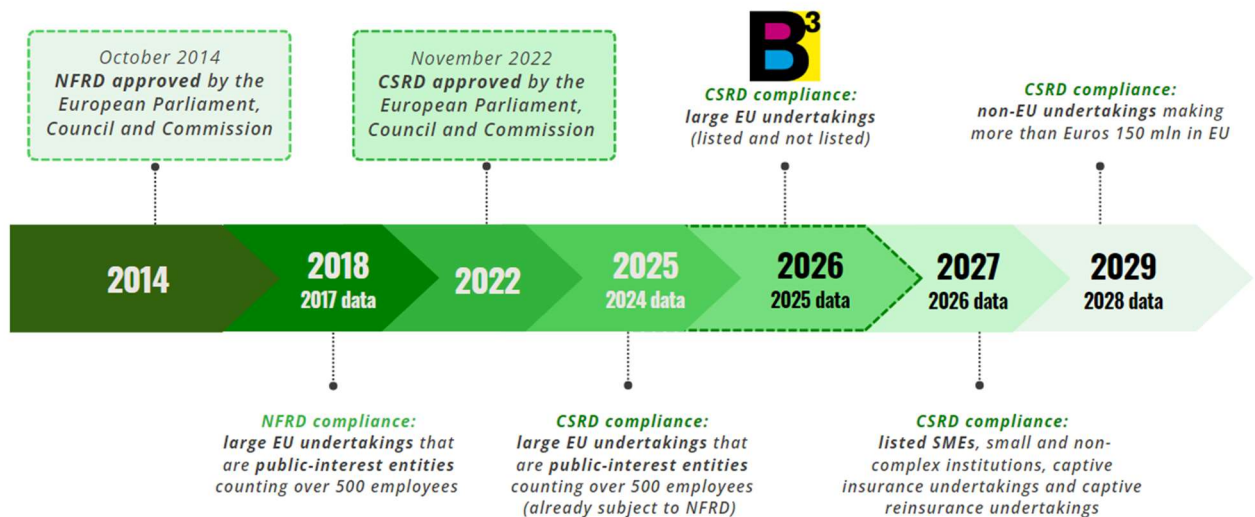


Figure 1 - Timeline of the main changes in sustainability reporting and of undertakings' compliance to the CSRD. The case study analysed in this paper, about ELLISSE (BCUBE), falls under the category "large EU undertakings, not listed" whose compliance is due in 2026, however the company decided to start reporting a year prior. Elaborated by the author from the information cited above.

1.3. Omnibus Simplification Package

Proving that Sustainability Reporting Legislation is still changing and developing, on February 26, 2025, while this thesis was being written, the European Commission presented its proposal in the form of the “First Omnibus Package”, proposing to scale back sustainability reporting obligations under the CSRD as well as due diligence obligations under the CSDDD.

According to the European Commission (2025), it aims to prevent regulatory uncertainty, avoid unnecessary compliance costs, and provide companies with a clear, realistic and manageable path towards transition, which meets their sustainability obligations.

The proposals will reduce complexity of EU requirements for all businesses, notably SMEs and small mid-caps (SMCs), focus our regulatory framework on the largest companies which are likely to have a bigger impact on the climate and the environment, while still enabling companies to access sustainable finance for their clean transition.

According to the European Commission (2025), if adopted and implemented as set out today, the proposals are conservatively estimated to bring total savings in annual administrative costs of around €6.3 billion and to mobilise additional public and private investment capacity of €50 billion to support policy priorities.

The Omnibus package includes simplifications in sustainability due diligence, EU Taxonomy, carbon border adjustments and investment programmes. According to the European Commission, this should enable a cost-effective implementation of sustainability rules, reducing the administrative burden overall by about 25% and for small and medium-sized enterprises (SMEs) by about 35% (Pankov and Yalcin Ölmez, 2025).

The KPMG article by Baumgarts *et al.* (2025), summarizes the changes for CSRD and EU Taxonomy, that include:

- Aligning sustainability reporting scope with the CSDDD, removing around 80% of companies from the scope of CSRD. The reporting requirements would only apply to large undertakings with more than 1000 employees (i.e. undertakings that have more than 1000 employees and either a turnover above EUR 50 million or a balance sheet total above EUR 25 million).
- The CSRD and EU Taxonomy reporting requirements are postponed for two years (until 2028) for companies currently in the scope of CSRD and which are required to report as of 2026 or 2027.
- Limiting the EU Taxonomy reporting obligations to the largest companies (corresponding to the scope of the CSDDD), while keeping the possibility to report voluntarily for the other large companies within the future scope of the CSRD.
- Introducing the option of reporting on activities that are partially aligned with the EU Taxonomy, fostering a gradual environmental transition of activities over time.
- Introducing a financial materiality threshold for the Taxonomy reporting and reducing the reporting templates by around 70%.
- In the EU Taxonomy, simplifications to the most complex “Do no Significant harm” (DNSH) criteria for pollution prevention and control related to the use and presence of chemicals to all economic sectors.
- Simplifications of Taxonomy-based KPIs for banks. Banks will be able to exclude from the denominator of the Green Asset Ratio (GAR) exposures that relate to undertakings which are outside the future scope of the CSRD (i.e., companies with less than 1000 employees and €50m turnover).
- Ensure that sustainability reporting requirements on large companies do not burden smaller companies in their value chains by adoption of a voluntary reporting standard (VSME).

The European Commission (2025) declares that companies consider that some sustainability reporting and due diligence rules too complex and costly to implement, and of limited usefulness for investors and others, hindering the EU's competitiveness and its investment drive. By making EU companies' lives easier and creating a more favourable business environment, the EU can drive growth and quality jobs, boost investments and, ultimately, enable companies to embrace the transition to a sustainable economy in a more effective and pragmatic way.

Several key elements have been preserved, such as the double materiality, due diligence duty in CSDDD and the core themes of reporting requirements.

However, Pankov and Yalcin Ölmez (2025) underline that the Omnibus proposal, still subject to approval by the European Parliament and the Council, raises multiple concerns. Many sustainability professionals, politicians and civil society organizations are emphasizing the importance of regulatory clarity. A shift in obligations may cause inconsistent sustainability reporting, regulatory uncertainty and a delay in sustainability investments. The first market reactions imply that a lack of a clear framework will actually lead to more bureaucracy and weaken the competitiveness of businesses, as other parts of the world, such as Japan and China, shift towards tighter sustainability regulations. According to scientific examinations, deregulation with the intent to improve economic efficiency can accelerate innovation, but might also cause a higher concentration of power, higher consumer prices and undermine sustainability efforts. These findings suggest that while the Omnibus proposal seeks to reduce administrative burdens, it may also lead to unintended consequences, such as reduced transparency and potential market inefficiencies.

Balancing the goals of competitiveness and sustainability remains a complex challenge, requiring careful consideration of short-term economic benefits and long-term environmental and social impacts. It is important to recognize that deregulation does not mean deprioritizing sustainability. On the contrary, customers, suppliers and investors will not wait for regulations to dictate their actions and are most likely to further proceed with their sustainability endeavors, as in the case study analysed in this paper, about ELLISSE (BCUBE).

Pankov and Yalcin Ölmez (2025) claim that, whereas the legally mandated role of sustainability professionals appears to be diminishing, market dynamics are expected to further drive sustainability efforts across the entire value chain. Companies that proactively engage with established international standards and market trends in sustainability have more probability of emerging as industry leaders, securing competitive advantages and gaining business, as well as consumer trust.

2. Literature Background and Guidelines for companies on how to approach the first Sustainability Report according to the CSRD

Sustainability reporting is the disclosure of information about an organization's broader dimensions of performance and impacts and is often characterised by three main components: environmental, social and governance (ESG) (Aureli et al., 2020). The environmental components relate to an organisation's impact on the environment, including energy usage, Greenhouse Gas (GHG) emissions, water consumption, waste management and biodiversity protection, among others (Adams and Abhayawansa, 2022; Janik et al., 2020). The social elements relate to an organisation's impact on society, including labour practices, community engagement, health and safety, as well as diversity and inclusion. Finally, the governance components are related to an organisation's governance structure and practices, including board composition and diversity, ethical practices, risk management, compliance and transparency (Aureli et al., 2020; Bosi et al., 2022). Sustainability reporting aims to provide transparency, hold organisations accountable for their impacts on society and the environment, and demonstrate commitment to sustainable development (Meutia et al., 2021; Swarnapali, 2020).

The most important sustainability reporting features, as suggested by Leal Filho *et al.*, (2025), are:

- Transparency: providing stakeholders with a transparent view of an organisation's sustainability performance.
- Accountability: holding organisations accountable for their impacts on society and the environment.
- Performance Improvement: encouraging organisations to improve their sustainability performance over time.
- Stakeholder Engagement: engaging with stakeholders and responding to their concerns and expectations regarding sustainability.
- Value Creation: demonstrating how sustainability practices contribute to the long-term value creation of the organisation.
- Reputation: enhanced reputation and brand value.

At the time of writing this thesis, the research question “*What challenges does a company face when preparing its first Sustainability Report under the CSRD framework, and what solutions can be implemented to address them?*” could not be addressed directly through existing academic literature, as the Corporate Sustainability Reporting Directive (CSRD) had not been fully implemented by companies yet. Consequently, academic studies offering concrete insights into its practical application remain limited.

For this reason, Chapter 2 of this thesis focuses on reviewing relevant academic and institutional literature that offers a broader foundation for understanding the implementation of Sustainability Reporting in corporate practice. While direct experiences with the CSRD are scarce, related frameworks and approaches provide valuable guidance for organizations preparing to meet these new requirements.

This chapter is structured as follows:

- *Section 2.1* explores the introduction of Sustainability Reporting as a form of organizational change, positioning it within the broader context of change management strategies.
- *Section 2.2* provides an overview of the European Sustainability Reporting Standards (ESRS), which form the technical basis for reporting under the CSRD.
- *Section 2.3* examines the measurement and reduction of Greenhouse Gas (GHG) emissions, categorized by Scope 1, Scope 2, and Scope 3 emissions, in line with international reporting protocols.
- *Section 2.4* discusses the concept of Double Materiality, one of the core principles of the CSRD, and its implications for determining what information is relevant for sustainability disclosures.

Together, these sections aim to establish a conceptual framework that supports the analysis of the challenges and solutions discussed in the subsequent chapters.

2.1. Introducing a Change Management for Sustainability Reporting

The CSRD was approved in November 2022 simplifications were still being proposed while this thesis was written. Therefore, in this section, Sustainability Reporting will be analysed as “a new practice, a change management inside a company (Lozano *et al.*, 2016)”.

There are examples in literature about the application of change management to implement a sustainability project, in a way that equates sustainability in companies to a cultural shift. According to Oxford References, change management is “a systematic approach to controlling transition processes that affect an organization and its people with a well-defined set of objectives to be achieved at the end of the process”.

The book *Change Management for Sustainability* by Ha (2014) considered how organizations can manage change, in order to transform and develop in a sustainable manner. Changes made for sustainability would be able to help firms build their capabilities and core competencies which, in turn, help them retain their competitive advantages for a reasonable period of time.

Lozano *et al.* (2016) show that Sustainability Reporting and Organizational Change Management for Sustainability have reciprocal reinforcing relationships, where Sustainability Reporting provides a starting point for planning organizational change for sustainability and organizational change for sustainability improves the reporting process.

Another example about the application of change management to implement a sustainability project is investigated by Sancak (2023), namely sustainability transformation or transition for business organizations, by analyzing robust studies in organizational change management that can cast light on sustainability transformations.

The “transformations toward sustainability” notion has taken an increasingly central position in global sustainability research and policy discourse in recent years (Patterson *et al.*, 2017). However, achieving greater sustainability is the greatest challenge in organizational change management in the contemporary world (Matos and Clegg, 2013). The involvement of a large variety of actors and interests makes sustainability transition a field of high complexity (Markard *et al.*, 2012).

Although the imperative for developing a sustainable strategy is clear, the process often is not (Eccles and Serafeim, 2013).

Building on the literature that frames sustainability not merely as a set of operational adjustments, but as a deeper cultural transformation within organizations, it becomes essential to explore the theoretical foundations of change management. For this reason, the following section examines key concepts from change management literature that can help explain how organizations navigate such transitions. Errida and Lofti (2021) define that a change management model serves as a compass that can facilitate or lead change efforts by determining the specific processes and steps to follow, by illustrating the various factors influencing change, or by determining the levers used to succeed in the change management process.

Parry *et al.* (2013) distinguish between two categories of change management models: processual and descriptive models.

A processual model determines the steps for conducting and managing change.

Lewin (1947)’s three-stage model is considered the theoretical foundation of planned change management. This model involves three main steps for managing planned change: unfreezing, transition, and refreezing. “Unfreezing” consists of destabilizing the status quo by creating the need and buy-in for change and preparing for the upcoming change. “Transition” involves moving to the desired future state. “Refreezing” takes place after the implementation of the change, resulting in a new culture, behaviours, and practices.

The second notable change management processual model is the one proposed by Kotter (1995), consisting of eight steps to ensure a successful change process: (1) establish a sense of urgency about the need to achieve change, (2) create a guiding coalition, (3) develop a vision and strategy, (4) communicate the change vision, (5) empower broad-based action, (6) generate short-term wins, (7)

consolidate gains and produce more change, and (8) anchor new approaches in the corporate culture (Errida and Lofti, 2021).

Instead, a descriptive model specifies the main variables and factors that affect organizational performance and organizational change success.

The 7-S Model was developed by former McKinsey consultants Thomas Peters and Robert Waterman in the late of 1970s and serves as a framework to assess changes necessary to ensure organizational effectiveness by analyzing seven interrelated elements: strategy, structure, systems, staff, style, skills, and shared values. These seven elements interact to create different organizational patterns but does not explain how these factors are affected by the external environment or how each factor affects others.

The model of Burke and Litwin (1992) is a framework that hypothesizes how organizational performance and effectiveness can be influenced and identifies the factors influencing organizational change and explains how they are interrelated. This framework establishes cause and effect relationships between 12 dimensions that determine organizational change within an organization: external environment, leaderships, mission and strategy, organizational culture, management practices, structure, systems (policies and procedures), work unit climate, motivation, task requirements and individual skills/abilities, individual needs and values, and individual and organizational performance.

In this model, change is represented in terms of both process and content, with a comparison between transactional and transformational factors. Transformational change occurs in response to the external environment and directly impacts the mission, strategy, leadership, and culture of the organization. Similarly, transactional factors (management practices, structure, systems and work climate) are directly affected. Both factors together affect motivation, which in turn impacts individual and organizational performance (Errida and Lofti, 2021).

It is interesting to consider other valid literature on change management.

Phillips and Klein (2022) study and present a common set of change management strategies found across numerous models and frameworks. The five strategies are the following:

- Communicate about the change: change managers should provide members of the organization with clear communication about the change.
- Involve stakeholders at all levels of the organization: change managers should involve senior leaders, managers, as well as employees during a change initiative.
- Focus on organizational culture: organizational culture affects the acceptance of change. Changing the organizational culture can prevent employees from returning to the previous status quo (Bullock & Batten, 1985; Kotter, 2012; Mento et al., 2002).
- Consider the organization's mission and vision: A mission of an organization may include its beliefs, values, priorities, strengths, and desired public image (Cummings & Worley, 1993). Leaders are expected to adhere to a company's values and mission (Strebel, 1996).
- Provide encouragement and incentives to change: Most of the change management models and frameworks suggested that organizations should reward new behaviour. Employee training can be considered an incentive.

In conclusion, the integration of Sustainability Reporting within companies under the CSRD framework represents a significant organizational shift, necessitating a structured change management approach. The literature highlights that sustainability transitions are complex, requiring a strategic alignment between reporting practices and organizational change models. As sustainability becomes a core business imperative, effective change management strategies, like emphasizing communication, stakeholder involvement, and cultural adaptation, will be crucial for companies seeking to integrate sustainability into their long-term vision and maintain a competitive advantage.

2.2. European Sustainability Reporting Standards (ESRS)

Following the understanding of sustainability as a form of organizational and cultural change, it is essential to consider how this transformation is being formally structured and guided at the European level.

In line with the Corporate Sustainability Reporting Directive (CSRD), the Commission adopted common standards which helps companies to communicate and manage their sustainability performance more efficiently and therefore to have better access to sustainable finance.

The European Sustainability Reporting Standards (ESRS) are mandatory for use by companies that are obliged by the Accounting Directive to report certain sustainability information. By requiring the use of common standards, the Accounting Directive, as amended by the CSRD in 2022, aims to ensure that companies across the EU report comparable and reliable sustainability information.

Common standards are expected to help companies to reduce reporting costs in the medium and long term, by avoiding the use of multiple voluntary standards and causing an accountability gap in the quality of sustainability reporting.

In accordance with the provisions of the Accounting Directive, as amended by the CSRD, the standards adopted by the Commission are based on technical advice from EFRAG. EFRAG (European Financial Reporting Advisory Group) is an independent, multistakeholder advisory body, the majority funded by the EU. Its standards are developed with the close involvement of investors, companies, auditors, civil society, trade unions, academics and national standard-setters.

EFRAG submitted its draft standards to the Commission in November 2022 and made substantial modifications to its initial drafts before submission to the Commission with a particular view on reducing administrative burden for companies, including reducing the number of reporting requirements by nearly half.

In 2023, as required by the Accounting Directive, the Commission consulted Member States on the draft standards submitted by EFRAG, along with various EU bodies such as the 3 European Supervisory Authorities (the European Securities and Markets Authority, the European Banking Authority and the European Insurance and Occupational Pensions Authority), the European Environment Agency, the European Union Agency for Fundamental Rights, the European Central Bank, the Committee of European Auditing Oversight Bodies and the Platform on Sustainable Finance (European Commission, 2023).

The European Commission then adopted the ESRS on July 31, 2023, for first application in the 2024 financial year and subsequent publication of the reports in 2025 (Leal Filho *et al.*, 2025).

The ESRS requires these organizations to clearly identify the “information necessary to understand the undertaking’s impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking’s development, performance and position” (OJEU, 2022: Art. 19a). The ESRS aims to “ensure the quality of reported information, by requiring that it is understandable, relevant, verifiable, comparable and represented in a faithful manner” (OJEU, 2022).

There are 12 ESRS, covering the full range of sustainability issues, in line with EFRAG's proposal (*Table 1*).

ESRS 1 (“General Requirements”) sets general principles to be applied when reporting according to ESRS and does not itself set specific disclosure requirements. ESRS 2 (“General Disclosures”) specifies essential information to be disclosed irrespective of which sustainability matter is being considered. ESRS 2 is mandatory for all companies under the CSRD scope (European Commission, 2023).

The 5 ESRS Environmental (E) consist of climate factors including climate change mitigation, climate change adaptation, water resources, the circular economy, pollution, biodiversity and ecosystems, the 4 ESRS Social (S) involve social rights factors including equal opportunities, working conditions, respect for principles embodied within the International Bill of Human Rights and ‘other core UN

human rights conventions’, and the ESRS Governance (G) entails governance factors including the function, composition and skills of the organisation’s leadership and management roles in relation to sustainability, the organisation’s sustainability decision-making, audit and risk management, ethics within the organisational culture, and how it manages its external relationships with stakeholders affected by its operations (as well as its political activities) (OJEU, 2023; Leal Filho *et al.*, 2025).

Table 1 – The 12 European Sustainability Reporting Standards (ESRS) in line with the European Financial Reporting Advisory Group (EFRAG)’s proposal (European Commission, 2023).

Group	Number	Subject
Cross-cutting	ESRS 1	General Requirements
Cross-cutting	ESRS 2	General Disclosures
Environment	ESRS E1	Climate
Environment	ESRS E2	Pollution
Environment	ESRS E3	Water and marine resources
Environment	ESRS E4	Biodiversity and ecosystems
Environment	ESRS E5	Resource use and circular economy
Social	ESRS S1	Own workforce
Social	ESRS S2	Workers in the value chain
Social	ESRS S3	Affected communities
Social	ESRS S4	Consumers and end users
Governance	ESRS G1	Business conduct

The Environmental, Social and Governance ESRS standards and the individual disclosure requirements and datapoints within them are subject to a materiality assessment. This means that the company will report only relevant information and may omit the information in question that is not relevant (“material”) for its business model and activity.

Disclosure requirements subject to materiality are not voluntary. The information in question must be disclosed if it is material, and the undertaking's materiality assessment process is subject to external assurance in accordance with the provisions of the Accounting Directive. The standards require undertakings to perform a robust materiality assessment to ensure that all sustainability information necessary to meet the objectives and requirements of the Accounting Directive will be disclosed.

If a company concludes that climate change is not a material topic and therefore does not report in accordance with that standard, it has to provide a detailed explanation of the conclusions of its materiality assessment with regard to climate change. This requirement reflects the fact that climate change has wide-ranging and systemic impacts across the economy (European Commission, 2023).

In summary, the ESRS provide a unified framework to guide companies in disclosing their sustainability-related impacts, risks, and opportunities in alignment with the CSRD. By standardizing reporting practices across, the ESRS aims to ensure transparency, comparability, and accountability in corporate sustainability performance.

2.3. Double Materiality Analysis

Given the critical role of materiality in determining what sustainability information must be disclosed, a deeper understanding of the concept of “double materiality”, one of the cornerstones of the ESRS framework, is essential.

“Materiality” refers to the information that companies must provide to investors. More specifically, materiality refers to ‘the status of information where its omission or misstatement could reasonably be expected to influence decisions that users make on the basis of the financial statements of the undertaking.’ (IASB, 2010; Directive 2013/34/EU).

When businesses provide ESG data to investors based on this definition of materiality, they generally focus on factors that might affect the company financially, that is, the risks and opportunities that ESG factors may generate for the company (“outside-in”). This conceptualization of materiality corresponds to the notion of “financial materiality” and mainly targets investors (Delgado-Ceballos *et al.*, 2022).

According to the EU Commission’s 2019 Guidelines, the non-financial disclosure obligation enshrined in the NFRD was to be discharged through a process of selection of material information that departed from the conventional single materiality principle ordinarily applied to financial reporting. More specifically, the 2019 Guidelines explained that the information disclosure obligation required eligible companies to undertake two materiality assessments: financial materiality, on the one side, and the external impact of companies on society and the natural environment, on the other side. This latter dimension of materiality has been more recently referred to as “impact materiality” (“inside-out”). Therefore, unlike financial reporting, corporate sustainability reporting has adopted a ‘double materiality’ requirement (Mezzanotte, 2024), visually represented in *Figure 2*.

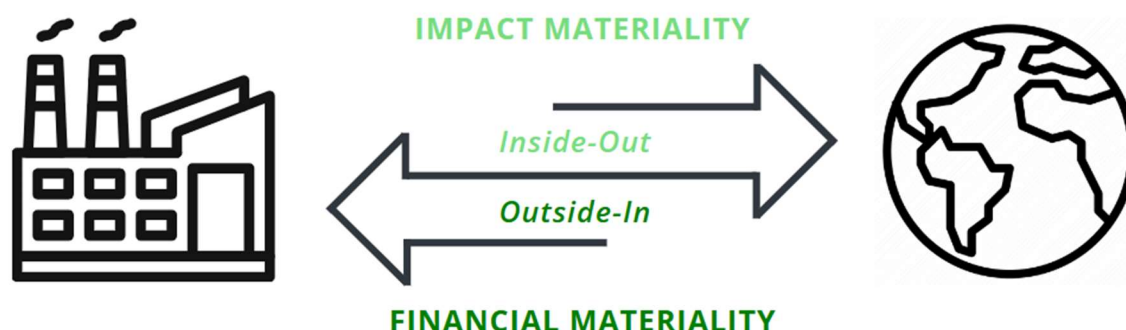


Figure 2 - Double Materiality Analysis, composed of Impact Materiality (Inside-Out) and Financial Materiality (Outside-In). Elaborated by the author from Delgado-Ceballos et al., (2022) and Mezzanotte, (2024).

Although materiality in financial reporting is a well-understood concept, there is less clarity about the meaning and operation of Double Materiality in corporate sustainability reporting under the CSRD and the ESRS rules. In basic terms, the CSRD requires that eligible companies include in their annual management report (1) the information necessary to understand the impacts of the company’s activity on sustainability matters and (2) the information necessary to understand how sustainability matters affect the company’s financial performance. The ESRS rules will guide the implementation of this obligation to disclose, and although compliance with a defined set of ESRS rules is mandatory in all cases, the general approach has been that the ESRS rules are mandatory subject to the assessment of Double Materiality. Having completed the Double Materiality evaluation, the company is obliged to report material information, whereas non-material information need not be reported. In short, the

assessment of Double Materiality has become a central requirement driving the process of corporate sustainability reporting (Mezzanotte, 2024).

Unlike financial materiality, whose definition under the ESRS rules borrows to some extent from the better-known materiality principle in corporate financial reporting, the notion of impact materiality is relatively new and untested in a setting of mandatory rules. Impact materiality provides criteria that guide the reporting company in the process of selecting and disclosing information on the impacts of its activity on society and the environment. The reporting company utilises criteria to identify information that is financially material and information that is material from an impact perspective. This process allows the reporting company to identify ‘material sustainability matters’ and, on that basis, prepare the information to be disclosed in terms of material disclosure requirements (DRs), including application requirements (ARs), and datapoints applicable to such sustainability matters (Mezzanotte, 2024).

In terms of criteria, a sustainability matter is deemed to be material from a financial materiality perspective when such matters trigger or could trigger financial effects (e.g. financial loss resulting from climate change-related phenomena) on the reporting company. According to the ESRS rules, financially material sustainability matters will be identified through the evaluation of the likelihood of occurrence and severity of such financial effects. By performing an evaluation of the materiality of impacts, the company selects information that explains the impacts that its activity has or could have on people or the environment (that is, impacts on sustainability matters, including environmental, social and governance matters).

The first step in the impact materiality process is to identify relevant impacts. In such a process, the ESRS rules foster the collaboration between the reporting company and the affected stakeholders. Affected stakeholders are those ‘individuals or groups whose interests are affected or could be affected’ by corporate activity. This interaction between the reporting company and the affected stakeholders is strongly promoted, although it is not a mandatory requirement, by the ESRS rules: the ‘[e]ngagement with affected stakeholders is central to the undertaking’s on-going due diligence process (...) and sustainability materiality assessment. This includes its processes to identify and assess actual and potential negative impacts (alongside other elements), which then inform the assessment process to identify the material impacts for the purposes of sustainability reporting (...)’ (Mezzanotte, 2024).

Therefore, the company engages with different groups of stakeholders, gathering their insights on specific economic, environmental, and social issues. These insights assist in identifying not only what the company should report on, but also how the strategies for sustainability should respond to continually changing economic, social and environmental circumstances (Forstater et al., 2006). To this purpose, GRI guidelines define a framework of sustainability aspects that describes the economic, environmental, and social dimensions of the sustainability performance. Within the standardized categories and subcategories of aspects, the GRI framework allows each company the flexibility to report on issues of most relevance for the company and its stakeholders (Landrum & Ohsowski, 2018; Calabrese *et al.*, 2019)

Impacts can be positive or negative, actual or potential. They may produce effects in the short-term, middle-term, or long-term. Impacts may have been caused or contributed to by the reporting company or by those other actors that are part of the company’s value chain, either upstream or downstream, including actors linked to the company’s own operations, products, or services through the company’s business relationships (Mezzanotte, 2024).

In conclusion, the Double Materiality Analysis, by integrating both financial and impact materiality, encourages companies to consider how sustainability issues affect their performance and how their operations affect society and the environment. This approach fosters a more transparent and responsible form of corporate reporting, as required under the CSRD framework.

2.4. Accounting and reducing Greenhouse Gas (GHG) emissions - Scope 1, 2 and 3

Following the discussion on Double Materiality, this next section focuses on accounting and reducing Greenhouse Gas (GHG) emissions, a central component of ESRS E1, as climate change is the most pressing, quantifiable and comparable environmental issue, other than being a mandatory topic under the ESRS framework.

Reporting corporate GHG emissions is important, and the focus is no longer only on direct energy-related CO₂ emissions but includes the other GHGs emitted by industries. These increasingly include the indirect emissions that occur in supply chains (Teske *et al.*, 2022).

The Greenhouse Gas Protocol, a global corporate GHG accounting and reporting standard, distinguishes between three ‘scopes’, according to Teske *et al.* (2022):

- *Scope 1*: All direct emissions from the activities of an organization or under their control. Including on-site fuel combustion, such as gas boilers, fleet vehicles, and air-conditioning leaks. For this analysis only, the economic activities covered under the sector-specific Global Industry Classification Standard (GICS) classification that are counted under the sector are included. All the energy demands reported by the International Energy Agency (IEA) Advanced World Energy Balances (IEA, 2020, 2021) for a specific sector are included.
- *Scope 2*: Indirect emissions from electricity purchased and used by an organization. Emissions are created during the production of this energy, which is eventually used by the organization. For reasons of data availability, the calculation of these emission focuses on the electricity demand and ‘own consumption’, e.g. reported for power generation.
- *Scope 3*: Greenhouse Gas (GHG) emissions caused by the analysed industry, limited to sector-specific activities and/or products, as classified in the GICS. The OneEarth Climate Model (OECM) only includes sector-specific emissions. Traveling, commuting, and all other transport-related emissions are reported under transport. The lease of buildings is reported under buildings. All other finance activities, such as ‘capital goods’, are excluded because no data are available for the GICS industry sectors, and their inclusion would lead to double counting. The OECM analysis is limited to energy-related CO₂ and energy-related methane (CH₄) emissions. All other GHGs are calculated outside the OECM model by Meinshausen and Dooley (2019).

Measures that can be used by companies to reduce their GHG emissions were organized by Lewandowski and Ullrich (2023) within nine different categories: energy, product, process, carbon capture, 6R & waste management, office & mobility, management, reporting & disclosure, and compensation (*Figure 3*). The first category refers to Scope 2 emissions, while the others can be both Scope 1 or 3, depending on the organization of the company.

Measures in the energy (1) category deal with sustainability along the energy life cycle and how to reduce the overall energy usage. The different measures within the energy category were energy production, acquisition, efficiency, awareness, and recovery. Renewable energy can be produced onsite using a photovoltaic plant, and energy storage can be ensured by installing solar panels on the company building (e.g., Coles *et al.*, 2014; Gonzalez-Garcia *et al.*, 2011). Energy acquisition focuses on buying energy from sources that are renewable or have a low carbon footprint, e.g., geothermal energy (e.g., Chen *et al.*, 2011). Installing motion detectors to control lighting or energy-saving light bulbs are two examples of how to implement energy efficiency measures. Higher efficiency of existing power plants can be achieved by switching from coal-based to gas-based power plants (e.g., Laing *et al.*, 2019). Teaching employees about energy-saving measures, such as switching computers off overnight, are implementation examples for energy awareness measures (e.g., Biro and Csete, 2021). Energy recovery measures include recovering waste heat and gases and using them for energy co-production to substitute the main energy sources (Huisinigh *et al.*, 2015). Within this category are the

most common measures mentioned in the literature, i.e., purchasing renewable energy (energy acquisition) or focusing on energy-efficient equipment and machinery (energy efficiency).

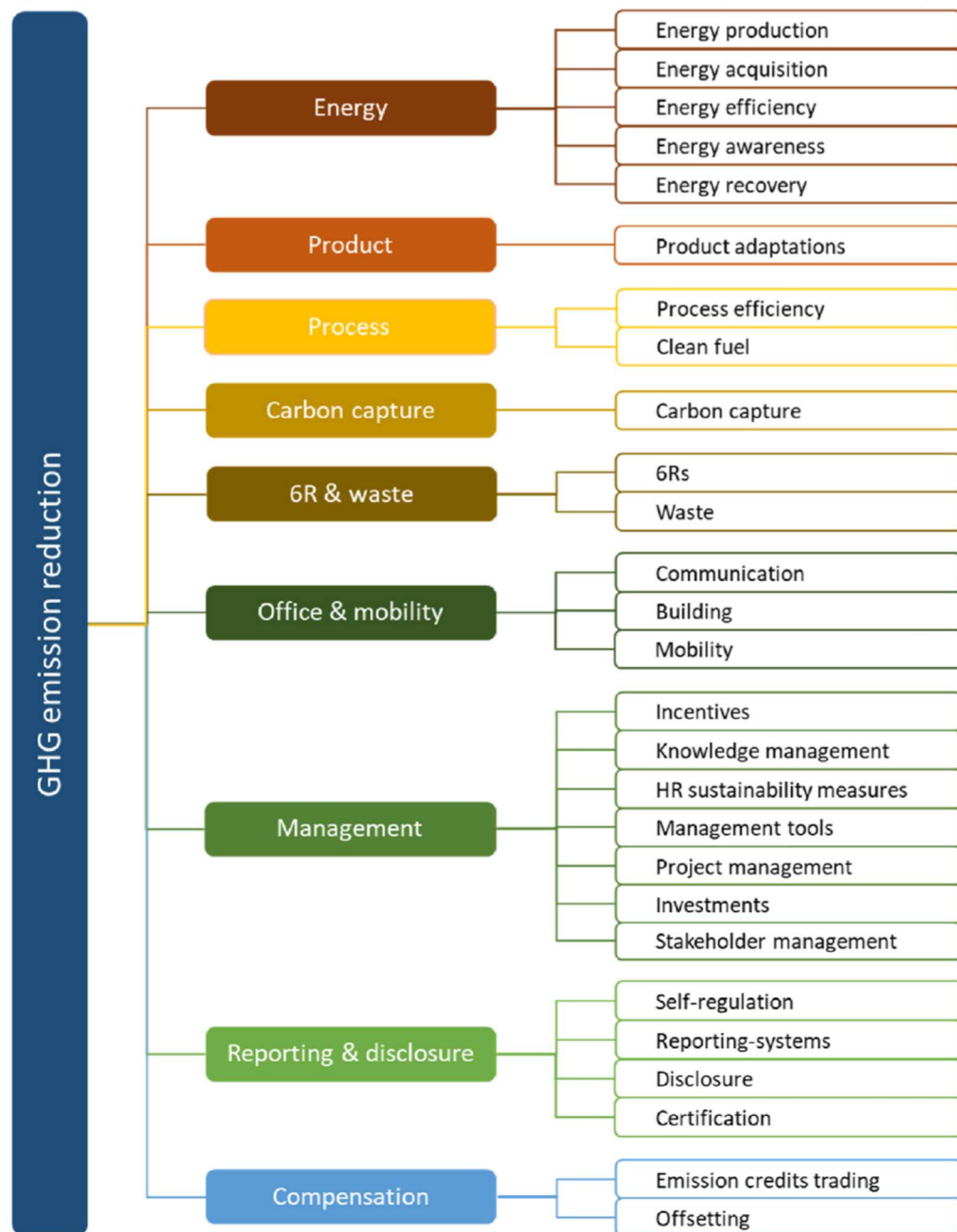


Figure 3 - Categories and measures of GHG emission reduction taxonomy (Lewadowski & Ullrich, 2023).

The product (2) category focuses on how the footprint of a manufactured good can be reduced. These measures are vital for product development and influence the resources and processes that produce the product. One option is to redesign products to reduce the product's carbon footprint. This can be achieved by making modifications to the product or substituting materials with recycled or renewable material (e.g., Cadez and Czerny, 2016; Griessacher and Antrekowitsch, 2012).

Process-related reductions (3) focus on increasing process efficiency. One method to achieve a higher process efficiency involves increasing automation and, therefore, re-designing the production processes (e.g., Penz and Polska, 2018; Zhang et al., 2021). Internet of Things (IoT) devices can be another tool to optimize the existing processes (e.g., Huisingh et al., 2015). In addition, up-to-date machinery, which, for example, needs less energy, creates less waste, or uses a cleaner technology,

such as natural-gas-fired-boilers compared to lignite-fired boilers, can increase process efficiency and reduce emissions (e.g., Britton and Petrovskis, 2021). Another method is to reduce the impact of byproducts by recycling or selling them for further use (e.g., Axelson et al., 2021). The use and/or development of clean fuel includes the use of biofuels as an alternative to traditional fuels (e.g., Bottcher and Müller, 2016).

The category carbon capture (4) differentiates between technology-based and natural carbon capture methods (e.g., Axelson et al., 2021; Holappa, 2020). Carbon capture can be applied, for example, in the cement industry, where technology is engineered to capture carbon dioxide and compress it into its liquid form which can be accumulated underground (Hasanbeigi *et al.*, 2012; Orsini and Marrone, 2019).

6R & waste management-related reductions (5) aim to enforce the 6R principles and appropriate waste discharge. The 6Rs are reuse, recycle, reduce, recover, redesign, and remanufacture. Waste management includes adequate waste discharge, e.g., water filtering on the production site, or proper recycling and discharge at the workplace (Biro & Csete, 2021).

The category office & mobility (6) comprises measures that are primarily applicable in office buildings and service sectors. The communication measures involve the use of less carbon-intensive communication and information carriers such as the reduction of paper use (Blanco *et al.*, 2017). The second building measures involve retrofitting and renovations with the goal of using “green products” and reducing energy consumption by using more energy-efficient ventilation or heating systems (Coles *et al.*, 2014). Lastly, mobility measures aim at reducing emissions arising from business travel or commuting by changing the way of travel, using less GHG intensive alternatives. Some examples are eco-driving practices that reduce fuel consumption (Centobelli *et al.*, 2020) and using electric cars instead of combustion engines or (electric) bicycles (Kilkis & Kilkis, 2016). Especially, the substitution of cars with bicycles is more applicable in cities (Lee *et al.*, 2019).

The management (7) category comprises seven measures and includes reduction actions that are initialized on a strategic level. The first measure involves internal incentives for employees to encourage low carbon behaviours. An example is to monetarily reward fewer business travels (Chu & Schroeder, 2010). The second measure, knowledge management, includes workshops and other information-sharing methods for reducing GHG. Third, HR sustainability measures aim at incorporating sustainability within the organizational structure. A higher diversification among board members (e.g., having female board members) has been proven to increase a company’s sustainability activities (Al-Qahtani & Elgharbawy, 2020; Ben-Amar *et al.*, 2017). Management tools such as SWOT-analysis, portfolio management, vulnerability assessment, scenario analysis, Six Sigma, best practices, and risk management can be used to implement reduction measures (Chaiyapa *et al.*, 2016). The last three measures, investments, project-, and stakeholder management focus on adaptations to new technologies and regulations, investments supporting sustainability, and active engagement with policymakers (Wittneben & Kiyar, 2009).

Reporting- & disclosure-related ERM (8) focus on self-regulation to create an organizational system that can regulate its emissions, achieve reduction goals, and report the process. One step toward a self-regulated system is to commit to environmental or specific emission reduction targets. After the targets have been set, a detailed plan on how to reach these goals must be implemented.

The final category, compensation (9), realizes indirect emission reductions by having companies pay a monetary price for GHG emissions. The first measure is emission credits trading. In the European Union, companies require EUA (EU-Allowances), which limit the amount of GHG emissions of a company. These allowances can be traded according to a company’s needs (buy more or sell

allowances) (Damert *et al.*, 2017). Furthermore, a company can offset its emissions by supporting projects that reduce emission outputs.

Companies must take a global supply chain perspective in order to identify the most profitable means to reduce overall Scope 3 emissions. They must find ways not only to reduce emissions under their direct control, but also to influence emissions caused by their suppliers and customers by providing them information and incentives and collaborating or even vertically integrating with them (Plambeck, 2012).

Due to the analysis of Scope 3 being less explored with no clear inputs to develop it, few studies have been conducted, and the topic remains underdeveloped. Although there are protocols to analyze it, they are still vague with no defined methodology for calculating indirect emissions leading the investors to darkness and less accurate results regarding the carbon footprint measurements (Anquetin *et al.*, 2022).

In summary, accounting and reducing GHG emissions, across Scopes 1, 2 and especially 3, is an essential yet complex aspect of corporate climate responsibility under the ESRS framework. Addressing these gaps will be critical for companies seeking to meet their reporting obligations and demonstrate credible progress toward decarbonization.

3. The object of the Case Study: ELLISSE S.r.l (BCUBE S.p.A)

This paper began with an overview of Sustainability Reporting Legislation within the European Union, followed by a review of the Literature and Guidelines designed to assist companies in preparing their First Sustainability Reports in accordance with the Corporate Sustainability Reporting Directive (CSRD). Now the attention will be directed to the analysis of a case study of the Italian logistics company ELLISSE (BCUBE), which in September 2024 commenced a project to draft its First Sustainability Report for the year 2024, voluntary undertaking the process one year ahead of the mandatory compliance deadline established by the CSRD.

Section 3.1 explores the logistics sector, which is undergoing a significant transformation driven by globalization, technological innovation, and the rising demands of modern commerce, but it also must confront pressing challenges such as geopolitical instability, workforce limitations, and environmental sustainability, where the traditional industrial models need for a shift toward more sustainable practices.

Section 3.2 presents an overview of the history and organizational structure of the Italian logistics company ELLISSE (BCUBE), providing essential background for understanding the company's strategic approach to sustainability reporting.

Together, these sections aim to establish a conceptual framework that supports the analysis of the challenges and solutions discussed in the subsequent chapters.

3.1. The Logistic Sector

The logistic sector, to which ELLISSE (BCUBE) belongs, encompasses the part of supply chain management that plans, implements, and controls the efficient, effective forward, reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements (Council of Supply Chain Management Professionals, 2013). It plays a critical role in the economy by enabling the movement of goods and services, which is essential for trade and economic growth (Rodrigue, J-P., 2020). As the globalization of markets and the information technology accelerate, logistics has been transformed into a strategic function that contributes to competitive advantage (Christopher, M., 2016).

In recent years, the global logistics market has experienced significant growth, and it is expected to grow in the future, according to Allied Market Research (2023) and Benchmark International (2024). This expansion is driven by factors such as the rise of e-commerce, technological advancements, and increased demand for efficient supply chain solutions.

However, the sector also faces challenges, including geopolitical tensions, labor shortages, and sustainability pressures. For instance, the ongoing trade disputes between major economies have disrupted shipping routes and increased operational costs (Investors Business Daily, 2025). Additionally, logistics operations in the supply chain cause environmental pollution and extensive resource depletion (Zaman & Shamsuddin, 2017). The negative impacts of logistics operations create interrelated economic, environmental, and social issues which demand more sustainability strategies for the logistics companies (Jayarathna et al., 2021). Traditional industrial approaches such as the linear economic model (take–make–dispose) or cradle-to-grave approach are not strongly aligned with sustainability strategies (Genovese et al., 2017). These traditional approaches do not address environmental pollution such as waste generation, natural resource depletion, and impact on economic and social performance (Jayarathna *et al.*, 2022).

In this perspective, sustainable logistics is gaining ground in the sector. Also known as green logistics, it is defined as “supply chain management practices and strategies that reduce the ecological and energy footprints of the distribution of goods which focuses on material handling, waste management, packaging and transport” (Seroka-Stolka & Ociepa-Kubicka, 2019, p. 472). Logistics sector companies are initiating sustainable practices as they cause environmental pollution such as carbon emission, noise pollution, and resource depletion (Jayarathna *et al.*, 2022).

In summary, the logistics sector is undergoing significant transformation due to the forces of globalization, rapid technological innovation, and the evolving demands of modern commerce. At the same time, the sector faces considerable challenges, including geopolitical instability, labor shortages, and increasing pressure to adopt environmentally sustainable practices. These dynamics are driving a shift away from traditional industrial models toward more resilient and sustainable operational frameworks.

Building on the growing importance of sustainability within the logistics sector, it is interesting to examine how individual companies, like ELLISSE (BCUBE), are responding to these evolving expectations.

3.2. ELLISSE S.r.l (BCUBE S.p.A)

ELLISSE (BCUBE) is a family-owned company, founded in Casale Monferrato in 1952 by the Bonzano family.

The company is the first Italian integrated logistics operator in the national scene, operating in several reference industrial sectors on a global scale, with a wide range of highly customizable integrated services (internal sources).

It originates as "Bonzano Teresio Enrico & Figli", managed by Cav. del Lav. Luigi Bonzano for the activity of production of wooden packaging.

In 1977, Piero Carlo Bonzano joins the company, at that moment specialized in production of cages, pallets and containers for the automotive sector.

In 1980 he takes over the activities of ARGOL, founded in 1973 as an independent company of the Group, and he introduces the concept of integrated logistics. This way, the company starts managing warehouses with the reception of raw materials and components, the handling of goods, material storage, the delivery to production lines, finished product management, transport and shipping service. In 2008 he acquires the majority of the ARGOL group and in 2012 of the VILLANOVA group, founded in 1974 to serve the automotive sector in the field of packaging and CKD and transport, leading to the creation of a single company in December 2012, "Gruppo Argol Villanova".

The entrance to the AIR CARGO sector happens in the early 2000s, with the acquisition of FLE (Roma Fiumicino) and MLE (Malpensa) and the entry into the Aerospace & Defence sector. Between 2014 and 2016 the company's image is restyled by Oliviero Toscani and new Executive Headquarters is inaugurated. This operation results in the new logo and the change of name from "Gruppo Argol Villanova" to "BCUBE".

BCUBE expands and diversificate between 2015 and 2019 with the entry into the German market, in the Fashion & Luxury sector and in the PHARMA sector.

In 2020 BONZAI was born, a business project of Luigi and Umberto Bonzano, with focus on banking, consumer, fashion & luxury: the company is integrated into BCUBE in 2023.

In 2024 Luigi Bonzano becomes CEO of BCUBE, supported by father Piero Carlo and brother Umberto. Currently the BCUBE group is the single-member company subject to the direction and coordination of ELLISSE S.r.l (internal sources).

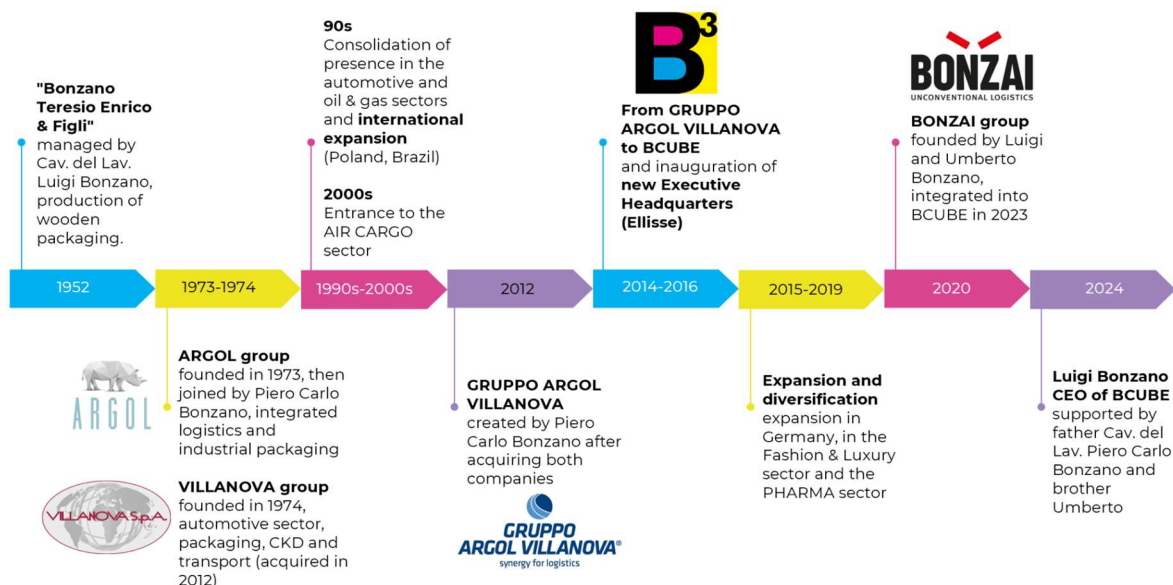


Figure 4 - ELLISSE (BCUBE) 's timeline, from its origin to nowadays. Elaborated by the author from internal sources.

ELLISSE (BCUBE) has 84 operational sites worldwide and about 5000 employees on a global scale.

Italy remains ELLISSE (BCUBE)'s first market, followed by Poland, that joined in the early 90's, and Germany, both with strong focus on Automotive Industry districts.

ELLISSE (BCUBE)'s presence in Brazil is a consequence of long-lasting business relationships with key customers in Italy, who expanded in South America throughout years (Figure 5, internal sources).

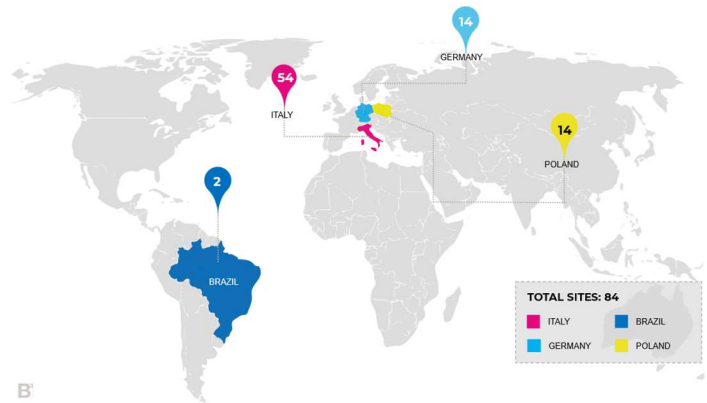


Figure 5 – ELLISSE (BCUBE)'s global presence.
From internal sources.

The company's structure, illustrated in Figure 6 from internal sources, consists in the parent company ELLISSE (BCUBE), that controls the 6 main companies: BONZAI, BCUBE AIR CARGO, BCUBE S.p.A (Italy), BCUBE POLAND LOGISTICS, BCUBE LOGISTIK (Brazil) and BCUBE LOGISTIK GMBH (Germany).

However, in the data collection in Chapter 5, some of the subcompanies are involved separately from the main company. This reflects a deliberate decision made by the Sustainability Office in collaboration with the external consultants, after discussions with representatives from each entity, to facilitate a more practical and accurate data collection process (internal sources).

Here is the list of the main companies under ELLISSE (BCUBE) and respective subcompanies involved, for a total of 22 entities (internal sources):

- the main company BCUBE S.p.A (Italy), with the subcompanies BCUBE CEIM and PROGRAMMA MARE,
- the main company BONZAI, with the subcompanies BONZAI Services S.R.L. and B FASHION S.R.L.,
- the main company BCUBE AIR CARGO, with the subcompanies Malpensa Logistica Europa S.P.A, Fiumicino Logistica Europa S.R.L. and Venezia Logistica S.P.A,
- the main company BCUBE POLAND LOGISTICS, with the subcompanies BCUBE SP.ZOO and BCUBE Poland Services SP.ZOO,
- the main company BCUBE LOGISTIC (Brazil),
- the main company BCUBE LOGISTIK GMBH (Germany), with the subcompanies BCUBE Wuppertal GMBH, BCUBE Hessen GMBH, Projektlogistik GMBH BCUBE Berlin, BCUBE Projektlogistik GMBH Ost, BCUBE Sachsen GMBH, BCUBE PCC Logistik GMBH and BCUBE Thüringen GMBH.

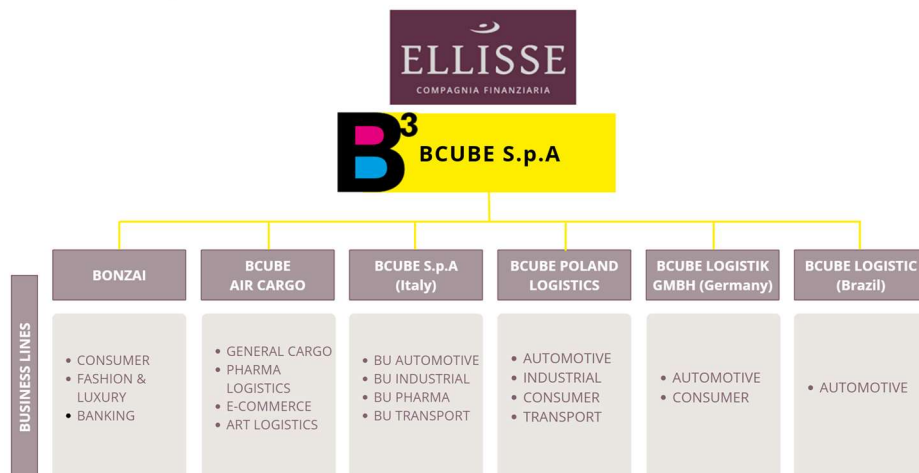


Figure 6 – ELLISSE (BCUBE)'s structure. Adapted by the author from internal sources.

As depicted in *Figure 6*, from internal sources, ELLISSE (BCUBE)'s main sectors are:

- automotive: car compound, spare parts management, CKD, line feeding, kitting and AGV,
- industrial & energy: platform management, industrial packaging, welding and sandblasting, warehouse management, assembling and kitting,
- fashion & luxury: finished products management, quality control, raw materials warehouse management, e-commerce, reconditioning,
- consumer: finished products management, outbound and inbound logistics, warehouse management, spare parts management,
- pharma: temperature-controlled systems, pharma warehouse management, dedicated pharma team, pharma centre, cool chain rooms,
- banking: dematerialization and archives, visual tool, desktop management, distribution, warehouse management,
- transports: rail and intermodal, road, out of gauge, freight forwarding, last mile,
- air cargo: cargo handling, e-commerce, ramp handling, special cargo, caveau & art logistics.

In conclusion, *Figure 7* provides a visual representation of ELLISSE (BCUBE)'s core business areas, broken down by Industry, with Automotive as the dominant sector (43%); by Service type, with Contract Logistics as the main offering (77%); by Country, with primarily geographical presence in Italy (73%); and within Contract Logistics, by operational focus, mainly on Warehousing (50%) and Factory Logistics (40%) (internal sources).

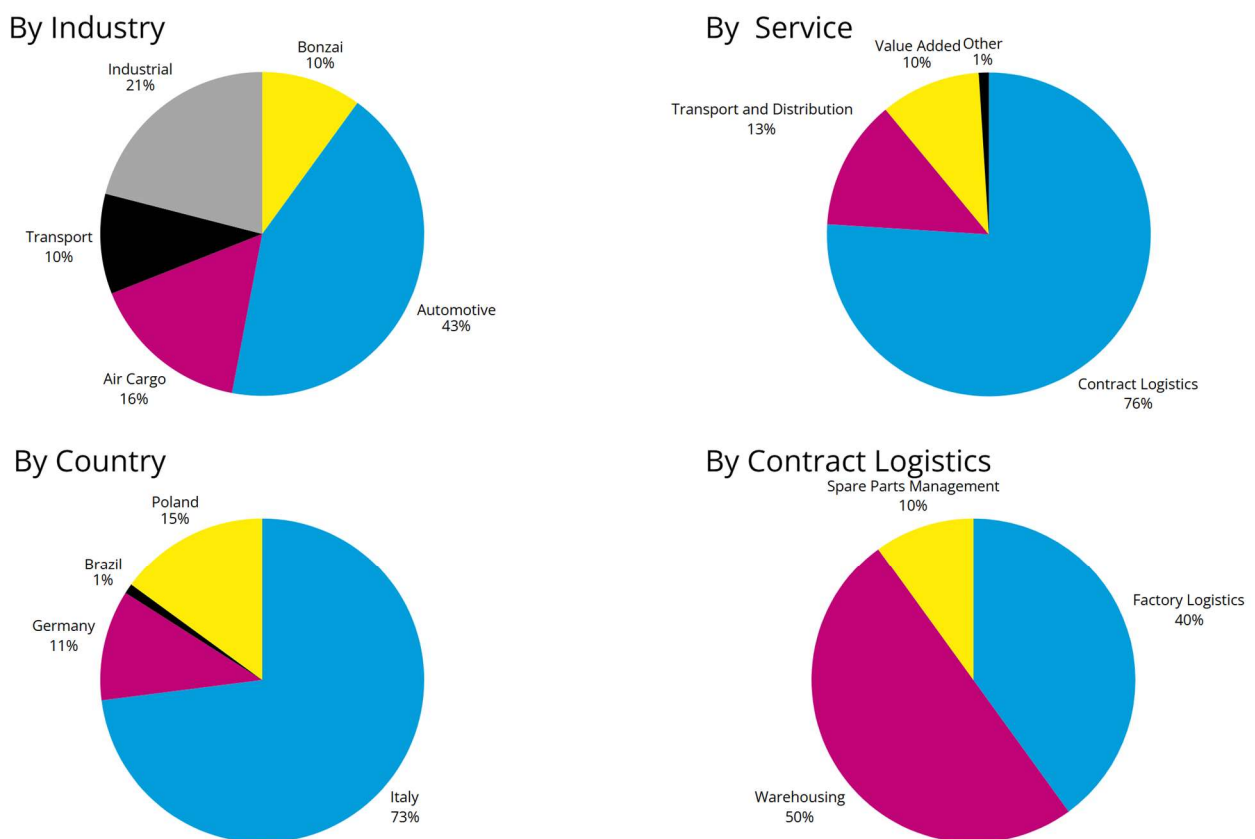


Figure 7 – ELLISSE (BCUBE)'s business lines breakdown: by Industry, by Service, by Country and by Contract Logistics. Adapted by the author from internal sources.

4. Methodology of the Case Study on ELLISSE S.r.l (BCUBE S.p.A)

This chapter outlines the research methodology adopted for the case study of ELLISSE (BCUBE), focusing on the challenges and solutions encountered during the company's preparation of its first Sustainability Report for the year 2024 under the CSRD framework.

The research follows a qualitative and quantitative case study approach, grounded in the author's direct participation in the project as Corporate Social Responsibility Intern within ELLISSE (BCUBE)'s Sustainability Office. This position enabled continuous monitoring and documentation of the sustainability reporting process, from initial planning stages to the finalization of data collection. Primary data was collected through participant observation, internal document analysis, weekly meetings, survey distribution, progress tracking, and retrospective discussions with colleagues. This embedded approach allowed the author to identify critical issues as they emerged and reflect on their resolution, offering a detailed account of practical challenges faced by a multinational logistics group. The analysis was conducted through qualitative and quantitative content analysis, identifying problems and classifying them into categories of challenges and corresponding solutions.

This methodology is particularly suited for exploring a phenomenon still under development, such as CSRD compliance, where standardized procedures are not yet fully established. However, the study is not without limitations: the research is based on a single case within one organization, and the author's internal role, while granting access to firsthand data, may introduce subjective bias. To mitigate this, findings were cross-checked through discussions with other team members and validated against official documentation.

Ultimately, this case study aims to contribute to the limited academic literature on the early implementation of CSRD requirements, providing insights that may guide other organizations in navigating similar challenges in sustainability reporting.

4.1. The Project and the Methodology of Data Collection

The project to prepare ELLISSE (BCUBE)’s first Sustainability Report, related to the year 2024, started in September 2024 and was planned to be terminated in May 2025, resulting in the preparation of the Report. To undertake the project, ELLISSE (BCUBE) chose to rely on the external consultancy of Up2You, a company born in 2020 and certified BCorp since 2021, specializing in guiding firms towards their ecological transition.

This paper will describe the process followed in the project, under the consultancy of Up2You, but the main goal is to address the existing gap in the literature regarding the analysis of challenges and solutions of Corporate Sustainability Reporting, from the beginning of the project, until the end of the data collection (internal company data).

The initial GANTT of the project is the following (Figure 8):

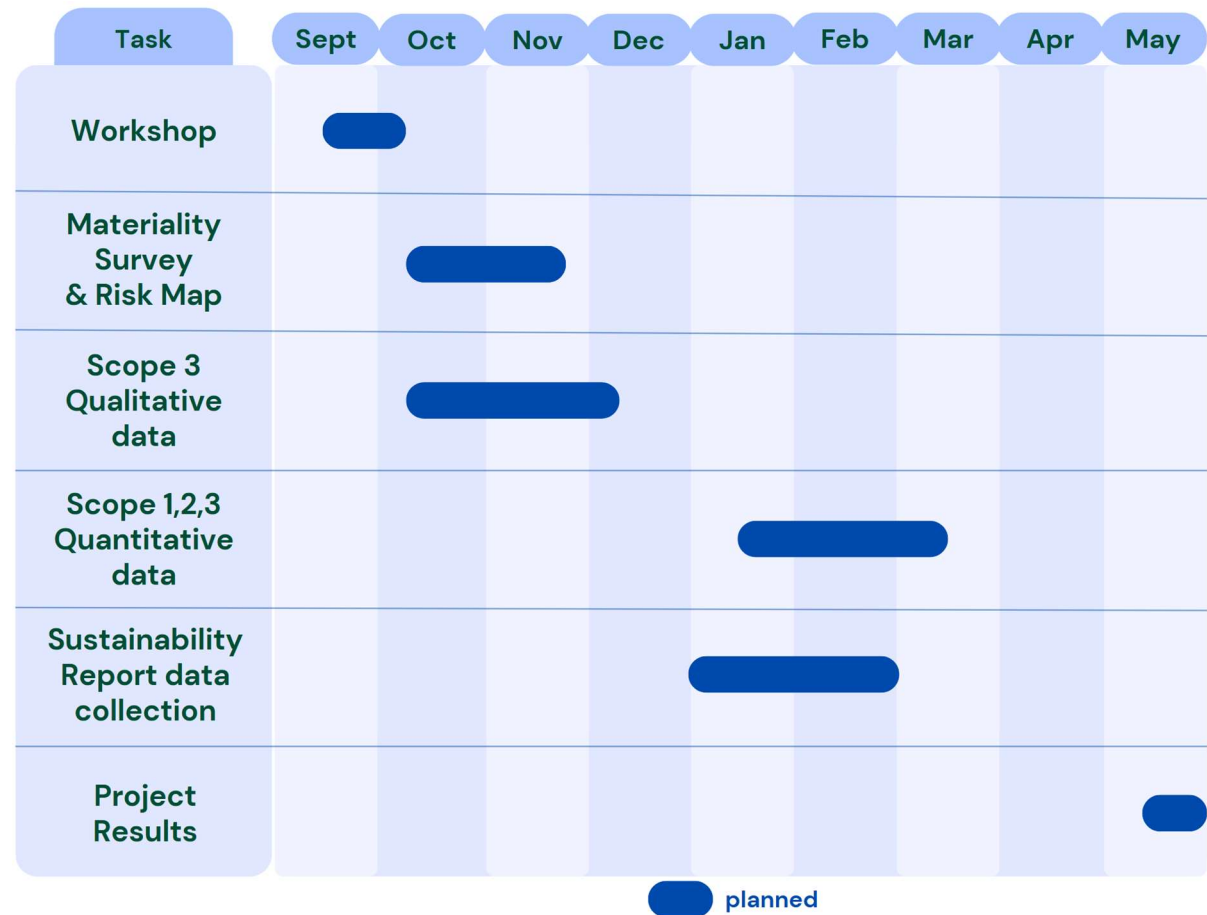


Figure 8 – Initial version of the Gantt for ELLISSE (BCUBE)’s Sustainability Report project for the year 2024. Author’s adaptation from the consultant Up2You’s Gantt chart, for ELLISSE (BCUBE)’s internal use.

As the initial Gantt in Figure 8 underlines, the project started with a Workshop held by the consultant Up2You. The aim was to present the project to the CEO, the Managers and the Head ofs of ELLISSE (BCUBE) and draw information about the company.

During the Workshop, ELLISSE (BCUBE)’s Sustainability Office, composed by the Head of Sustainability and Quality, the Corporate Social Responsibility Coordinator and the author of this thesis as the Corporate Social Responsibility Intern, alongside the consultancy of Up2You, had a clear and overall view of the company’s structure and operations.

From the information gathered in the Workshop, the consultant was able to prepare the Materiality Survey, the Risk Map and the Stakeholders Mapping, crucial steps for the Double Materiality Analysis (internal company data).

The Materiality Survey was designed to involve the stakeholders in the identification of the importance of positive and negative impacts that ELLISSE (BCUBE) generates through its activities on the environment, people, and the economy, locally or internationally. It was submitted to all the white collars and to warehouse site managers of every site by the author of this thesis, as defined by the Sustainability Office in agreement with the consultant.

The author also assisted the Risk Map completion, made by a selected group of people, whose task was to evaluate the risks and opportunities that ELLISSE (BCUBE) could face.

In the meantime, the author of this thesis with the Sustainability Office, made a list of EHS, Sales, Purchasing and Administration representatives for each ELLISSE (BCUBE)'s entity, and submitted qualitative questions about Scope 3 emissions, in order to help the setting of Up2You's platform Climax, employed to calculate ELLISSE (BCUBE)'s Carbon Footprint (internal company data).

After the setting of Climax, the Corporate Social Responsibility Coordinator, in cooperation with EHS, Sales, Purchasing and Administration representatives of each entity, completed the questions about Scope 1, 2 and 3 with quantitative data on the Climax platform.

Meanwhile, Up2You's Choral platform was also set and used to collect the available policies and quantitative data regarding the Material Themes, selected through the Double Materiality Analysis, to draft the Sustainability Report. This task was completed by the Sustainability Office, in collaboration with the representatives of Quality, HR, Sales, EHS, Purchasing and Administration for each entity. The author contributed to the data collection processes by systematically monitoring the information received and identifying any missing data from the various representatives of the legal entities involved, ensuring an overview of the process (internal company data).

The author's main contribution was made by participating in meetings regarding the project, tracking each phase, collaborating in the data collection, tracing the progresses and discussing it in weekly meeting with ELLISSE (BCUBE)'s colleagues, highlighting the criticisms and analyzing each phase retrospectively. The output of this analysis will be discussed in *chapter 5*.

5. Analysis and Results of ELLISSE S.r.l (BCUBE S.p.A)'s Sustainability Reporting Project

The goal of this chapter is to track and analyze the project to prepare ELLISSE (BCUBE)'s first Sustainability Report, to understand the challenges the company faced in the process, alongside understanding which solutions can be efficient to overcome the issues.

The Gantt of the project, shown in *Figure 9*, compares the planned timeline of the project (see also *Figure 8*) with the actual one, highlighting that the project had 2 months of delay.

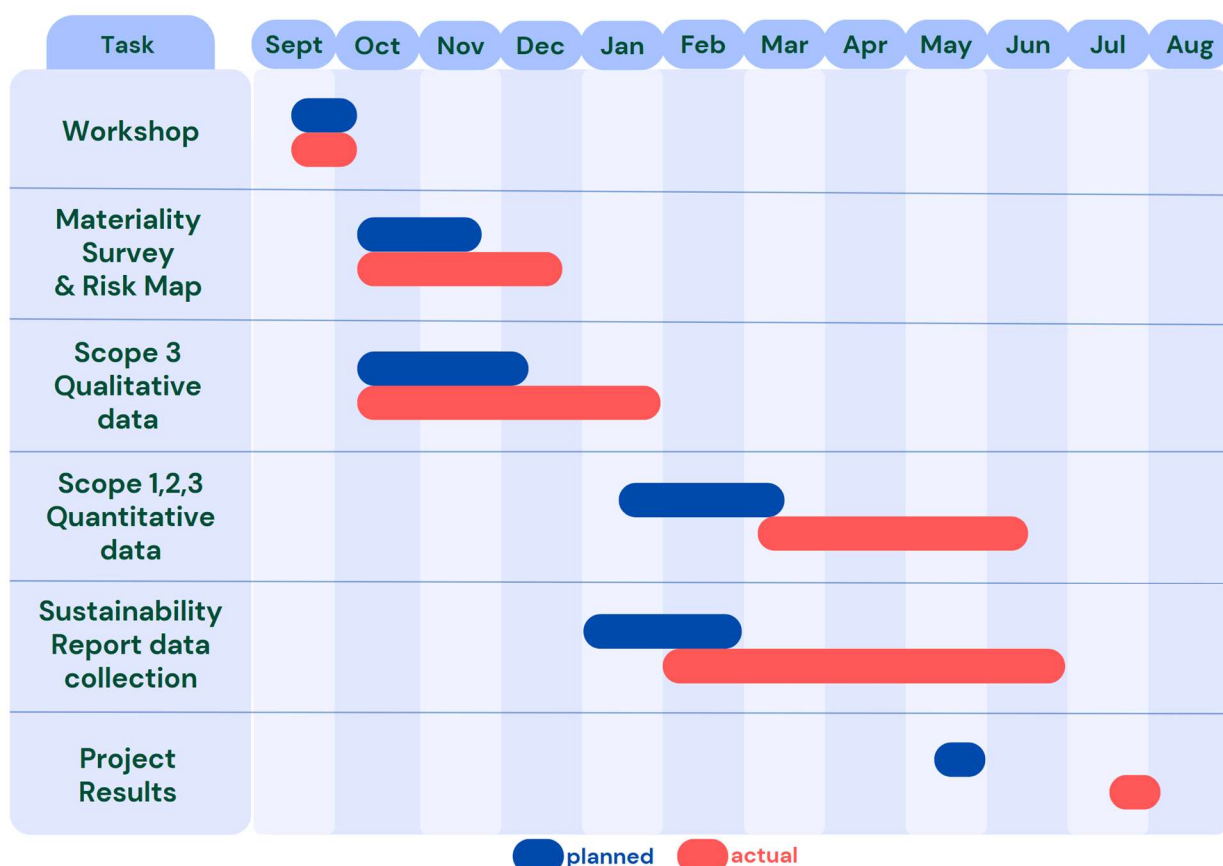


Figure 9 - Gantt for ELLISSE (BCUBE)'s Sustainability Report project for the year 2024, that compares. Author's own elaboration, updated in June 2025, from Up2You's Gantt charts for ELLISSE (BCUBE)'s internal use.

The project began on time with the first task "Workshop", analyzed in *section 5.1*.

Figure 9 underlines that the second task "Materiality Survey & Risk Map" started on time but was completed with a month delay (*section 5.2*).

"Scope 3 Qualitative Data" started on time but was completed with almost 2 months delay (*section 5.3*), leading "Scope 1,2,3 Quantitative Data" to start with a delay of almost 2 months. This task experienced more delay and was completed 3 months after the planned due date (*section 5.4*).

In *section 5.5*, "Sustainability Report data collection" is explored, task that started with a month delay and was completed 3 months and a half after the due date.

The total delay of the project ended up being 2 months.

The reason for it, treated in detail in the following sections, was the complexity of the data collection that included all ELLISSE (BCUBE)'s entities: as examined in *section 3.2*, the parent company controls 6 companies, each with other subcompanies under their control, all included in the analysis. However, such a delay was considered to be a possibility from the start, since the data collection was expected to be an elaborate process, and it should also be remembered that the company started the Sustainability Reporting project one year prior the compulsory compliance, foreseeing the intricacy of it.

In the following sections of this chapter, primary data, collected by the author of this thesis from internal company sources, is reported and each task is analyzed with the aim of answering the research question “*What challenges does a company face when preparing its first Sustainability Report under the CSRD framework, and what solutions can be implemented to address them?*”.

5.1. Initial Workshop

The Workshop on the corporate Carbon Footprint and Sustainability Report of ELLISSE (BCUBE) was held by Up2You's external consultancy on 19th September 2024 and lasted 3 hours. The aim of this workshop was to communicate about the project and define the characteristics of the company.

The participants of the workshop were: the CEO, the General Manager of BONZAI, the General Manager of BCUBE Air Cargo, the Country Director of BCUBE Italy and Poland, the Chief of Human Resources, the Country Manager of BCUBE Germany, the General Director of BCUBE Poland, the Corporate CFO, the Financial Planning Manager, the Head of AFC, the Controlling Manager, the Head of Purchasing, the Chief Business Development Officer, the Head of Automotive, the Head of BU Energy, The BU Industrial Manager, the Head of Engineering & B&P, the Special Project Advisor, plus the Sustainability Office, that included the Head of Quality & Sustainability, the Corporate Social Responsibility Coordinator and the author of this thesis as the Corporate Social Responsibility Intern (internal company data).

The focus of the workshop was on (internal company data):

- defining the characteristics of the company,
- mapping company's activity,
- analyzing and identifying the main energetic sources used in the buildings,
- identifying the emission sources,
- identifying the main internal and external stakeholders for the materiality survey,
- identifying the material themes,
- exploring the main ESG risks and opportunities.

After gaining information about the company's structure and characteristics and activities during the Workshop, Up2You was able to divide those activities into Scope 1, 2 and 3 as shown in *Figure 10*, to identify the main emission sources for the Carbon Footprint analysis (internal company data):

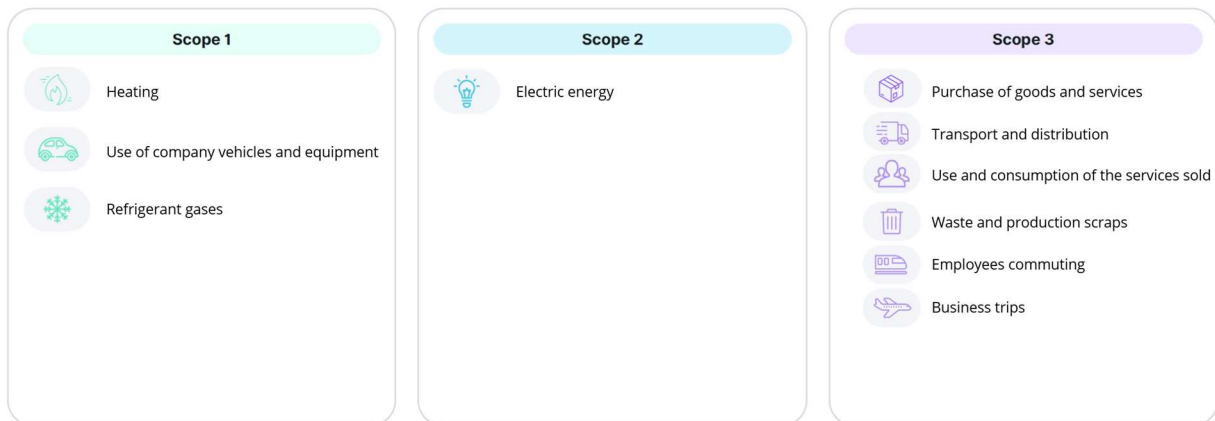


Figure 10 - ELLISSE (BCUBE)'s Scope 1, 2 and 3, defined during the Workshop. Internal company data elaborated by Up2You's external consultancy.

ELLISSE (BCUBE)'s preliminary distribution of emissions deviates from the Logistic Sector mean, mostly because of the company's characteristic of using external suppliers to transport most of the goods in its warehouses. In fact, instead of having the highest percentage in Scope 1, aligned to the sector mean, the biggest slice of the pie goes to Scope 3 as "purchase of goods and services" and "use and consumption of services sold" (*Figure 11*, internal company data).

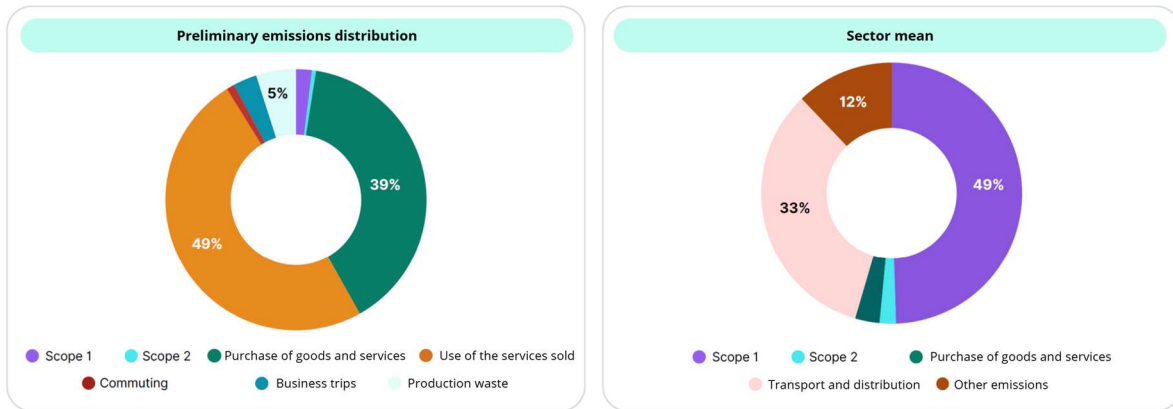


Figure 11 – Pie diagrams of ELLISSE (BCUBE)'s preliminary distribution of emissions compared to the Logistic Sector mean. Internal company data elaborated by Up2You's external consultancy.

Moreover, from the information gained during the Workshop, the external consultancy of Up2You redacted the Influence-Dependence matrix of ELLISSE (BCUBE)'s stakeholders, highlighting 4 categories of stakeholders (Figure 12). The scope of this matrix was to realize which stakeholders have the most influence and dependance on ELLISSE (BCUBE), in order to involve them in the Materiality Analysis (internal company data).

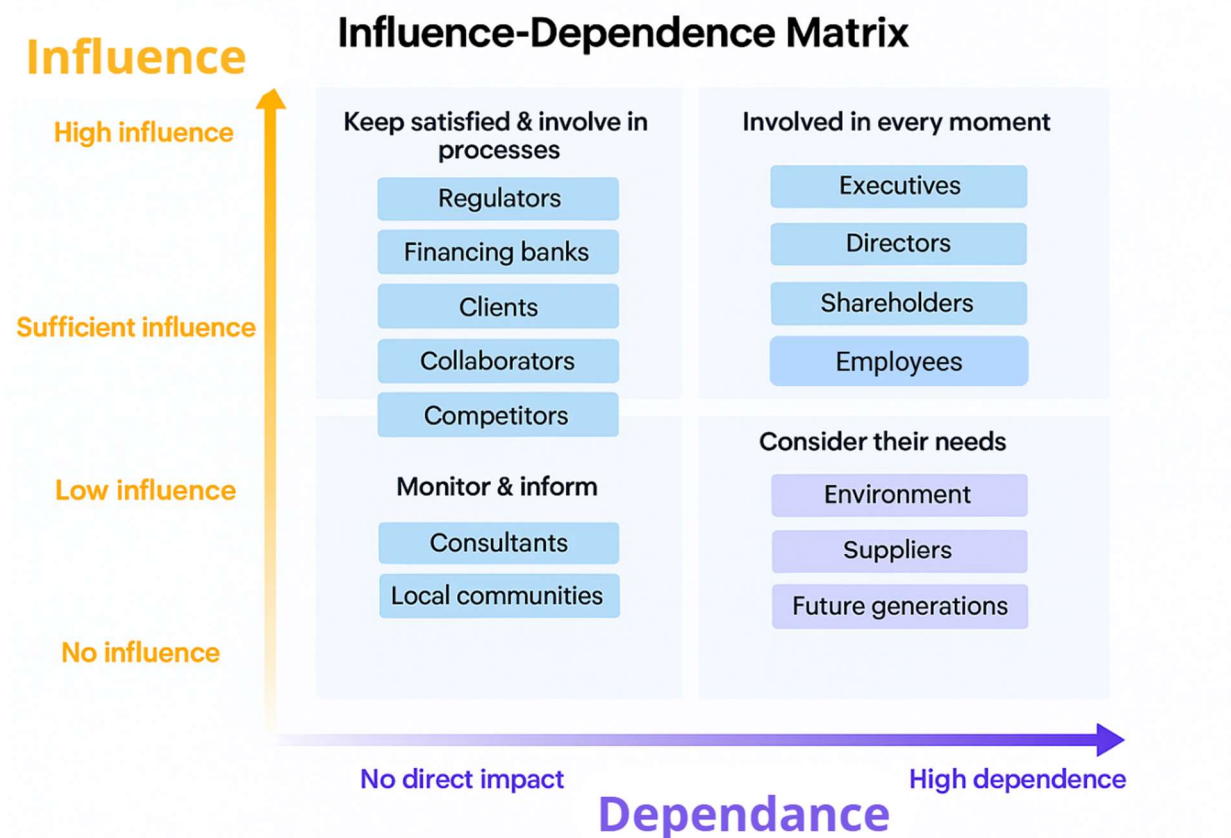


Figure 12 - Influence-Dependence matrix of ELLISSE (BCUBE)'s stakeholders, defined during the Workshop. Internal company data elaborated by Up2You's external consultancy.

Another important topic discussed in the Workshop was the selection of ELLISSE (BCUBE)'s Material Themes.

The Material Themes selected were divided into Environment (5 themes), Social (4 themes) and Governance (5 themes), as depicted in Figure 13 (internal company data).

Material Themes identified as potentially relevant		
Environment	Social	Governance
GHG emissions	Diversity & inclusion	Sustainable supply chain
Waste & packaging management	Training & development	Ethics & human rights
Circular economy & sustainable packaging	Talent attraction	Privacy & data security
Resource management	Health & safety at work	Regulatory compliance
Extremes weather events		Anti-corruption

Figure 13 – ELLISSE (BCUBE)'s Material Themes identified as potentially relevant, selected during the Workshop, divided into Environmental, Social and Governance. Internal company data elaborated by Up2You's external consultancy.

The Environmental Themes selected and their risks and opportunities are (internal company data):

- GHG emissions: generation of Greenhouse Gas emissions through company activities and those related to the value chain.
Risks: regulatory costs, reputational harm, investor pressure.
Opportunities: energy savings, innovation, access to green financing.
- Waste and packaging management: adoption of practices to minimize waste production and optimize packaging use.
Risks: regulatory fines, high disposal costs, environmental impact.
Opportunities: cost reduction, resource efficiency, improved brand image.
- Extreme weather events: adverse climatic conditions such as floods, storms, heatwaves, or heavy snowfall.
Risks: service interruptions and disruptions caused by adverse weather events.
- Circular economy and packaging: promotion of solutions for material reuse and waste reduction.
Risks: low customer sensitivity toward sustainable options.
Opportunities: growing demand for returnable packaging and sustainable solution.
- Resource management: optimization in the use of resources and raw materials employed.
Risks: regulatory restrictions on business operations, reduction and scarcity of resources and raw materials, increased costs related to updating the company's vehicle fleet.
Opportunities: implementation of initiatives for energy efficiency in company facilities.

The Social Themes selected and their risks and opportunities are (internal company data):

- Health and safety at work: implementation of measures to ensure a safe working environment and protect employees.
Risks: increased costs for harmonizing international best practices.
- Talent attraction: creation of welfare policies and promotion of work-life balance.
Risks: difficulties in attracting and retaining talent.
Opportunities: improvement of corporate reputation.
- Staff training and development: development of professional growth programs and continuous training plans.

Risks: increased costs related to staff training.

Opportunities: development of professional skills.

- Diversity and inclusion: adoption of policies to ensure inclusion and value staff diversity.

Risks: greater complexity in managing cultural diversity.

Opportunities: competitive advantage from multicultural diversity.

The Governance Themes selected and their risks and opportunities are (internal company data):

- Privacy and data security: implementation of systems to protect personal and corporate data.

Risks: threats to data security due to new technological developments.

- Anti-corruption: adoption of measures to promote transparency and prevent unlawful conduct.

Risks: legal penalties, reputational damage, loss of business opportunities.

Opportunities: stronger governance, improved reputation, better access to funding.

- Sustainable supply chain: introduction of environmental and social criteria in supply chain management.

Risks: stricter regulations for supplier selection can make the process slower and then longer.

Opportunities: building a more responsible supply chain.

- Regulatory compliance: compliance with applicable laws and regulations to ensure transparency and conformity.

Risks: limitations in access to public tenders and funding, risk of sanctions for non-compliance.

- Corporate ethics and human rights: promotion of ethical practices and respect for human rights across all company activities.

Risks: potential reputational damage due to human rights violations in the supply chain, growing expectations from customers and stakeholders.

Opportunities: improved market attractiveness and positioning, enhanced corporate brand reputation through the implementation of specific policies.

Lastly, the identification of ESG risks and opportunities by the participants of the Workshop was a crucial activity to elaborate the Risk Map (see *section 5.2*).

The Environmental Risks and Opportunities emerged that could impact the company are (*Figure 14*):

Environmental Risks and Opportunities



Figure 14 - Environmental Risks and Opportunities emerged during the Workshop. Author's adaptation from internal company data elaborated by Up2You's external consultancy.

The Social Risks and Opportunities emerged that could impact the company are (Figure 15):



Figure 15 - Social Risks and Opportunities emerged during the Workshop. Author's adaptation from internal company data elaborated by Up2You's external consultancy.

The Governance Risks and Opportunities emerged that could impact the company are (Figure 16):



Figure 16 - Governance Risks and Opportunities emerged during the Workshop. Author's adaptation from internal company data elaborated by Up2You's external consultancy.

The results that came out from the Workshop were essential for the consultant and the Sustainability Office to understand the structure of the company on a deeper level, in order to lead the project and draft the Materiality Survey, the Risk Map and the Stakeholders Analysis.

Discussing retrospectively in meetings during the course of the project, it surfaced that it would have been more appropriate to divide the Workshop into two separate workshops, to analyze the Carbon Footprint and the Sustainability Report as two different topics, making it clearer to the participants that the two projects were parallel, but distinct.

Moreover, it should have been cleared that, following the Workshop, a data collection for the Carbon Footprint Analysis regarding Scope 1, 2 and 3 emissions and a differentiated data collection for the Sustainability Report drafting would have taken place. This way, the Managers and Head of's could have informed and prepared the employees responsible of such data, facilitating the data collection.

5.2. Double Materiality Analysis and SHs involvement

The Double Materiality Analysis, explored in *section 2.3*, is an essential step in Corporate Sustainability Reporting that requires the involvement of the stakeholders considered relevant.

To lead this analysis, the answers from the Materiality Survey were essential to define the Impact Materiality (inside-out), and the Risk Map completion was key to determine the Financial Materiality (outside-in).

The Materiality Survey, drafted by the consultants after the information collected in the Workshop, had a crucial role. The survey was submitted around mid-October 2024 via email to all the white collars and to warehouse site managers of every ELLISSE (BCUBE) site, by the author of this thesis. The number of people who received the Materiality Survey is listed in *Table 2*, divided by the 6 main ELLISSE (BCUBE)'s legal entities: BCUBE S.p.A (Italy), BONZAI, BCUBE AIR CARGO, BCUBE LOGISTIC (Brazil), BCUBE LOGISTIK GMBH (Germany) and BCUBE POLAND LOGISTICS (internal company data).

Table 2 - Number of ELLISSE (BCUBE)'s stakeholders who received the Materiality Survey to complete, divided in legal entities. Author's own elaboration from internal company data.

ELLISSE (BCUBE)'s legal entities	#people who received the Materiality Survey
BCUBE S.p.A (Italy)	150
BONZAI	30
BCUBE AIR CARGO	69
BCUBE LOGISTIC (Brazil)	14
BCUBE LOGISTIK GMBH (Germany)	14
BCUBE POLAND LOGISTICS	103
External Consultants	2
tot receivers	382

The survey was designed to involve the stakeholders in the identification of the importance of positive and negative impacts that ELLISSE (BCUBE) generates through its activities on the environment, people, and the economy, locally or internationally.

From *Table 2*, it is noticeable that the Survey was internally focused, a choice made by the Sustainability Office to simplify the task on the first year of reporting, with the ambition and requirement of extending the survey to external stakeholders in the future.

Every employee, after indicating their role in the company, had to provide their personal perspective in terms of benefit or severity, that is to say how beneficial or harmful an impact can be and how widespread it is, and likelihood of occurrence, meaning what is the probability that a potential impact occurs in the future. The scale was from 0 to 4, where 0=I am not able to evaluate, 1=Very low, 2=Low, 3=High, 4=Very high (internal company data).

By the end of December 2024, the survey closed with a month of delay from the scheduled due date. The process took longer because the survey was also a mean of introducing the project and the Sustainability Office to each entity, since it was the first project involving the whole group. Moreover, the survey was in English and Italian, but it occurred to be appropriate to translate it in German and Polish to facilitate the understanding of BCUBE GERMANY and POLAND's employees.

The total answers collected were 222, meaning that around 58% of the stakeholders involved gave feedback, which was considered a positive result from the consultants' experience.

The answers, as shown in *Figure 17*, are divided between Managers (12.6%), Administrators (3.6%), Employees (83.8%) and Shareholders (0.005%).

The percentages of answers suggest a low participation from shareholders: a higher percentage of answers from them could make a significant difference in future analysis (internal company data).

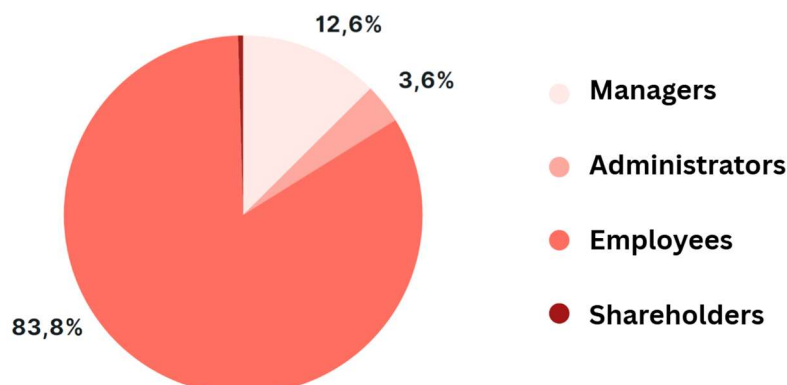


Figure 17 – Percentual distribution of Materiality Survey responses divided by company roles: Managers, Administrators, Employees and Shareholders. From internal company data elaborated by Up2You's external consultancy.

In parallel with the Materiality Survey, a meeting to complete the Risk Map took place on 6th November 2024, with the participation of the CFO, the General Manager of BONZAI, the Country Director of BCUBE Italy and Poland, the General Manager of BCUBE Poland, the Chief of Human Resources, the HR Recruiting, Training & Development Coordinator, the Special Project Advisor and the Sustainability Office.

A risk map is a visual tool used to identify and assess potential risks by plotting them according to their likelihood of occurrence and potential impact, helping organizations prioritize and manage threats effectively (Hopkin, 2018).

ELLISSE (BCUBE)'s Risk Map was structured as a table, having as columns Item, Category, Risk/Opportunity, Description, Probability, Magnitude and Priority, and the risks or opportunities to evaluate as lines (*Table 3*, internal company data).

Table 3 - Example of a Risk Map table. From internal company data elaborated by Up2You's external consultancy.

Item	Category	R/O	Description	Probability	Magnitude	Priority
Reduction and scarcity of resources and raw materials, resulting in a reduction of business volume	Resource management	Risk	The limited availability of raw materials and resources can affect the company's ability to meet demand, potentially leading to a reduction in business volume and increasing operating costs.	1	1	1
Low customer sensitivity towards sustainable solutions	Circular economy and sustainable packaging	Risk	Customers' low perception of the value of more sustainable solutions promoted by the company could undermine the effectiveness of its environmental initiatives, limiting the expected economic benefits for the company.	2	2	4
Service interruptions and discontinuity due to adverse weather events	Extreme climate events	Risk	Extreme weather events can disrupt operational continuity and compromise the company's ability to meet customer commitments, leading to potential profit losses and reputational damage.	3	3	9
Growing demand for returnable packaging and sustainable solutions	Circular economy and sustainable packaging	Opportunity	The growing interest in environmental issues is driving demand for reusable packaging and eco-friendly solutions, opening up new business opportunities and strengthening the company's competitive position.	4	4	16
Implementation of initiatives for energy efficiency in facilities	Resource management	Opportunity	The adoption of measures to improve the energy efficiency of company facilities can reduce operating costs and enhance the company's sustainability, reinforcing its commitment to the environment and increasing its competitiveness.	5	5	25
Improvement of the company's brand reputation through the implementation of environmental policies	Business ethics and human rights	Opportunity	The implementation of effective environmental policies can enhance brand reputation, fostering a positive perception of the company among customers and improving their loyalty.	6	6	36

To evaluate each risk or opportunity, the participants of the meeting discussed together the Probability and Magnitude scores, based on *Table 4*, obtaining the Priority score from the multiplication of the two values.

The Priority is considered low (green) from 1 to 4, medium (orange) from 5 to 16 and high (red) from 20 to 36 (internal company data).

Table 4 - Probability and Magnitude score references for the Risk Map completion. From internal company data elaborated by Up2You's external consultancy.

Probability	Probability of at least 1 occurrence in the next 12 months	Magnitude	Expected average economic impact
1	<1%	1	<10k
2	1-10%	2	10k-50k
3	10-30%	3	50k-100k
4	30-50%	4	100k-500k
5	50-80%	5	500k-1mln
6	>80%	6	>1mln€

The data collected from the Materiality Survey and the Risk Map was elaborated by Up2You to obtain the Double Materiality Analysis (*Figure 18*).

The analysis positions the material themes previously selected in order of relevance on a graph, structured with Impact Materiality on the x-axis, resulting from the Materiality Survey, and Financial Materiality on the y-axis, extracted from the Risk Map (internal company data).

The results from the Materiality Survey and the Risk Map highlighted which are the most relevant themes for ELLISSE (BCUBE), from the Material Themes previously selected in the Workshop (internal company data):

- “Diversity, equity and inclusion” (Social) was considered relevant from the Financial Materiality (outside-in) point of view,
- “Responsible waste management and promotion of circular economy” and “GHG emissions” (Environmental), “Value chain sustainability”, “Anti-corruption” and “Normative compliance” (Governance), “Talent attraction and retention”, “Employees’ training and development” and “Employees’ wellbeing, health and safety” (Social) were determined relevant for Impact Materiality (inside-out),
- “Privacy management and data protection” (Governance) was regarded relevant for both Financial and Impact Materiality.

5.3. Scope 3: qualitative data collection

While the Double Materiality Analysis took place, the qualitative data collection on Scope 3 began. The aim was to help the consultant Up2You set the quantitative question on the Climax platform for the Carbon Footprint Analysis.

The data collection, which began mid-October 2024 and ended by the end of January 2025, was on the following topics (internal company data):

- purchased goods and services: the order of magnitude of the goods, the classification (raw materials, intermediate products, end products) and how they reach the company,
- waste management: information on company's waste policies,
- leased goods: information on goods purchased in leasing,
- use and consumption of goods sold: characteristics of the goods sold.

For this reason, the Sustainability Office contacted EHS, Sales, Purchasing and Administration representatives for each ELLISSE (BCUBE)'s entity, in order to obtain the information requested.

The representatives were contacted via email, briefly introducing the project.

The email sent to all EHS representatives asked for qualitative data, referring to the entire year 2024, regarding the type of waste produced for each managed site and possible presence, type, and unit of measurement of volatile organic compounds.

The email sent to all Sales representatives aimed to obtain a list of clients, of all the services provided for them (e.g.: warehouse logistics, painting, transportation, etc.), and to determine whether the revenue for each service was available.

The question asked to Purchasing representatives involved the use in their legal entity of SAP, an ERP software for data management used to keep track of goods and services purchased, at least since January 1st, 2024, to understand if data on purchases were available for all the legal entities. Moreover, they were asked whether they were aware of the kWh of electricity and SMC of gas consumed in the sites in the company's name and if there was a way to know the liters of fuel used during the year by all company vehicles.

Lastly, the Administrative representatives were asked to provide a list of any movable and immovable assets held under leasing, regarding the year 2024.

They were all advised that, from January to March, they would have been involved in the collection of quantitative data (internal company data).

The qualitative data collection took longer than anticipated due to the complexity of obtaining some of the data and the involvement of multiple entities. In hindsight, the Sustainability Office recognized that providing representatives with a well-structured Excel file from the start, containing clearer and more organized questions would have been the solution to facilitate both representatives and the Sustainability Office's work.

Ultimately, the Office prepared and completed a file with the information collected from each representative (internal company data):

- The EHS file contained all the significant Codes of Environmental Regulations (CER), used to classify waste materials for proper management and disposal. The Sustainability Office indicated for each legal entity and its respective sites whether a specific code was relevant, thereby identifying if a particular type of waste was generated. Since CER codes are associated with the European Union's waste management regulations, the data obtained from BCUBE Brazil were categorized by waste type, and the Sustainability Office subsequently assigned the corresponding CER codes.
- The Sales file comprehended a list of clients and activities carried out by each ELLISSE (BCUBE)'s site.
- The Purchasing file included a list of purchase categories, such as services, raw materials, packaging, and end products, along with the materials associated with each category.

However, by realizing too late that such file was essential due to the complexity of the data collection in this field, the Sustainability Office realized they would be overdue for the Climax setting. For this reason, the quantitative data collection for Purchasing did not take place on Climax, but through the compilation of Excel files that were later given to the consultants directly.

- The Administration file included information on leased goods, organized by legal entities and their respective sites. The leased goods comprised real estate and/or material-handling equipment (MHE), along with details on whether utilities were registered to the legal entities.

Initially, the data collection was conducted through phone calls, email exchanges, and various unstructured documents. It was only after encountering significant difficulties in consolidating the information that the Sustainability Office recognized, through internal review and confrontation meetings, the inefficiencies of the initial process and the value of structured data management.

This realization emerged retrospectively, highlighting the need for a more organized approach, with the solution being the use of Excel files (internal company data).

5.4. Scope 1,2,3: quantitative data collection on Climax

The quantitative data collection for Scope 1, 2 and 3 began in March 2025 and ended mid-June 2025. The data was collected by the Corporate Social Responsibility Coordinator through an online platform, owned by the consultant Up2You, called Climax, described below through screenshots of the platform itself (internal company data).

It is important to emphasize that at the time this thesis was written, the data collection was about to close and some of the screenshots of the platform depict incomplete information or lack of results. However, this does not represent an issue, since the main aim of this thesis is to describe the challenges and solutions of a company complying with the Corporate Sustainability Reporting Directive (CSRD) standards and it is not primarily focused on the results of the project, but on the process of reaching such results.

In *Figure 19*, the red rectangle on the left, indicated with number 1, shows Climax's navigation menu. This section will describe the platform section by section, from the Home section to the Data Collection one. The Report, Reduction, Offsetting and Communication sections, however, will be available only after the elaboration of data collected, made by the consultant Up2You, so they will not be illustrated in this paper (internal company data).

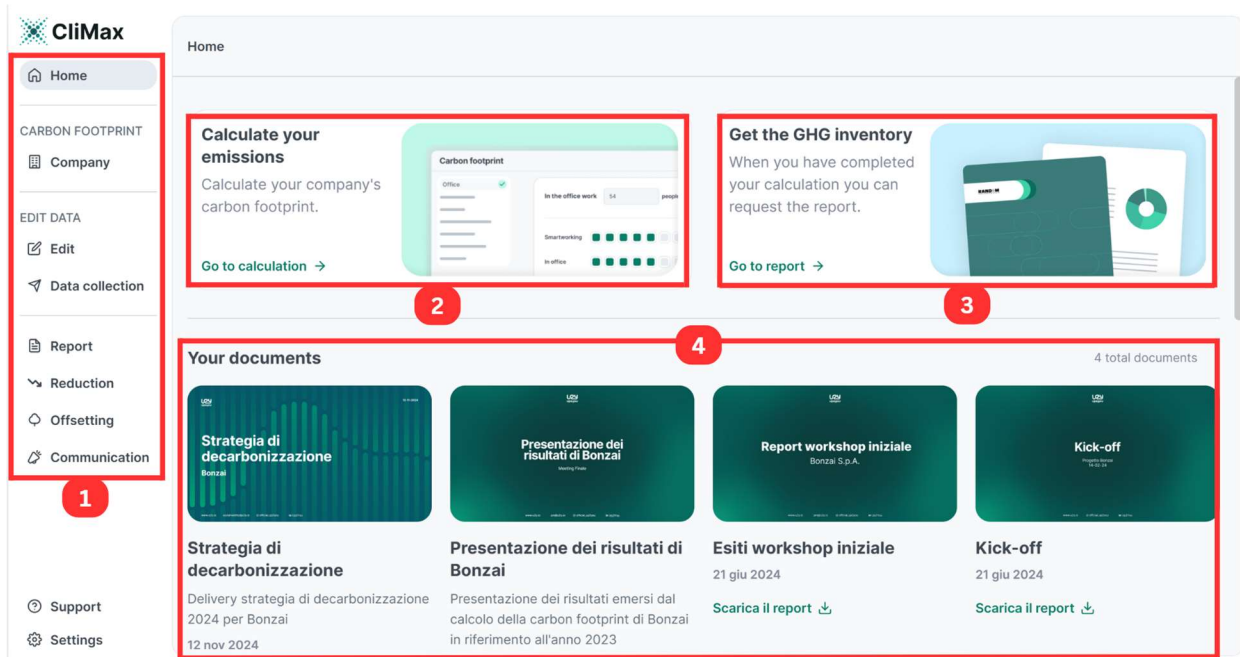


Figure 19 - Screenshot from the Home section of the Climax platform, used for Scope 1, 2 and 3 data collection (screenshotted on 3rd June 2025). From Climax, an online platform owned by external consultant Up2You.

The Climax Home section is structured as follows, shown in *Figure 19*: by going on the red rectangle indicated with number 2 and clicking “go to calculation”, the platform goes to the “Edit” section (see *Figure 21*); by going on the red rectangle indicated with number 3 and clicking “go to report”, the platform goes to the “Report” section; going on the red rectangle indicated with number 4, it is possible to view and download the documents prepared by the consultant Up2You for ELLISSE (BCUBE) in the previous months, i.e. the Workshop Results presentation (see *section 4.2*) (internal company data).

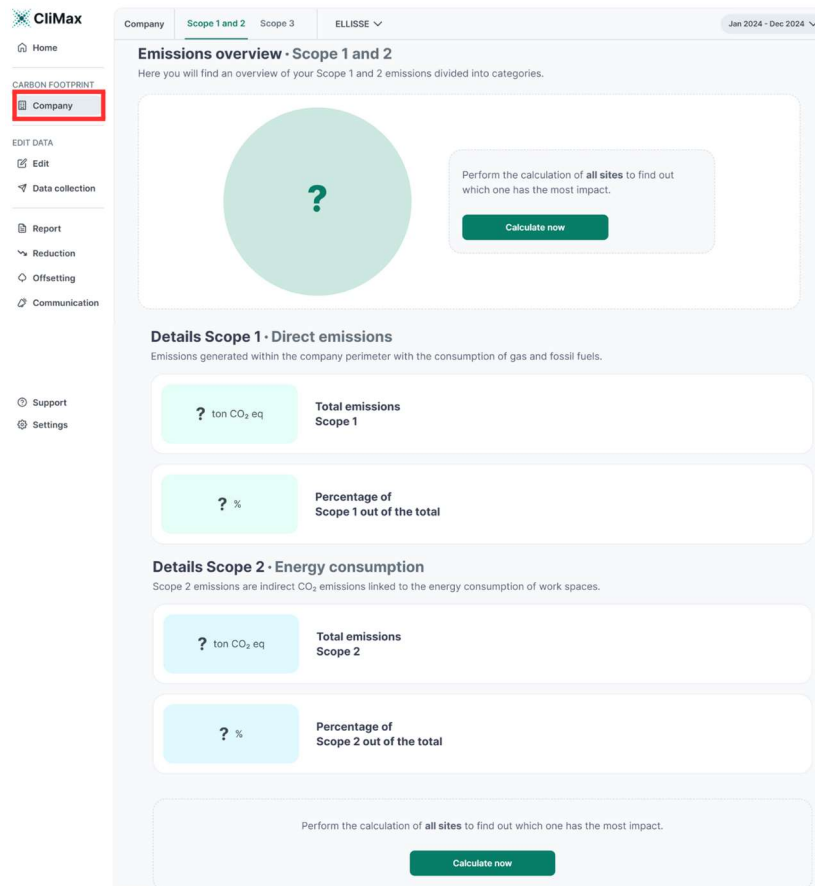


Figure 20 – Screenshot from the Company section of the Climax platform (screenshoted on 3rd June 2025). From Climax, an online platform owned by external consultant Up2You.

The Company section in Climax (Figure 20), is available only after the elaboration of the data collected, so it was still inactive at the time this thesis was written. When active, this section will describe the company emission overview, by using a pie chart, with details on the ton CO₂ equivalent of Scope 1, 2 and 3 total emissions (internal company data).

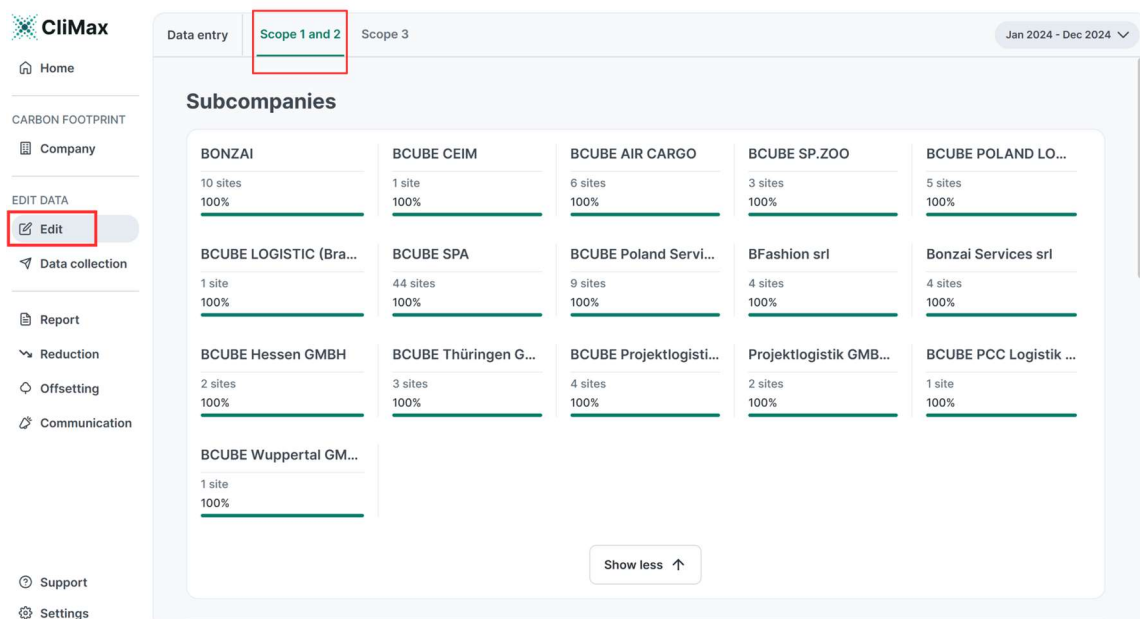


Figure 21 – Screenshot from the Edit section, “Scope 1 and 2” subsection, of the Climax platform (screenshoted on 18th June 2025). From Climax, an online platform owned by external consultant Up2You.

Figure 21 portrays the Edit section of Scope 1 and 2 completed data collection.

The screenshot shows the list of ELLISSE (BCUBE)’s legal entities (“subcompanies”) involved in the collection:

- BCUBE S.p.A (Italy) with CEIM (PROGRAMMA MARE gave no feedback),
- BONZAI with BFashion,
- BCUBE AIR CARGO,
- BCUBE LOGISTIC (Brazil),
- BCUBE LOGISTIK GMBH (Germany) with BCUBE Wuppertal GMBH, BCUBE Hessen GMBH, Projektlogistik GMBH BCUBE Berlin, BCUBE Projektlogistik GMBH Ost, BCUBE PCC Logistik GMBH and BCUBE Thüringen GMBH,
- BCUBE POLAND LOGISTICS with BCUBE SP.ZOO and BCUBE Poland Services SP.ZOO.

Each entity is followed by the number of sites under such entity and its Scope 1 and 2 completion percentage, all at 100% since the data collection was completed.

The number of entities and subcompanies selected to complete the Climax platform was discussed which each representative during the qualitative data collection and personalized to match each entity needs and structure (internal company data).

Figure 22 depicts the Edit section of the Scope 3 completed data collection.

Each entity is followed by the number of sites under such entity and its Scope 3 completion percentage, all around 100% since the data collection was completed (internal company data).

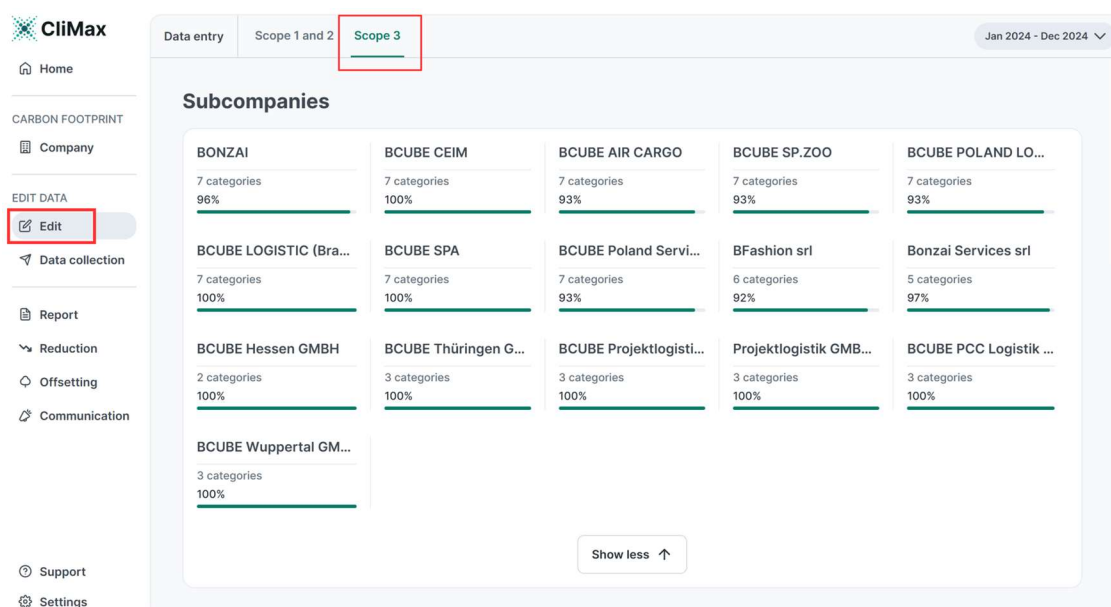


Figure 22 - Screenshot from the Edit section, “Scope 3” subsection, of the Climax platform (screenshoted on 18th June 2025). From Climax, an online platform owned by external consultant Up2You.

The Data Collection section has a Requests subsection (1) and a Contributors subsection (2). The Request subsection, depicted in the Climax screenshot in Figure 23, reports the list of requests made by the Corporate Social Responsibility Coordinator to various representatives of ELLISSE (BCUBE)’s entities.

The red arrow in Figure 23 indicates the list of the 56 requests made (only 4 are shown in the screenshot) to 16 internal contributors. For every request on the list, it is depicted the title of the request, the contributor who received it, the Scope to which it belongs, the subcompany to which it is

referred, the deadline (not specified in this case on the platform), eventual messages and the status of the request (i.e. completed, in revision, in progress) (internal company data).

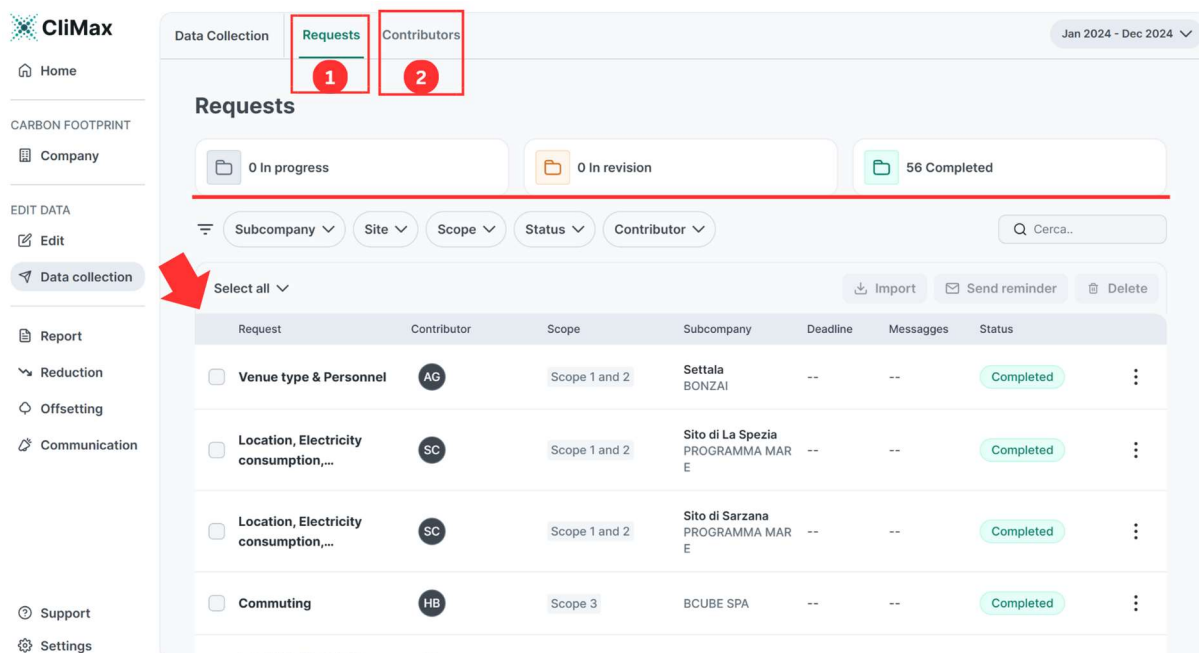


Figure 23 – Screenshot from the Data Collection section, Request subsection, of the Climax platform (screenshoted on 3rd June 2025). From Climax, an online platform owned by external consultant Up2You.

The Contributors subsection will not be displayed as a screenshot for privacy reasons, being a list of the 16 contributors' names and emails, but their role and the information requested to them are listed below.

The company's contributors that were consulted for each legal entity to collect the information needed for Scope 1 are (internal company data):

- Human Resources, to know the number of blue and white-collars and the percentage of smart working of the entity,
- Purchasing representatives, to obtain the quantitative of gas used for heating, and of fuel used for the entity's owned transportation and fleet. The Corporate Social Responsibility Coordinator had already access to BCUBE and BONZAI's data.

For Scope 2, the electricity consumption of each legal entity was collected from the Purchasing representatives. In ELLISSE (BCUBE)'s case, Scope 2 includes site lighting, cooling systems and material-handling equipment (MHE) (internal company data).

The company's contributors that were consulted for each legal entity to collect the information needed for Scope 3 are (internal company data):

- Human Resources, for information on business trips and employees commuting,
- Purchasing representatives, for information on goods and services purchased,
- Management Control representatives, to know the transportation revenue,
- Site Managers, to obtain the hours of vehicle operations, needed to calculate the electricity use in the few cases of the electricity bills not being in the company's name,
- EHS representatives, for information on waste management.

Most of the representatives were contacted by the Corporate Social Responsibility Coordinator through Climax and were able to compile the questions related to their field on the platform. Note that some representatives are the same for multiple entities and some entities only have one person responsible for all these aspects due to their small dimension (i.e. CEIM).

The only exceptions were made for: Purchasing of every entity, since the qualitative data collection was delayed due to complications in realizing a generalized Excel with the questions, so the quantitative data was given directly to the consultants through a compiled Excel file; all BCUBE Poland's representative who, mainly because of the language barrier, had the Corporate Social Responsibility Coordinator as referent who translated and compiled Climax with their information; BCUBE Germany representative, who referenced directly to the Corporate Social Responsibility Coordinator. The elaborate information requested was the cause of delay of this task, compared to the initial timeline, and drove the Coordinator to adapt to the different needs of each entity, in order to reach the final goal (internal company data).

The author contributed to the data collection process by systematically monitoring the information received and identifying any missing data from the various representatives of the legal entities involved. This support ensured an organized and transparent overview of the progress, enabling the Sustainability Office to follow up more efficiently and maintain consistency throughout the process.

At the delayed deadline for the quantitative data collection, the Corporate Social Responsibility Coordinator had collected data on Scope 1, 2 and 3 of every legal entity, with the exception shown in *Figure 24: PROGRAMMA MARE*, a small reality under BCUBE (Italy) that was not able to give any feedback about Scope 1, 2 and 3 this year, so it was excluded from the analysis, and BCUBE Germany, that could not provide data on purchasing due to internal complications that could not be overcome in time, resulting in obtaining only partial information on Scope 3 (internal company data).

Despite the absence of some data and the need to rely on estimations in certain cases, the validity of the data collection process was not undermined, being the company's first voluntary effort to assess its GHG emissions, carried out one year ahead of regulatory obligations.

The primary objective was to identify potential gaps and challenges in data availability and reporting. As such, this preliminary exercise serves as a way to understand where the difficulties lay, in order to build a more robust and complete reporting system in the future.

LEGAL ENTITY	SCOPE 1	SCOPE 2	SCOPE 3
BCUBE Italy &1 subc.	✓	✓	✓
BCUBE Italy subc. (PROGRAMMA MARE)	✗	✗	✗
BONZAI &1 subc.	✓	✓	✓
AIR CARGO	✓	✓	✓
BCUBE Brazil	✓	✓	✓
BCUBE Germany &5 subc.	✓	✓	✓
BCUBE Poland &2 subc.	✓	✓	✓

 information collected
  information partially collected or estimated
  information not available

Figure 24 – Results of the Scope 1, 2 and 3 data collection for ELLISSE (BCUBE)'s Carbon Footprint Analysis on Climax. The green checks indicate the information was collected, the orange checks indicate the information was only partially collected or estimated, and the red crosses indicate that it was not possible to obtain information about such Scope for the corresponding legal entity. Author's own elaboration from internal company data.

5.5. Sustainability Report: data collection on Choral

The data collection to gain all the information to draft the Sustainability Report began in February 2025 and ended in June 2025 (internal company data).

The data was collected by the Head of Quality and Sustainability through Choral, another online platform owned by the external consultant Up2You. As in the case of the Climax data collection, that happened in parallel, this thesis was written before the Choral data collection was elaborated, so some of the screenshots of the Choral platform that are reported may depict incomplete information or lack of results. However, this does not represent an issue, since the main aim of this thesis is to describe the challenges and solutions of a company preparing its first Sustainability Report according to the Corporate Sustainability Reporting Directive (CSRD) standards and it is not primarily focused on the results of the analysis, but on the process.

The Choral platform is structured in a fairly similar way to Climax.

As shown in *Figure 25*, a screenshot of the Home section for the Choral platform, the navigation menu is in the top left corner, indicated with the number 1. In the red rectangle indicated with the number 2, it's possible to see the advancement tracks of each legal entity; only 6 are shown in the screenshot, but as explained in *section 3.2*, the total number of entities required to answer the questions on the selected Material Themes are 22 (internal company data).

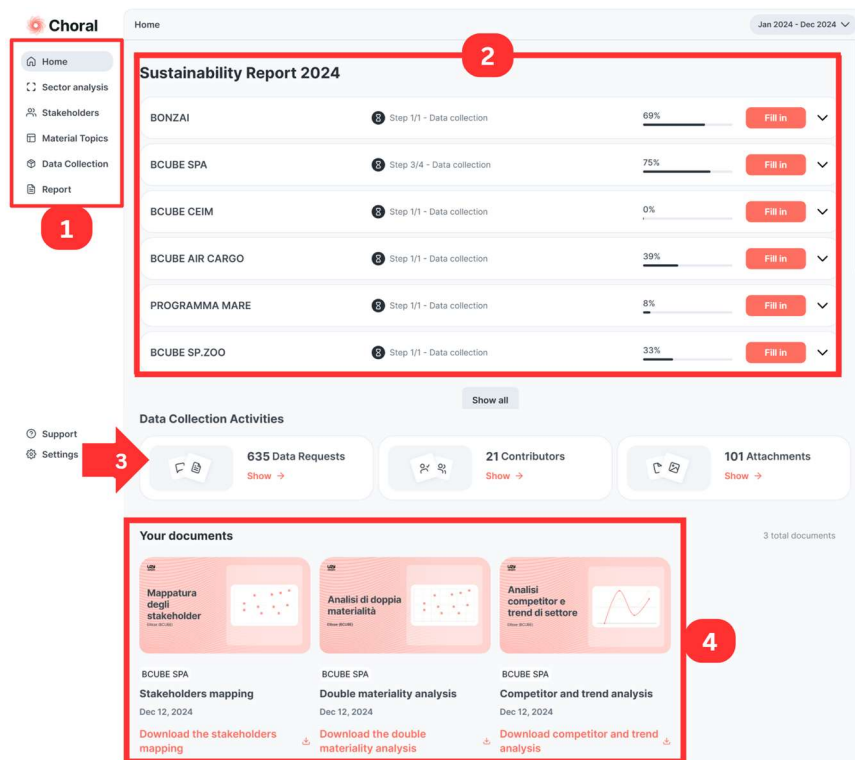


Figure 25 - Screenshot from the Home section of the Choral platform, for the data collection on the Material Themes selected (screenshotted on 4th June 2025). From Choral, an online platform owned by external consultant Up2You.

The high number of subcompanies included in the data collection, compared to the entities selected for Climax, reflects a deliberate decision made by the Sustainability Office in collaboration with external consultants. This approach was defined after discussions with representatives from each entity. The rationale behind this decision was to facilitate a more practical and accurate data collection process. Given the specificity of the information requested, it was agreed that each main entity would respond to questions concerning policies related to the Material Themes, policies that also apply to their subcompanies. Conversely, quantitative questions on these themes were answered individually by each company.

Here is the list of companies and respective subcompanies on Choral (internal company data):

- the main company BCUBE S.p.A (Italy), with BCUBE CEIM and PROGRAMMA MARE as subcompanies,
- the main company BONZAI, with BONZAI Services S.R.L. and B FASHION S.R.L. as subcompanies,
- the main company BCUBE AIR CARGO, with Malpensa Logistica Europa S.P.A, Fiumicino Logistica Europa S.R.L. and Venezia Logistica S.P.A as subcompanies,
- the main company BCUBE POLAND LOGISTICS as main company, with BCUBE SP.ZOO and BCUBE Poland Services SP.ZOO as subcompanies,
- the main company BCUBE LOGISTIC (Brazil),
- the main company BCUBE LOGISTIK GMBH (Germany), with BCUBE Wuppertal GMBH, BCUBE Hessen GMBH, Projektlogistik GMBH BCUBE Berlin, BCUBE Projektlogistik GMBH Ost, BCUBE Sachsen GMBH, BCUBE PCC Logistik GMBH and BCUBE Thüringen GMBH as subcompanies.

Going back to *Figure 25*, the red arrow with the number 3 indicates that the Head of Sustainability made 645 data requests through Choral to the 21 contributors, and that 101 documents were attached regarding policies related to the Material Themes selected in the Double Materiality Analysis. This part will be analyzed when talking about the Data Collection section of Choral.

The red rectangle in *Figure 25*, indicated with number 4, points out the documents redacted by the consultant Up2You for ELLISSE (BCUBE), that are, at the moment of the screenshot, the Stakeholders Mapping, the Double Materiality Analysis and the Competitor Trend Analysis. These 3 documents are reported again in their own Choral section, respectively in the Stakeholders section, the Material Topics section and the Sector Analysis section (see *Figure 24*, navigation menu indicated with the number 1) (internal company data).

The Stakeholders and Sector Analysis sections contain such documents, while the Material Topics one is noteworthy (*Figure 26*), since it lists the 10 Material Themes chosen for ELLISSE (BCUBE) (see *section 4.3*), categorized as Environmental, Social or Governance, indicating which of the legal entities they are referred to and what SDGs are connected to them (internal company data).

Material topics	Pillar	Subcompany	SDG
Responsible waste management and promotion of circular economy	Environmental	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	12, 13, 14, 15
Value chain sustainability	Economic	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	8, 9, 10, 11, 12, 13, 14, 15
Employees' wellbeing, health and safety	Social	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	3, 8, 10, 11, 12, 13, 14, 15
Employees' training and development	Social	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	4, 8, 10, 11, 12, 13, 14, 15
Diversity, equity and inclusion	Social	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	5, 8, 10, 11, 12, 13, 14, 15
Talent attraction and retention	Social	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	5, 8, 10, 11, 12, 13, 14, 15
Normative compliance	Economic	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	8, 9, 10, 11, 12, 13, 14, 15
Privacy management and data protection	Economic	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	8, 9, 10, 11, 12, 13, 14, 15
GHG emissions	Environmental	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	13, 14, 15
Anti-corruption	Economic	BONZAI, BCUBE SPA, BCUBE CEIM, BCUBE AIR CARGO, PROGRAMMA MARE, BC...	8, 9, 10, 11, 12, 13, 14, 15

Your documents 1 total documents

Figure 26 - Screenshot from the Material Topics section of the Choral platform (screenshotted on 4th June 2025). From Choral, an online platform owned by external consultant Up2You.

The last Choral section described, since the Report section was not available yet at the time this thesis was written and terminated, is the Data Collection section. The Data Collection section from Choral, in *Figure 27*, rectangle number 3, shows again that the Head of Sustainability made 645 data requests through Choral to the 21 contributors (internal company data).

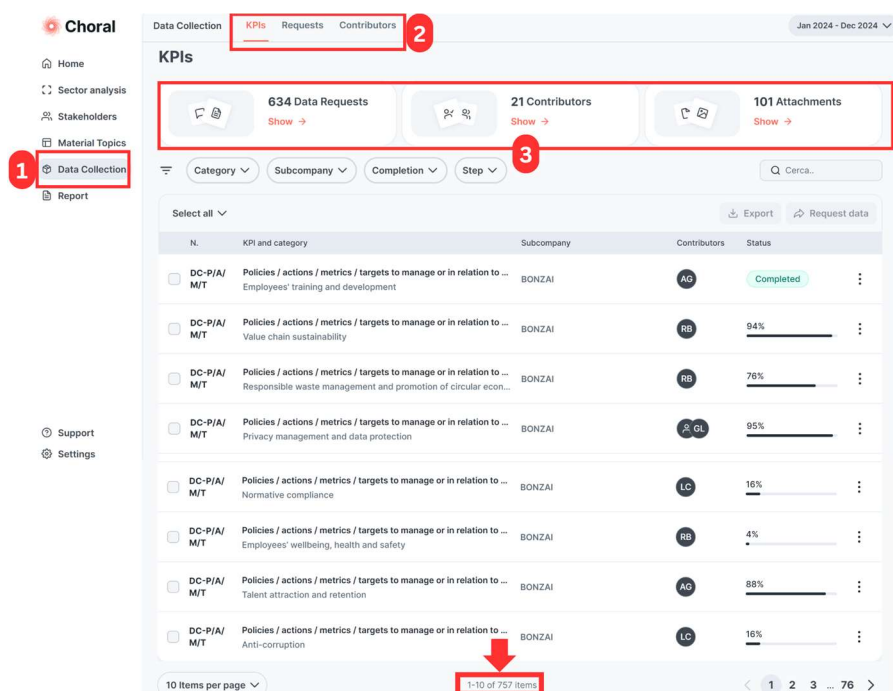


Figure 27 - Screenshot from the Material Topics section of the Choral platform (screenshoted on 5th June 2025). From Choral, an online platform owned by external consultant Up2You.

The contributors to the Choral data collection and the Material Themes they answered about are (internal company data):

- Head of Sustainability and Quality and Corporate Social Responsibility Coordinator for “GHG emission” and “Value chain sustainability”,
- Administration representatives for “Anti-corruption”, “Normative compliance” and “Privacy management and data protection”,
- HR representatives for “Diversity, equity and inclusion”, “Employees’ training and development”, “Talent attraction and retention” and “Privacy management and data protection”,
- EHS representatives for “Employees’ wellbeing, health and safety” and “Responsible waste management and promotion of circular economy”,
- Purchasing representatives for “Value chain sustainability”,
- Legal representatives for “Privacy management and data protection”,
- IT representatives for “Privacy management and data protection”,
- Security and Quality representatives for “GHG emission”.

In *Figure 27*, the red rectangle with the number 2 shows that the screenshot is from the KPIs subsection that lists questions about the Material Themes, divided by companies, for a total of 757 items, as the red arrow at the bottom indicates. For every KPI on the list, it is depicted the KPI name and category, the subcompany to which it is referred, the contributor who received it and the status of the KPI requested (i.e. a percentage if ongoing, “completed” if 100%).

The Request subsection reports the same list as the KPIs subsection, minus the KPI completed by the Sustainability Office, and the Contributors subsection will not be displayed as a screenshot for privacy

reasons, being a list of the 21 contributors' names and emails, but their role and the information requested to them have already been analyzed (internal company data).

Most of the representatives were contacted by the Head of Sustainability through Choral and were able to compile the questions related to their field on the platform. Clarification and support were given to the representatives that contacted the Head of Sustainability through phone calls or online meetings. Note that some representatives are the same for multiple entities and some entities only have one person responsible for all these aspects due to their small dimension (internal company data). The author contributed to the data collection process by systematically monitoring the information received and identifying any missing data from the various representatives of the legal entities involved.

At the delayed deadline for the Sustainability Report data collection, the Head of Sustainability had received satisfactory feedback from every legal entity, with the exception of CEIM and PROGRAMMA MARE, two small entities under BCUBE (Italy) who could not give any feedback this year on the specific quantitative questions about the Material Themes, however they are included in the main company's policies. Moreover, BCUBE Germany provided satisfactory answers regarding company policies, but the quantitative questions related to the Material Themes were answered collectively under BCUBE LOGISTIK GMBH. The individual sections for each subsidiary were not completed, except for BCUBE Wuppertal GMBH, as doing so would have resulted in missing the submission deadline (internal company data).

Such information is schematized in *Figure 28*.

Although some data was missing, the integrity and usefulness of the data collection were not compromised. The most critical and representative information was successfully gathered, allowing the process to remain meaningful and informative. Given the complexity of the data collection process, spanning multiple legal entities and requiring input on diverse sustainability indicators, it is understandable that some entities faced challenges in providing complete data for this first year.

In hindsight, it would have been beneficial to emphasize more strongly to those involved that their role was essential to the success of the Sustainability Report, and that the data requested were inherently difficult to obtain. This awareness could have fostered greater engagement and preparation among the participants. However, the primary objective of carrying this project one year ahead of the compulsory compliance, was to identify potential gaps, challenges and weak points in the data collection. As such, this preliminary exercise serves as a way to understand where the difficulties lay, in order to build a more robust and complete reporting system in the future (internal company data).

LEGAL ENTITY	MAIN COMPANY POLICIES		QUANTITATIVE DATA COLLECTION	
	REQUIRED	STATUS	REQUIRED	STATUS
BCUBE S.p.A (Italy)	YES	COLLECTED	YES	COLLECTED
BCUBE CEIM	NO	-	YES	MISSING
PROGRAMMA MARE	NO	-	YES	MISSING
BONZAI	YES	COLLECTED	YES	COLLECTED
BONZAI Services S.R.L.	NO	-	YES	COLLECTED
B FASHION S.R.L.	NO	-	YES	COLLECTED
BCUBE AIR CARGO	YES	COLLECTED	YES	COLLECTED
Malpensa Logistica Europa S.p.A	NO	-	YES	COLLECTED
Fiumicino Logistica Europa S.R.L.	NO	-	YES	COLLECTED
Venezia Logistica S.p.A	NO	-	YES	COLLECTED
BCUBE LOGISTIC (Brazil)	YES	COLLECTED	YES	COLLECTED
BCUBE LOGISTIK GMBH (Germany)	YES	COLLECTED	YES	COLLECTED
BCUBE Wuppertal GMBH	NO	-	YES	COLLECTED
BCUBE Hessen GMBH	NO	-	YES	AGGREGATED in main company
Projektlogistik GMBH BCUBE Berlin	NO	-	YES	AGGREGATED in main company
BCUBE Projektlogistik GMBH Ost	NO	-	YES	AGGREGATED in main company
BCUBE Sachsen GMBH	NO	-	YES	AGGREGATED in main company
BCUBE PCC Logistik GMBH	NO	-	YES	AGGREGATED in main company
BCUBE Thüringen GMBH	NO	-	YES	AGGREGATED in main company
BCUBE POLAND LOGISTICS	YES	COLLECTED	YES	COLLECTED
BCUBE SP.ZOO	NO	-	YES	COLLECTED
BCUBE Poland Services SP.ZOO	NO	-	YES	COLLECTED

Figure 28 - Results of company policies collection and quantitative data collection on the Material Themes for the Sustainability Report, on Choral. Author's own elaboration from internal company data.

6. Conclusion

This thesis began by examining the legislative context of Sustainability Reporting within the European Union and analyzing relevant academic literature and institutional guidelines to support the preparation of a company's first Sustainability Report under the Corporate Sustainability Reporting Directive (CSRD). However, the application of CSRD principles is still a complicated and unexplored field: the literature on how companies are handling the initial phases of CSRD implementation, including the difficulties they encounter and the tactics they use to comply with the new standards, is currently lacking due to how recent the Directive is.

To explore such gap, the research focused on a case study of the Italian logistics company ELLISSE (BCUBE), which voluntarily launched its first Sustainability Reporting project for the year 2024, one year in advance of the legal obligation, with the support of the external consultancy of Up2You. This proactive approach aimed to identify potential challenges in data collection and internal engagement, in order to develop a stronger and more structured reporting process in the years to come.

Through the immersive role of Corporate Social Responsibility Intern within the Sustainability Office of ELLISSE (BCUBE), the author actively monitored the development of the sustainability report, identifying bottlenecks, supporting the collection and validation of data, and collaborating in stakeholder engagement activities. All the contributions were aligned with the central research question of this thesis: *“What challenges does a company face when preparing its first Sustainability Report under the CSRD framework, and what solutions can be implemented to address them?”*.

During the initial Workshop, the author participated alongside the Head of Sustainability and Quality and the Corporate Social Responsibility Coordinator, gaining a comprehensive understanding of the company's structure and operations.

The author was also directly responsible for submitting the Materiality Survey, designed to assess the significance of ELLISSE (BCUBE)'s impact on the environment, people, and the economy, to all white-collar employees and warehouse site managers across all company sites, as defined by the Sustainability Office in coordination with consultant Up2You.

The author also supported the completion of the Risk Map, assisting a selected group of evaluators in assessing the company's risks and opportunities. Simultaneously, the author collaborated with the Sustainability Office to compile a comprehensive list of EHS, Sales, Purchasing, and Administration representatives for each of ELLISSE (BCUBE)'s legal entities. These representatives were then sent qualitative questions related to Scope 3 emissions, by the Corporate Social Responsibility Coordinator assisted by the author.

Following the platform's setup, quantitative Scope 1, 2, and 3 data were entered into the Climax platform by the Corporate Social Responsibility Coordinator in cooperation with the designated representatives from each function. Meanwhile, the Head of Sustainability and Quality contributed to the gathering of ESG-related data and policies connected to the Material Themes identified during the Double Materiality Analysis.

Throughout this phase, the author played a key role in monitoring the data collection process, tracking responses from various representatives, identifying missing inputs, and assisting the work of the Sustainability Office, learning how to handle complex data collection from the experience of ELLISSE (BCUBE)'s colleagues.

Lastly, the author attended regular meetings, contributing to discussions, reporting progress, and highlighting issues encountered during each phase, during weekly internal review sessions with ELLISSE (BCUBE) staff. These insights were used to support continuous improvement and retrospective analysis, stressing the challenges of the project and looking for solutions to overcome them.

The project, in fact, revealed several key lessons.

Through retrospective meetings, it became clear that dividing the initial Workshop into two distinct sessions, one dedicated to Carbon Footprint Analysis and the other to the Sustainability Report, could have clarified the scope and timeline of each process to the participants. Furthermore, it would have been beneficial to clearly and priorly communicate with the stakeholders that two separate data collection exercises would have followed: one for Scope 1, 2, and 3 emissions and one for the Sustainability Report. This clarity would have allowed managers to better inform and prepare the relevant employees, ultimately facilitating the data gathering process and avoiding the need for additional clarification during the process (internal company data).

The Materiality Survey, a central component of the reporting process, was internally focused during this first year, as a deliberate choice by the Sustainability Office to simplify the implementation. The results highlighted a relatively low participation rate from shareholders, when a higher percentage of answers from them could make a significant difference in future analysis. This approach served its purpose, but future iterations of the survey could benefit from broader stakeholder involvement. Additionally, language barriers posed unforeseen challenges: the survey was available in both English and Italian, but translations into German and Polish were later deemed necessary to enhance comprehension among international subsidiaries. The survey, initially planned to conclude in November, was extended into December. This was due to its dual function as both a data collection tool and a means of introducing the project and the Sustainability Office to all the legal entities under ELLISSE (BCUBE), since it was the first project involving the whole group (internal company data).

From a procedural standpoint, one significant challenge was the complexity of data collection across a multinational structure. Getting in touch with representatives of each entity, communicating the needed information and then collecting it took longer than planned.

Some data were missing, such as quantitative inputs from BCUBE Italy (PROGRAMMA MARE), data on the Material Themes from BCUBE Italy (PROGRAMMA MARE and CEIM) and some information from BCUBE Germany was incomplete due to internal issues. However, the project succeeded in capturing the most significant and representative information required.

Given the inherent difficulty and novelty of the task, such gaps were to be expected. It became evident that better preparation and clearer communication about the importance and complexity of the data would have enhanced participation and accuracy. However, the early implementation of this project fulfilled its primary purpose: identifying pain points, fostering internal awareness, and laying the foundation for more efficient and complete reporting in the future, by identifying representatives that take longer or have issues in providing data, in order to assist them from the start (internal company data).

Looking ahead, this first experience has already contributed to spread awareness on sustainability within the company. Many participants acknowledged the challenges faced during the data collection phase and expressed a clear intention to be better organized in the future. In response to the gaps identified, the Sustainability Office initiated ESG training for both white and blue-collar workers, beginning in March 2025. These efforts aim to raise awareness about sustainability issues and prepare the organization for future reporting cycles (internal company data).

As a future development, this initial report can serve as a valuable learning tool. The insights gained may be used to design a more efficient data governance model, improve stakeholder engagement strategies, and implement systems that support timely, accurate, and transparent sustainability reporting, aligned not only with CSRD requirements but also with the company's long-term commitment to responsible business practices (internal company data).

In conclusion, this thesis contributes to addressing the current gap in the literature by examining the challenges encountered by ELLISSE (BCUBE) during its first Sustainability Reporting project under

the CSRD framework, along with the solutions adopted to manage them, listed and schematized in Table 5, with the aim of offering practical insights for other companies embarking on similar journeys.

Table 5 – Challenges faced by ELLISSE (BCUBE) while preparing its first Sustainability Report under the CSRD framework, solutions and future recommendations. Author's own elaboration of internal company data.

PHASE	CHALLENGE	DESCRIPTION/ IMPACT	SOLUTION/ RESPONSE	FUTURE RECOMMENDATIONS
WORKSHOP PLANNING	Initial ambiguity regarding the parallel nature of the two project streams	Participants confused Carbon Footprint project and Sustainability Report project	Additional clarifications needed	Divide Workshop into two sessions to clarify separate data collections and timelines
STAKEHOLDER COMMUNICATION	Limited initial awareness among employees about the specific data requirements	Managers faced challenges in cascading clear instructions to employees due to initial ambiguity	Additional clarifications needed that made the process longer	Communicate early that two distinct data sets will be collected post-Workshop
MATERIALITY SURVEY	Internally focused + low shareholder participation	Limits representativeness of impacts and priorities	Deliberate choice for the first year of voluntary reporting	Extend to external stakeholders in future years
SURVEY LANGUAGE ACCESSIBILITY	Language barriers for non-Italian/English speakers	Reduced clarity and engagement in Germany and Poland	Translations done late in process	Provide all language versions from the start (EN, IT, DE, PL)
SURVEY TIMING	Delay in survey closure	Extended by 1 month, data collection delayed	More time allocated	Allocate more time and separate survey from project intro phase
DATA COLLECTION COMPLEXITY	Multi-entity structure led to longer processes	Contacting representatives and gaining info took longer than planned	More time allocated	Identify representatives that take longer or have issues in providing data and assist them
MISSING DATA	Incomplete info from a few entities	Scope 1,2,3 and Quantitative Material Theme data missing	Partial coverage in Sustainability Report	Emphasize importance of each representative's role through training and communication
STAKEHOLDER PREPAREDNESS	Partial familiarity with the multifaceted nature of sustainability topics	Challenges faced by representatives in aligning with reporting expectations, given the novelty of the process	Many learned through the process	Initiate ESG training to improve future data quality
FIRST YEAR COMPLEXITY	High workload and ambiguity	First-time process led to slower execution	Still captured most significant data	Use this cycle as a learning tool for process refinement

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