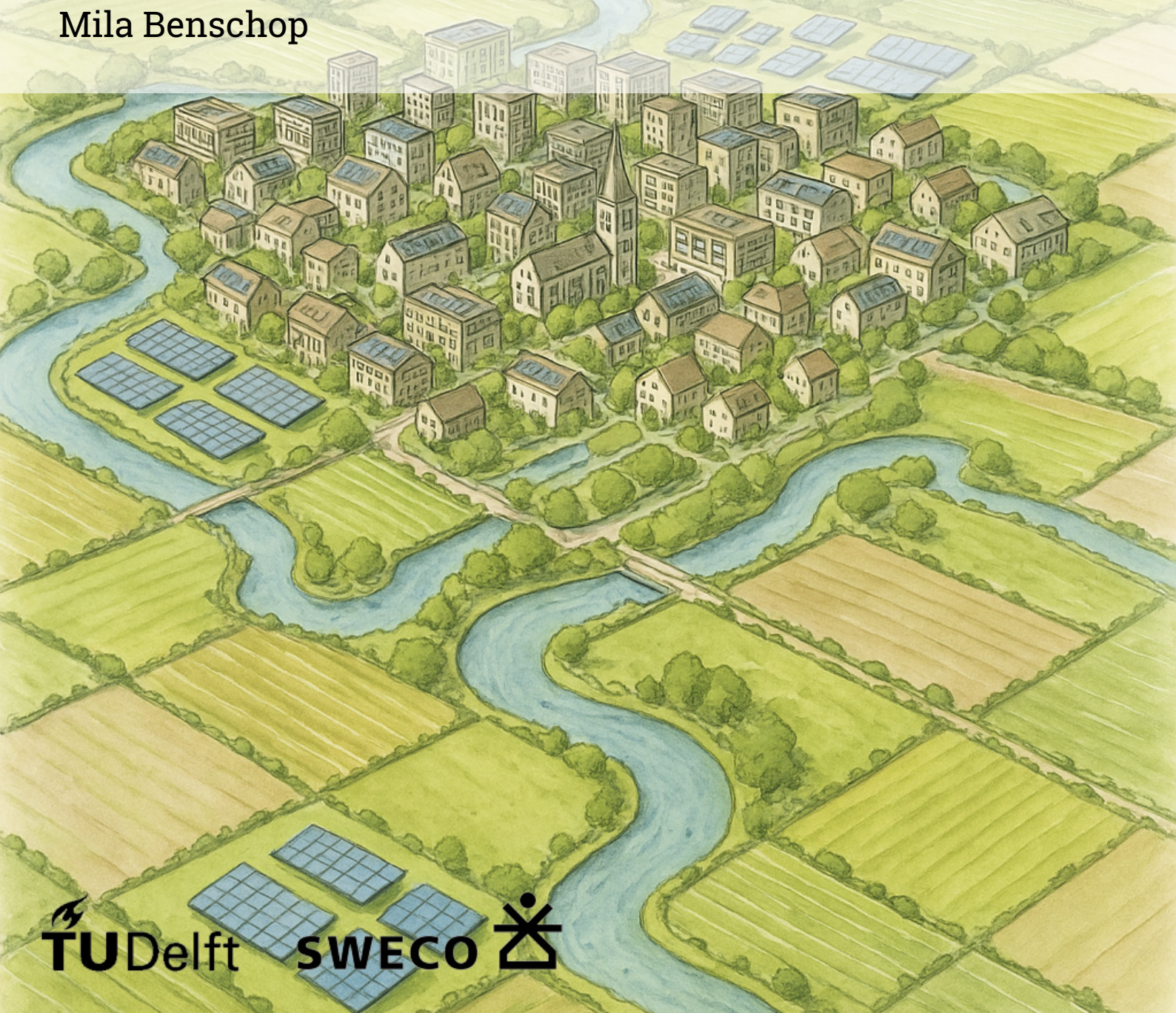
Improving sustainability in property asset management companies

Exploring the role of the Corporate Sustainability Reporting Directive (CSRD)

Master Thesis

Mila Benschop



TU Delft SWECO

Improving sustainability in property asset management companies

Exploring the role of the Corporate Sustainability Reporting Directive (CSRD)

by

Mila Benschop

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Preface

This thesis marks the conclusion of my Master's in Construction Management & Engineering at the Delft University of Technology, and with it, the final step in a rich academic journey. Over the past years, I have developed a strong interest in the intersection between sustainability, governance, and strategic decision-making; an interest that came to life in this research on improving sustainability in the property asset management sector.

During my Bachelor's in Systems Engineering, Policy Analysis and Management and later in the Master's program in Construction Management & Engineering, I developed a strong interest in the way organisations deal with complex challenges related to sustainability and policy. This thesis gave me the opportunity to explore those interests further by focusing on how property asset management companies aim to implement sustainability in practice. The Corporate Sustainability Reporting Directive (CSRD), although primarily a reporting requirement, raised the question for me whether such a framework could also help organisations take more concrete steps in embedding sustainability into their operations; particularly in a sector like real estate, where environmental performance is both important and multifaceted.

This research would not have been possible without the guidance and encouragement of many people. I would like to sincerely thank all my supervisors at both TU Delft and Sweco for their invaluable support and insights throughout this process. Erik-Jan, thank you for our many insightful discussions and your critical perspective throughout the process. These conversations helped me to clarify my research focus and approach the topic from new angles. Marlon, your legal expertise and clear explanations of the regulatory context were very helpful in connecting my research to broader policy developments. I also appreciated your enthusiasm and engagement, which made the progress meetings both productive and enjoyable. Johan, I appreciated your constructive feedback and pragmatic approach, which helped to keep the research both grounded and relevant. A special thanks goes to my company supervisor, Nasja, for providing me with the opportunity to conduct this research within Sweco. Your insights and encouragement helped bridge theory and practice, and I greatly appreciated the trust you placed in me to independently explore this topic. Finally, a warm thanks to all colleagues in the 'Duurzame Gebouwen' team. It was a pleasure to work with you, and your support and interest in my research made this a very positive experience. I would also like to thank all my interview participants; your openness, enthusiasm, and perspectives were key to shaping the empirical findings of this study.

Lastly, I am incredibly grateful to my family, friends, and boyfriend for their patience, encouragement, and genuine interest in this thesis. Your support helped me stay motivated, especially during the more demanding phases of this project.

I hope this thesis offers not only insights into the role of the CSRD, but also inspiration for those working in real estate and beyond to embed sustainability into the heart of their operations and strategy. May it contribute, in some small way, to a more sustainable and responsible built environment. I wish the reader an enjoyable and reflective read; one that not only informs, but perhaps also inspires.

Mila Benschop
Delft, July 2025

Executive summary

As global warming, rising sea levels, and rapid population growth accelerate, the built environment is under increasing pressure to adapt and reduce its impact (Tebaldi et al., 2021)(Gu, Andreev, & Dupre, 2021)(UNEP, 2024). Research of Anderson, Wulfhorst, and Lang (2015) showed that the built environment contributes to approximately 55% of global greenhouse gas emissions. Moreover, Warren Myers (2012) argues that improving sustainability in commercial real estate is crucial to lowering the environmental impact of the built environment. By managing and optimising building portfolios on behalf of (institutional) investors, property asset management companies are well positioned to advance sustainability in the real estate sector (Ross, 2024)(Nyoni, Piller, & Vigren, 2023). According to Piller and Nyoni (2022), property asset managers are an integral part of commercial real estate and are frequently at the forefront of addressing sustainability in the built environment. They ensure that their properties generate stable returns, are managed sustainably, and are strategically developed to maximise long-term value (Scarrett, 2010). Since these companies own their properties, they have the ability to directly integrate sustainability measures into their building portfolios, helping to make them “Paris-proof” (Geertens, 2024). Despite a growing interest in sustainability, many property asset management companies face a persistent challenge: the difficulty of translating strategic sustainability visions into operational practices (Falkenbach, Lindholm, & Schleich, 2010). Various tools and frameworks – such as ESG benchmarks, green building certifications, and internal sustainability performance indicators – have emerged over the years to support the implementation of sustainability in the real estate sector (Rogmans & Ghunaim, 2016). However, the variety and inconsistency of these instruments create confusion and limit comparability across building portfolios. To increase this comparability and to accelerate the global sustainability transition, the European Commission introduced the Corporate Sustainability Reporting Directive (CSRD) in January 2023. This directive requires companies to disclose standardised information on their environmental, social, and governance (ESG) impacts (European Commission, n.d.-a). Since the CSRD was introduced as an instrument to support the climate objectives of the European Green Deal, it raised the question of whether this directive could play a role in improving and implementing sustainability within the operational practices of property asset management companies.

This thesis therefore explores how sustainability can be effectively improved within Dutch property asset management companies, and investigates which role the CSRD can play in this process. To guide this exploration, the following main research question will be addressed in this thesis:

MRQ: “How can property asset management companies improve and implement sustainability within their operations, and what role does the CSRD play in this process?”

To answer the main research question, this study applied a qualitative methodology structured across three interrelated phases. The first phase involved a comprehensive review of academic literature and regulatory documents to establish a conceptual and legal foundation. The literature review explored key themes such as the definition of sustainability, its implementation in the real estate sector, and the differences between the strategic, tactical, and operational level. Additionally, it examined the motivations, barriers, and strategies related to sustainability implementation in general. Simultaneously, a legal-document analysis of the Corporate Sustainability Reporting Directive (CSRD) and the accompanying European Sustainability Reporting Standards (ESRS) was conducted to assess their objectives, scope, structure, and specific requirements. The second phase focused on empirical data collection through 13 in-depth semi-structured interviews with two distinct groups: ESG managers from Dutch property asset management companies and independent CSRD experts. The interviews were thematically coded and analysed using software from Atlas.ti, allowing for a detailed exploration of the motivations, barriers, and strategies that shape sustainability implementation in practice. In the third and final phase, the findings from the literature, document review, and empirical research were combined into a practical implementation flowchart. This flowchart visualises the pathway from an emerging

sustainability ambition to an embedded sustainability approach and offers a structured tool for property asset management companies to translate strategy into action.

The interviews with Dutch property asset management companies revealed several valuable insights. First, it became clear that five key themes emerged as primary motivations for engaging with sustainability: financial incentives, social and moral considerations, stakeholder pressure, risk management, and regulatory compliance. Among these, financial and moral-based motivations were cited most frequently, suggesting that both play a central role in driving sustainability efforts. However, the analysis also indicated that financial stability is often seen as a necessary condition before taking meaningful sustainability action. This suggests that while companies may be morally committed to sustainability, financial considerations still take precedence in decision-making. Additionally, the empirical research identified a range of barriers across the same themes, with the majority falling under the financial and social and moral-based categories. The most frequently mentioned barrier was the lack of clear sustainability performance indicators; an externally driven challenge that not only limits the ability to measure progress and communicate value, but also complicates decision-making around which sustainability initiatives to prioritise and implement. The second most cited barrier, balancing sustainability with profitability, reflects a deeply rooted financial logic, further reinforcing the dominance of financial considerations in organisational decision-making. Subsequently, the strategies were identified and aligned with the barriers they directly or indirectly mitigate. This led to the identification of the ten most effective strategies, which were later used in the flowchart development. Lastly, the perceptions regarding the CSRD were gathered. This revealed that many respondents expressed concern that the CSRD would become a box-ticking exercise, fulfilling disclosure requirements without actually embedding sustainability within their properties. To close this gap, several CSRD-experts suggested ways to improve the directive's implementation. These included calls for more practical support tools, the inclusion of performance requirements, and a more active role of national governments in facilitating implementation. Experts also emphasised the need for clearer language, better alignment with sector-specific realities, and the introduction of a limited set of EU-wide priority themes to reduce reporting complexity. Despite the significant criticism, many respondents noted that the CSRD could serve as an incentive for companies to start engaging more seriously with sustainability.

To effectively answer the main research question, these empirical findings need to be translated into a flowchart that offers a concrete, step-by-step guide to improve sustainability within the operations of property asset management companies. The flowchart begins with an emerging sustainability ambition, which may arise in response to internal values, external pressure from stakeholders, evolving regulations, or broader societal expectations. It marks the moment when sustainability becomes a topic that is starting to matter, but still needs structure, direction, and action. This ambition creates the need to structure sustainability efforts within the organisation effectively. The first step is therefore to establish a dedicated team responsible for sustainability, which can act as a central point for sustainability expertise within the organisation. Next, companies are encouraged to assess their current sustainability performance to understand their baseline. Based on this assessment, securing management commitment becomes essential, as leadership support is critical for allocating sufficient budget and personnel, embedding sustainability into strategic decision-making, and motivating employees to prioritise sustainability in their daily work. Only after these foundations are in place does the flowchart move to the development of a sustainability vision or goal. A shared sustainability vision or goal provides strategic direction, helps align efforts, and sets a long-term ambition that goes beyond individual projects or departments. It also lays the groundwork for more concrete steps and initiatives further down the line. After the initial vision is formulated, it must also be discussed, communicated, and validated internally. Once validated, the vision can be integrated into the company's core business strategy, ensuring that sustainability becomes an embedded consideration in both daily operations and long-term planning. From there, the flowchart helps companies translate vision into action. The starting point here is the development of clear Key Performance Indicators (KPIs), which translate high-level goals into measurable outcomes. To enable broad organisational engagement, training and awareness-raising activities are essential. Organising events and offering targeted training helps to increase general awareness, bridge internal knowledge gaps, and enhance commitment across departments. Once internal commitment is strengthened, a dedicated implementation program can be launched. This step in the flowchart marks the shift from setting strategic goals to actually putting them into practice through a structured

implementation plan. To support this, companies are encouraged to adopt an existing performance or impact system that consistently evaluates and categorises sustainability actions based on their environmental performance and alignment with defined standards. At this stage, companies should identify specific actions that support their sustainability objectives. Once a clear plan is established, the company can move on to implementation; putting ideas into practice and turning goals into concrete actions. To support continuous improvement, the flowchart builds in regular monitoring and evaluation. By assessing whether the KPIs and performance systems are 'on the right track', organisations can identify early signs of success or deviation. Lastly, organisations are encouraged to build a culture that values and promotes sustainability in everyday work. The flowchart ends with an embedded sustainability approach. The flowchart has been visualised in Figure 1.

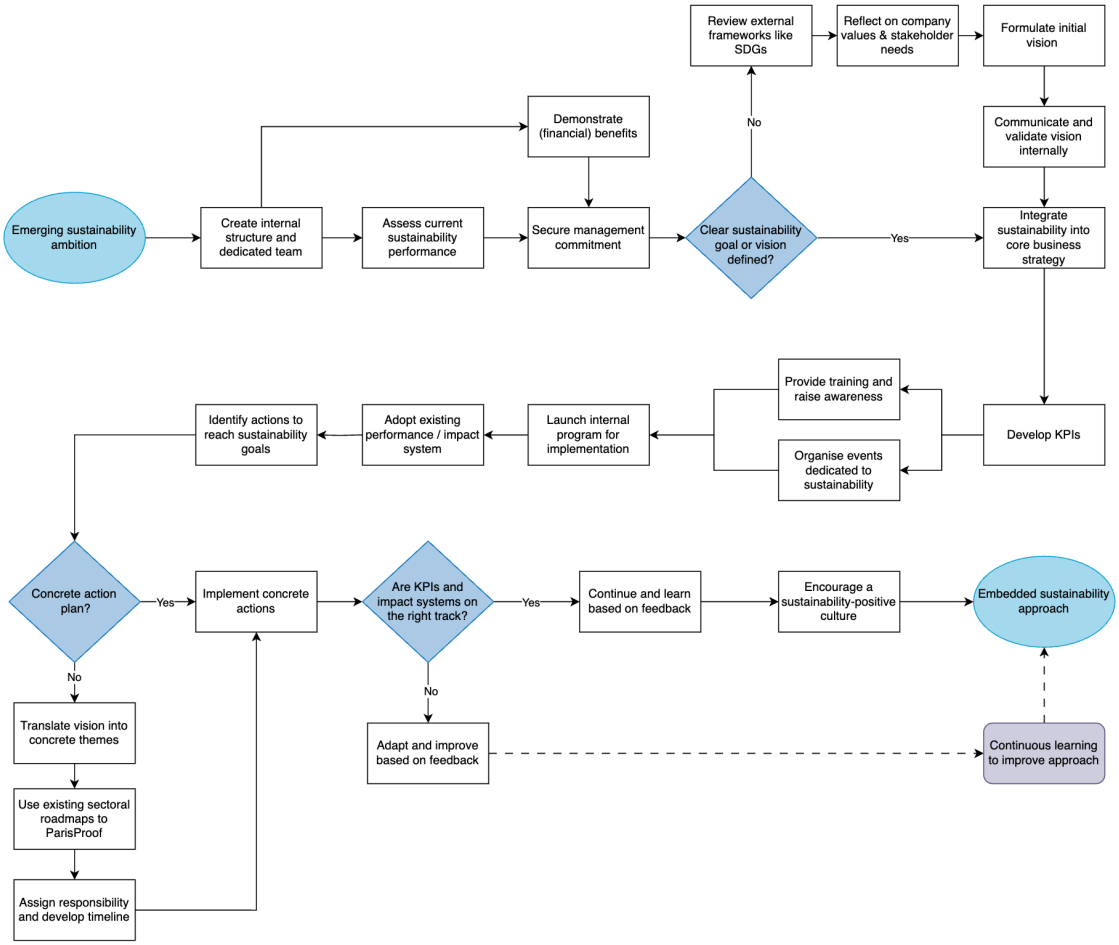

Figure 1: Flowchart to improve sustainability in property asset management companies (made by author)

In essence, this flowchart answers the main research question and is therefore recommended as a practical guide for property asset management companies striving to translate their sustainability ambitions into operational practices. Moreover, the study found that the CSRD lacks the internal guidance necessary to drive organisational change. While it may serve as an initial incentive, its main function should remain reporting. Additional elements should be left to the discretion of member states, allowing them to tailor implementation and support to their national context. The literature showed that to date limited focus has been given to the practical implementation of sustainability, particularly the concrete steps required to translate sustainability strategies into actionable measures (Engert & Baumgartner, 2016). Furthermore, due to the absence of structured frameworks for implementing sustainability, objectives often remain at the strategic level, leaving uncertainty about the steps required for operational execution (Epstein & Buhovac, 2014)(Wijethilake, 2017). Therefore, the flowchart in this study has been developed to both address the practical challenges faced by property asset management companies and to contribute to filling the theoretical gaps identified in the literature.

Contents

List of Figures

List of Tables

1 Introduction

Adapting the future environment under the influence of climate change is one of the greatest ecological and societal challenges of our time (Dietz, Shwom, & Whitley, 2020). As global warming, rising sea levels, and rapid population growth accelerate, the built environment is under increasing pressure to adapt and reduce its impact (Tebaldi et al., 2021)(Gu et al., 2021)(UNEP, 2024). Research of Anderson et al. (2015) showed that the built environment contributes to approximately 55% of global greenhouse gas emissions. Moreover, Warren Myers (2012) argues that improving sustainability in commercial real estate is crucial to lowering the environmental impact of the built environment. Therefore, the way the built environment is managed and developed has an urgent and crucial role in shaping the global response to climate change.

This urgency is also recognised by companies in the real estate sector itself, where sustainability is becoming an increasingly important consideration in both strategy and operations. In recent years, the real estate market has seen the introduction of various initiatives aimed at implementing sustainability, such as green building principles and energy-saving measures. At the same time, there has been a growing demand for practical tools to assess and compare the sustainability performance of buildings. As a result, the real estate sector has increasingly adopted building rating systems to demonstrate the sustainability performance of their properties. (Falkenbach et al., 2010). However, this growing focus on sustainability is not driven by a single motivation; companies adopt sustainability measures for a variety of reasons, which can differ significantly from one organisation to another.

For real estate companies, one major driver is competitive advantage, as sustainability certifications and initiatives are increasingly seen as ways to differentiate themselves in the market (Falkenbach et al., 2010). Closely related is the goal of value creation, as many institutional investors believe sustainability can lead to enhanced operational efficiency and higher rental or resale value (Christensen, Robinson, & Simons, 2022). In addition, regulatory compliance plays a role, as tightening environmental regulations and building standards push firms toward more sustainable practices (Falkenbach et al., 2010). Moreover, stakeholder pressure and concerns about future risks have emerged as important motivations for adopting sustainable measures (Simões-Coelho & Figueira, 2021)(Epstein & Buhovac, 2014). While it thus seems that economic reasoning often dominates, some companies are also motivated by ethical considerations, seeing sustainability as a moral obligation of their public image (Falkenbach et al., 2010). Regardless of the specific intrinsic motivations, the trend suggests a growing commitment within the real estate sector to embed sustainability across all levels of their activities.

By managing and optimising building portfolios on behalf of (institutional) investors, property asset management companies are well positioned to advance sustainability in the real estate sector (Ross, 2024)(Nyoni et al., 2023). According to Piller and Nyoni (2022), property asset managers are an integral part of commercial real estate and are frequently at the forefront of addressing sustainability in the built environment. They ensure that their properties generate stable returns, are managed sustainably, and are strategically developed to maximise long-term value (Scarrett, 2010). Since these companies own their properties, they have the ability to directly integrate sustainability measures into their building portfolios, helping to make them “Paris-proof” (Geertens, 2024). Yet, these companies still face challenges in translating their strategic sustainability ambitions into operational practices on the portfolio

level (Falkenbach et al., 2010). This leaves them confronted with the fundamental question: how to integrate sustainability at the operational level?

This growing emphasis on sustainability is not only driven by market actors but is also reflected in policy developments at the European and global level. To accelerate the global sustainability transition, the European Union launched the European Green Deal in 2019, outlining its ambitions to become the first climate-neutral continent by 2050 (Council of the European Union, 2024). As part of this broader strategy, the Corporate Sustainability Reporting Directive (CSRD) was introduced to improve transparency and accountability in corporate sustainability performance (Directive (EU) 2022/2464). The CSRD initially came into force on 5 January 2023 and requires companies to disclose standardised information on their environmental, social, and governance (ESG) impacts (European Commission, n.d.-a). While initial estimates suggested that around 5,000 Dutch companies would fall under the CSRD's scope (SER, n.d.), recent Omnibus proposals by the European Commission may significantly reduce its reach – potentially excluding up to 80% of previously covered companies (European Commission, 2025). If these proposals were to be accepted, most Dutch property asset management companies would be excluded from the CSRD's scope. Nonetheless, these changes are expected to have only a limited impact on companies' ongoing sustainability efforts, as the need to implement and demonstrate sustainability remains relevant due to broader voluntary and strategic drivers. Moreover, the CSRD may offer companies a strategic opportunity to position themselves as responsible and forward-looking industry leaders, regardless of whether compliance is mandatory (de Waal, 2025).

The CSRD may serve as a useful guideline for property asset management companies in addressing the question of how to integrate sustainability into their operations, by offering clear tools to support this process. Thus, while the CSRD may no longer be as prescriptive in the future, it might still serve as a guiding framework for sustainability implementation and offer opportunities to enhance transparency and strategic positioning. Therefore, this thesis explores how property asset management companies can improve sustainability in their operations, and what role the CSRD plays in this process.

1.1. Problem analysis

Property asset management companies play a crucial role in the transition toward a more sustainable built environment. As key actors responsible for the long-term performance, development, and management of commercial real estate, they are in a position to shape how sustainability is embedded in building portfolios (Piller & Nyoni, 2022)(Nyoni et al., 2023). Property asset managers carry the responsibility of not only formulating sustainability strategies but also ensuring these are effectively translated into practice (Engert & Baumgartner, 2016). In recent years, many of these companies have expressed increasing ambition to contribute to climate goals and broader ESG objectives (SPRYG, 2025). Yet, despite these ambitions, a fundamental challenge persists: how to implement sustainability into their operations?

This implementation gap is widely acknowledged in academic literature. Falkenbach et al. (2010) observe that while sustainability has become an important consideration for real estate investors, actual implementation in practice remains limited due to organisational complexity, lack of standardised tools, and misalignment between strategic goals and operational practice. Similarly, Nyoni et al. (2023) note that property asset managers often face a gap between long-term sustainability visions and daily practice, caused by limited internal capacity and unclear implementation pathways. Additionally, this study confirms that although asset managers increasingly perceive sustainability as important, implementation efforts differ across companies and portfolios. Currently, most efforts still focus on measures that bring financial benefits (e.g. energy efficiency), while broader sustainability themes receive less attention. (Nyoni et al., 2023). Moreover, Christensen et al. (2022) point out that although many institutional real estate investors have sustainability ambitions, they are often difficult to put into practice due to competing priorities, internal fragmentation, and risk aversion. These findings are echoed by Sayce, Sundberg, and Clements (2010), who argue that the sector has been slow in integrating sustainability into its valuation and decision-making processes, partly because of complexity and the absence of coherent frameworks. These issues collectively contribute to a growing gap between strategy and practice: sustainability is often present at the strategic level but absent in operational actions.

The drivers of sustainability implementation in property asset management companies are often shaped by a combination of external pressures and internal motivations (Falkenbach et al., 2010). While companies frequently highlight a broad commitment to ESG values, in practice, it seems that economic motives dominate sustainability decision-making (Nyoni et al., 2023). Similarly, Falkenbach et al. (2010) argue that sustainability initiatives in real estate are often pursued to enhance competitiveness, improve asset value, or meet investor expectations, rather than being part of a broader commitment to sustainability. The focus on cost-benefits thinking limits sustainability implementation to actions that can be justified financially, making it difficult to consider other sustainability measures. As a result, sustainability efforts often remain selective, short-term, and fragmented, rather than supporting a more fundamental transition in how real estate is managed. (Sourani & Sohail, 2011).

Various tools and frameworks – such as ESG benchmarks, green building certifications, and internal sustainability performance indicators – have emerged over the years to support the implementation of sustainability in the real estate sector (Rogmans & Ghunaim, 2016). However, the variety and inconsistency of these instruments create confusion and limit comparability across building portfolios. This fragmented landscape makes it difficult to ensure transparency and creates challenges for applying a consistent approach to sustainability implementation and reporting. Therefore, the recently introduced Corporate Sustainability Reporting Directive may offer a more structured approach that could serve as a useful guideline for property asset management companies to improve and implement sustainability across their operations. However, to determine this, it is needed to better understand how sustainability can be effectively implemented within the operational practices of property asset management. This includes insights into the motivations that drive sustainability efforts, the barriers that hinder their translation into practices, and the strategies companies use to overcome these challenges. It also requires understanding which tools of the CSRD may support these efforts and align with the practical needs of property asset management companies. This knowledge is critical not only for improving performance at the property asset management company level, but also to support wider efforts to make the real estate sector more sustainable, resilient, and future-proof.

1.2. Research design

This section provides the research design. Firstly, the research gap is presented, after which the research objectives are defined. Lastly, the research questions and the research scope are presented.

1.2.1. Research gap

Despite increasing recognition of the importance of sustainability in the real estate sector, organisations still face substantial challenges in turning sustainability ambitions into concrete operational practices (Nyoni et al., 2023). As noted by Epstein and Roy (2001), while the formulation of sustainability strategies has become widely acknowledged among managers, translating these into tangible actions remains difficult. This gap between ambition and implementation is echoed by Baumgartner (2014), who argues that for companies that have committed to sustainable development, the key question is no longer whether to act sustainably, but rather how to do so effectively.

Multiple studies have similarly emphasised the lack of guidance on practical implementation. For example, Klettner, Clarke, and Boersma (2014) observe that most literature discusses why companies should act sustainably but offers little insight into how this should be achieved in practice. Engert and Baumgartner (2016) confirm that while the theoretical formulation of sustainability strategies is well-documented, there is a shortage of empirical studies on the mechanisms and conditions required for successful implementation.

This challenge is especially relevant in the real estate sector, where existing literature on sustainability implementation remains scarce (Kauko, 2018). The study of Nyoni et al. (2023) notes that although sustainability actions are increasingly taking place, they are still largely concentrated in the design and construction phases of buildings. The operational phase, where real estate owners such as property asset managers play a role, remains underexplored. Numerous sustainability assessment tools are available in the real estate sector and may offer valuable guidance, yet they have also faced widespread

criticism. Rogmans and Ghunaim (2016) criticise these existing systems for focusing predominantly on sustainable design features rather than actual operational performance. Moreover, they often lack clear definitions of sustainability and provide little justification for the weighting of certain indicators, making it still hard to compare and use effectively.

In light of these challenges, the CSRD introduces a new layer of regulatory oversight that aims to standardise sustainability reporting across the European Union. While the directive aspires to improve the consistency and comparability of non-financial disclosures, it remains uncertain whether it will offer the practical support to implement sustainability into operational practices. To date, no (empirical) research has examined the practical implementation of the CSRD within the real estate sector, or any other sector for that matter. This thesis aims to address the broader research gap surrounding sustainability implementation in the real estate sector by examining the motivations, barriers, and strategies within property asset management companies, and assessing whether and how the CSRD might serve as a practical tool in that process.

1.2.2. Research objective

A research objective must be developed in order to address the research problem and respond to the identified gap in the literature. This study seeks to contribute to the ongoing sustainability transition in the real estate sector by investigating how property asset management companies can bridge the gap between strategic sustainability ambitions and operational implementation. Despite the growing number of sustainability frameworks and tools available in the sector, implementation at the operational level remains challenging and inconsistent; especially in property portfolios where long-term sustainability improvements are key but not always clearly prioritised.

Additionally, this research aims to explore how property asset management companies can improve sustainability into their operations, and what role the CSRD can play in this process. The study aims to identify what motivates these companies to pursue sustainability, what barriers they encounter in translating sustainability visions into action, and which strategies or internal processes are used to overcome these obstacles. Furthermore, it assesses whether the CSRD offers practical tools that align with these motivations and strategies, or whether it risks remaining merely a compliance-driven reporting instrument. Ultimately, the research also aims to explore and propose concrete steps that property asset management companies can take to improve sustainability implementation in practice.

1.2.3. Research questions

This thesis aims to address the following main research question:

MRQ: "How can property asset management companies improve and implement sustainability within their operations, and what role does the CSRD play in this process?"

To address the main research question, the following sub-questions will be explored during various phases of the research:

SQ1: What are the current motivations, barriers and strategies of property asset management companies in translating their sustainability vision into operational practices?
This sub-question seeks to explore the practical aspects of implementing sustainability in property asset management. It investigates what drives companies to prioritise sustainability, which challenges they face in bridging the gap between vision and action, and what strategies they use to overcome these. Initially, a literature review will examine general insights into motivations, barriers, and strategies of large organisations. Building on this, semi-structured interviews with Dutch property asset managers will be conducted to understand how these aspects are experienced in their specific context. These interviews will also explore whether companies already have a formalised sustainability strategy and what their underlying ambitions are, thereby providing insights into both the why and how of sustainability efforts.

SQ2: What is the current knowledge on the CSRD regarding its objectives, scope, reporting requirements, and the levels (strategic, tactical, operational) at which companies are expected

to report?
The goal of this sub-question is to gain a detailed understanding of the CSRD's objectives, scope, and requirements, as well as the organisational levels (strategic, tactical, operational) at which reporting is expected. This insight helps clarify whether the CSRD can support not only high-level vision development, but also the translation of sustainability goals into concrete actions. This question will be addressed through a literature review and document analysis.

SQ3: How can property asset management companies translate their sustainability ambitions across strategic, tactical, and operational levels?
This sub-question aims to explore how property asset management companies can translate their sustainability ambitions into actions across strategic, tactical, and operational levels. By examining how companies move from high-level goals to practical implementation, the question helps identify which steps are needed at each level to achieve an embedded sustainability approach. The answer is primarily informed by the empirical findings and can help to develop a framework with specific steps for sustainability implementation.

SQ4: To what extent do the tools provided by the CSRD meet the practical needs of property asset management companies in pursuing their sustainability goals?
This sub-question addresses the alignment between the CSRD's tools and the actual sustainability needs of property asset management companies. It builds on the insights from previous sub-questions to evaluate whether the CSRD can provide value, even to companies not formally required to comply with it. To answer this question, the developed framework will be compared to the structure and content of the CSRD to assess whether the directive supports the internal processes required to translate sustainability ambitions into practice.

1.2.4. Research design

This research design links the research questions to the methodologies required to address them, ultimately contributing to answering the main research question. The research design is divided into three phases, first the theoretical background, then the empirical research, and finally the development of the flowchart and recommendations. Details on the methodologies used are presented in Chapter 4. Figure 1.1 presents an overview of the research design.

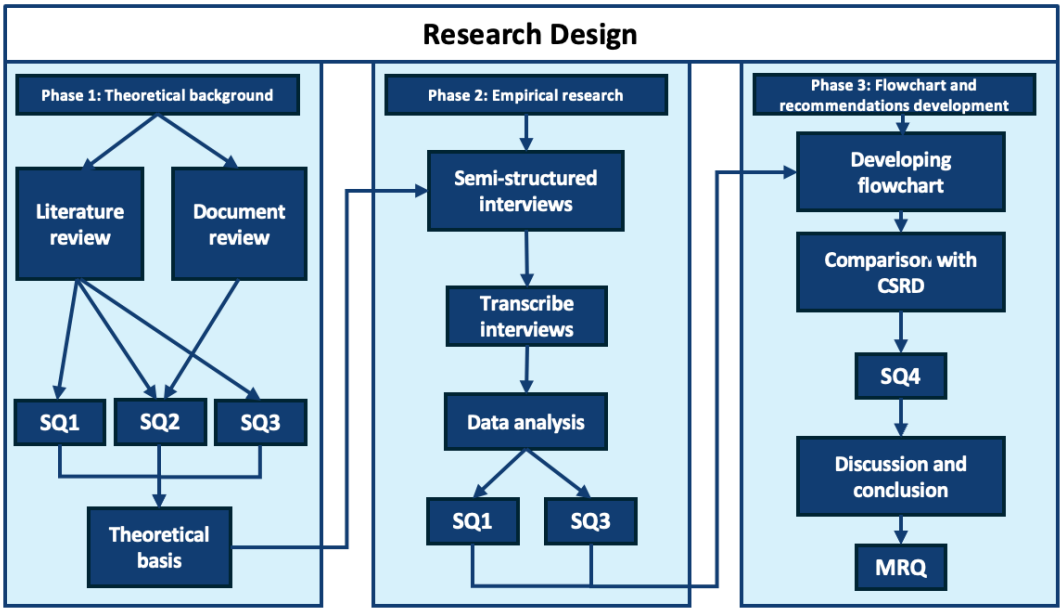

Figure 1.1: Research design

1.2.5. Research scope

This thesis investigates how property asset management companies can improve and implement sustainability within their operational practices, and what role the Corporate Sustainability Reporting Directive (CSRD) plays in this process. Defining the scope of this research helps clarify its focus and boundaries, outlining which topics will be explored and which fall outside the scope of the study. The scope of this research is defined by the following key boundaries:

- **Focus on sustainability across organisational levels:** This research focuses on how sustainability is implemented in practice within property asset management companies, with particular attention to the operational level, where day-to-day decisions are made. However, the study also considers the strategic and tactical levels, as these provide the vision, structure, and coordination needed for meaningful operational outcomes. Exploring how sustainability is translated from strategic goals into operational practices allows for a more complete understanding of how companies can drive lasting change. In doing so, the research recognises that isolated efforts at the operational level may lack impact if not embedded in a broader, organisation-wide approach to sustainability.
- **Target group: Dutch property asset management companies, both CSRD-compliant and non-compliant:** The empirical research focuses on Dutch property asset management companies that manage and own real estate portfolios on behalf of (institutional) investors. It includes both companies currently subject to CSRD reporting requirements and those that fall outside its mandatory scope, especially in light of the proposed regulatory Omnibus changes. An overview of which respondents' companies fall within or outside the CSRD's scope is provided in section 3.1.2 and 5.1. This combined focus allows for a broader understanding of how the CSRD may support sustainability efforts, even when reporting is not legally required.
- **Focus on implementing the CSRD as a potential tool, not an evaluation of compliance:** The study does not assess whether companies comply with the CSRD in a legal or technical sense. Rather, it examines whether the CSRD's tools and structure may be useful in helping companies improve sustainability in practice, including voluntarily.
- **Empirical data collection through interviews:** The study relies on semi-structured interviews with ESG professionals from property asset management companies, as well as independent CSRD experts. These interviews explore motivations, barriers, strategies, and perceptions of the CSRD as a supporting tool.
- **Emphasis on environmental sustainability:** While the CSRD covers environmental, social, and governance topics, this thesis focuses primarily on environmental sustainability. This is due to the strong alignment with EU climate goals and the high relevance of environmental impacts in the real estate sector. More specific reasons for this choice are explained in Chapter 2.

1.3. Practical relevance

This research holds practical relevance for property asset management companies seeking to improve their sustainability performance, particularly in the face of growing expectations from stakeholders and regulatory bodies. While the CSRD was originally introduced as a mandatory reporting directive, recent developments may exclude many real estate companies from its legal scope. Nonetheless, the directive still offers a structured approach that may serve as a valuable tool for organisations aiming to strengthen their sustainability strategy and operations voluntarily.

By examining how both CSRD-compliant and non-compliant companies navigate sustainability implementation, this research provides practical insights into common challenges, motivations, and strategies in the sector. It identifies the strategies required to embed sustainability across a company's strategic, tactical, and operational levels. These findings can support ESG professionals and decision-makers in the real estate sector in aligning internal sustainability efforts with external standards, improving internal coordination, transparency, and long-term value creation. In doing so, the study also contributes to advancing broader efforts toward a more sustainable and resilient built environment.

1.4. Thesis outline

Figure 1.2 presents an overview of the chapter structure developed for this thesis. It visualises how the chapters are connected and how each one contributes to addressing the research questions outlined in Section 1.2.3.

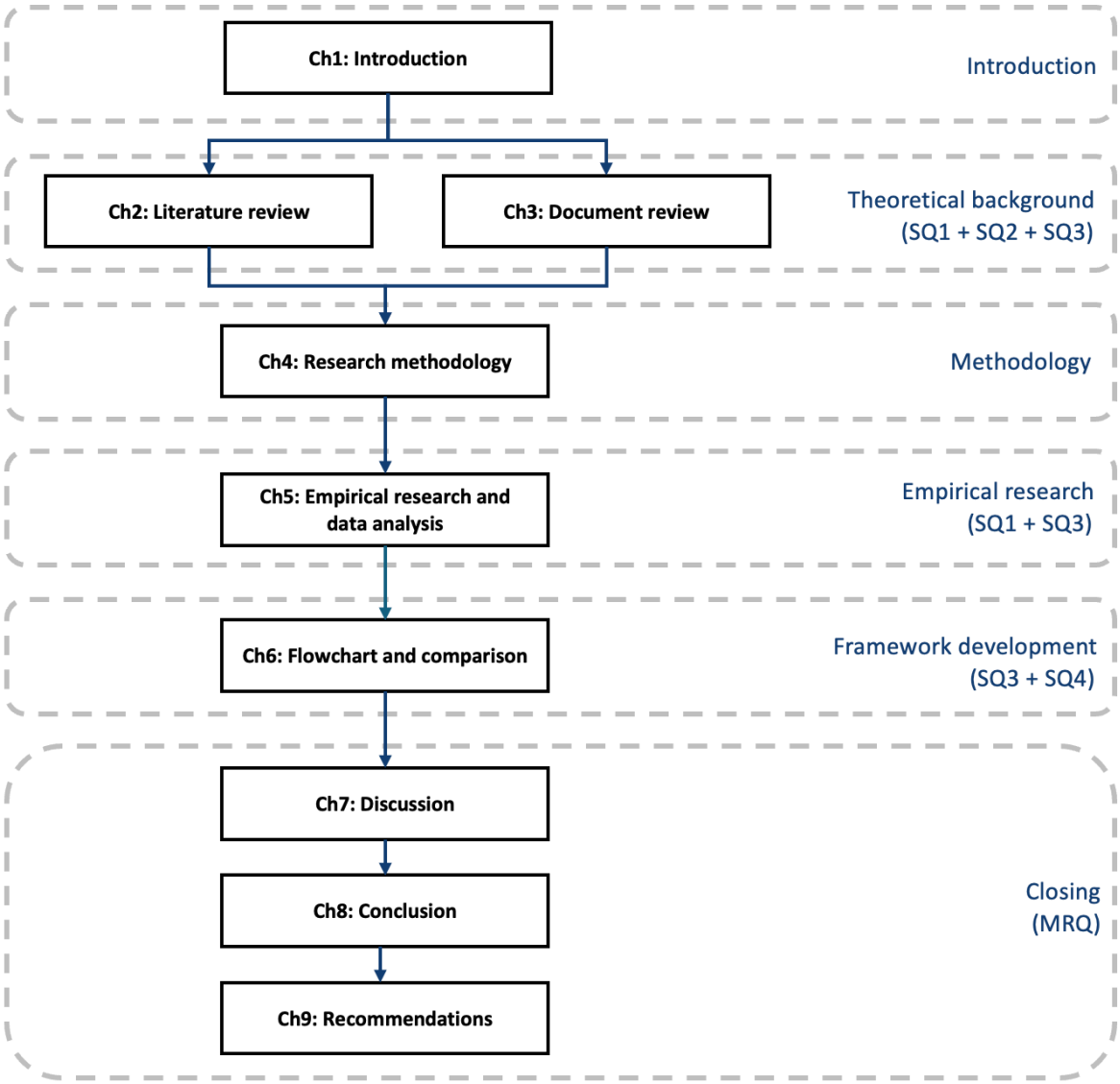

Figure 1.2: Thesis outline

2

Literature review

The literature review will start with a discussion of the concept of sustainability, including the perception of the UN, the EU, and (property asset management) companies. Subsequently, concrete sustainability actions within the real estate and construction sector will be discussed. This is followed by exploring the operational, tactical, and strategic levels of business activity. Next, the formulation of a sustainability vision in organisational settings is examined, after which the importance and motivations underlying sustainability implementation will be discussed. Then, the identified barriers to sustainability implementation are elaborated on, after which the drivers and enablers will also be discussed. The review will end with a conclusion and description of next steps. The literature review will provide motivations, barriers, and strategies to operational sustainability implementation in general, which can help to answer sub-question one. Moreover, the literature review aims to provide insights into the operational, tactical, and strategic levels to address sub-question two and three.

2.1. Definition of sustainability in accordance with the CSRD

Sustainability is a broad concept that can be interpreted in various ways. Therefore, it is crucial to clearly define how sustainability is applied and interpreted in CSRD reporting, to understand its origins, and to explore how both the EU and property asset management companies perceive the concept. Sustainability concerns were first brought to the political agenda in 1972 with the publication of "The Limits to Growth" (Meadows, Meadows, Randers, & Behrens, 1972), a book commissioned by the Club of Rome. The authors of the book concluded that if the world's population and economic growth would continue at the current rates, the Earth's natural resources will exceed the planet's capacity to sustain them. Although the book's assumptions faced significant criticism, it sparked a global debate that ultimately led to the establishment of the UN World Commission on Development and Environment, known as the Brundtland Commission, named after its chair. (A. G. Silvius, Kampinga, Paniagua, & Mooi, 2017). In 1987 the Commission issued a report called "Our Common Future", in which they defined sustainable development as "development that meets the needs of the present, without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). Currently, this definition is still seen as the foundational concept for sustainable development (A. Silvius, Schipper, & Aetsveld, 2014).

After the Brundtland report, the United Nations continuously evolved the concept, starting with the Earth Summit (1992) and the World Summit on Social Development (1995), which formally established the three-pillar model (Hák, Janoušková, & Moldan, 2016). This model refers to a framework that conceptualises sustainability through three interconnected dimensions – environmental, economic, and social – with the goal of balancing these aspects to achieve long-term sustainable development (Purvis, Mao, & Robinson, 2018). To measure this sustainable development effectively, the Millenium Development Goals were introduced in 2000, however their limitations led to the development of the Sustainable Development Goals in 2012 (Sachs, 2012).

Figure 2.1: The 17 Sustainable Development Goals, (United Nations, n.d.))

These 17 goals provide a universal set of targets and indicators to guide global sustainability efforts and address sustainability challenges. They cover the three dimensions of sustainability, as also identified by the three-pillar model: environmental, economic, and social. The 17 SDGs are subdivided into 169 targets, which aim to provide a structured policy framework for sustainable development, focusing on issues such as climate change, inequality, and environmental protection. (Hák et al., 2016). According to Kørnøv, Lyhne, and Davila (2020), the United Nation's Sustainable Development Goals have indeed become a reference point for policy-making processes worldwide. In line with this, the official EU document of the CSRD explicitly states that they have incorporated the SDGs as a guiding framework for this sustainability policy (Directive (EU) 2022/2464).

However, the reporting requirements of the CSRD are structured based on Environmental, Social, and Governance (ESG) factors, which have a slightly different origin. The selection of Environmental, Social, and Governance (ESG) factors as the core pillars of sustainable investing and corporate responsibility evolved from broader corporate social responsibility (CSR) principles and responsible investment frameworks developed in the late 20th and early 21st centuries Lykkesfeldt and Kjaergaard (2022). Early forms of ethical investing, such as the Global Sullivan Principles (1999), laid the groundwork for integrating social and environmental concerns into business practices (Alexis, 2010). The United Nations Global Compact, established in 2000, introduced ten principles on human rights, labour, environment, and anti-corruption, which influenced modern corporate sustainability efforts (Sethi & Schepers, 2013). A few years later in 2004, the organisation commissioned the "Who cares Wins" report, which formally introduced ESG as a framework for integrating environmental, social, and governance issues into financial decision-making (UN Global Impact, 2004). This was further reinforced by the UN Principles for Responsible Investment (PRI) in 2006, which encouraged institutional investors to consider ESG factors (PRI, n.d.). The 2004 UN Global Impact report describes ESG factors as critical components of corporate management quality, necessary for competitive success in an increasingly globalised world. The report identifies ESG issues as follows:

- *Environmental:* Climate change risks, pollution, resource use, and the transition to a low-carbon economy.
- *Social:* Workplace health and safety, human rights, community relations.
- *Governance:* Board structure, executive compensation, audit integrity, and anti-corruption.

Moreover, they emphasise that for all issues, there is growing pressure from the civil society to enhance performance, transparency, and accountability. Failure to address these concerns effectively can even result in reputational risks. (UN Global Impact, 2004). ESG factors thus represent non-financial performance metrics designed to assess an organisation's commitment to responsible practices and can be evaluated by investors and other stakeholders (Kaźmierczak, 2022).

Thus, both the CSRD itself and its requirements integrate the ESG framework and the UN Sustainable Development Goals (SDGs) to create a comprehensive sustainability report. ESG provides a framework for companies and investors to measure sustainability performance while the SDGs provide globally recognised targets for sustainable development. The CSRD explicitly refers to the SDGs as part of its alignment with international sustainability frameworks, which means that companies reporting under the CSRD must demonstrate how their activities contribute to achieving the SDGs. Similarly, the CSRD requirements provide further specificity on how companies should report their sustainability performance in alignment with the SDGs. It ensures that environmental disclosures, such as climate impact assessments and resource efficiency, align with the environmental goals of the SDGs. In essence, the ESG framework structures the reporting approach, while the SDGs provide a global benchmark for evaluating corporate sustainability impact. Through this dual alignment, the CSRD aims to ensure that sustainability reporting is both standardised for regulatory purposes and strategically aligned with global sustainability objectives. Important to note is that this thesis will focus on environmental sustainability and thus on the environmental requirements of the CSRD. The rationale for this focus will be explained in the following sections.

2.1.1. Importance of sustainability according to UN, EU, and companies

It has thus become clear that the United Nations have adopted the 17 Sustainable Development Goals to define sustainable development. These outline 17 global objectives that all UN members states should aim to achieve by 2030 (Grainger-Brown & Malekpour, 2019). This commitment was formalised in the 2030 Agenda for Sustainable Development, which outlines the 17 SGDs and was endorsed by world leaders to ensure human rights and well-being are protected within a sustainable future (United Nations, 2024). In response, the European Commission has stated: "We are committed to implementing the SDGs in all our policies and encourage EU countries do to the same" (European Commission, n.d.-b). This implies that both the United Nations and the European Union have the same view on sustainable development. The European Commission (n.d.-b) recognises that the UN 2030 Agenda, alongside the Paris Climate Agreement, serves as a global framework for international collaboration on sustainable development, encompassing its economic, social, environmental, and governance aspects. The SDGs are based on the three-pillar model of sustainability: environmental, economic, and social principles (Diemer, Morales, & de Souza Coelho, 2017). This model is also embraced by the European Union, as they state: "Green growth is at the heart of EU policy to ensure that Europe's economic growth is environmentally sustainable" (Union, n.d.). Therefore, the EU has also initiated the European Green Deal, a set of policies that ensures the following:

- Achieving net-zero greenhouse gas emissions by 2050
- Separate economic growth from resource consumption
- Ensuring inclusivity, leaving no person or place behind

(European Commission, 2021)

This shows the commitment of the European Union to achieving sustainable development. The European Sustainable Development Report (2023/2024) offers an independent quantitative analysis of how the EU and its member states are advancing toward the SDGs (SDSN, 2024). This report shows that, despite the EU's strong focus on climate-related policies, it faces the greatest challenges with SDGs related to environmental sustainability, particularly SDG 12 (responsible consumption and production), SDG 13 (climate action), SDG 14 (life below water), and SDG 15 (life on land) seem difficult to achieve. The report notes persistent challenges in reducing carbon emissions, managing biodiversity loss, and mitigating the environmental impact of consumption and supply chains. (SDSN, 2024). The report highlights several reasons contributing to these challenges, including fragmentation in strategies, geopolitical and economic disruptions, political polarisation, and the complexity of supply chains. On the other hand, the EU has made notable progress towards ensuring decent work and economic

growth (SDG8), reducing poverty (SDG1), and improving gender equality (SDG5). Moreover, the EU has emphasised their desire for greater progress on SDG 13: climate action and highlight that they have already implemented additional measures to ensure this goal is met in the future. (Eurostat, 2023). This suggests that the EU places significant emphasis on environmental sustainability.

Alongside the three-pillar model, the ESG (Environmental, Social, and Governance) framework - originating from the financial sector - gained popularity, particularly among investors. As mentioned, they are non-financial performance indicators that allow for evaluation by investors and stakeholders. (Kaźmierczak, 2022). The European Commission has established standards for these non-financial performance indicators in the EU Taxonomy and CSRD, which also shows their commitment to this framework for both investors and companies. Companies, on the other hand, have mainly used the terms Corporate Social Responsibility (CSR) and Corporate Sustainability (CS) to express their sustainability activities (Kaźmierczak, 2022), as also already explained in section 2.1.1. In general, these terms can be described as the balance between economic, environmental, and social principles for organisations (Rai, 2014). According to Kaźmierczak (2022), a CSR/CS framework enables a company to effectively convey its values to employees and stakeholders, while an ESG framework allows a company to demonstrate its commitment to ESG responsibilities to its investors. Both frameworks are thus recognised by companies but used for different reasons. According to Van Zanten and Van Tulder (2021), Corporate Sustainability can increasingly support financial performance, enhance legitimacy, reduce reputational risks, improve relationships with diverse stakeholders, and help to identify future business opportunities. Therefore, it is also increasingly important for companies to adhere to these principles. Currently, most companies incorporate the SDGs in some form within their corporate sustainability report and strategy (Van Zanten & Van Tulder, 2021). According to the 2021 edition of Reporting Matters, published by the World Business Council for Sustainable Development, the most frequently referenced goals are SDG 13 (climate action), SDG 11 (sustainable cities and communities) and SDG 8 (decent work and economic growth). (WBCSD, 2021). Thus, the significance of SDG 8 (decent work and economic growth) and SDG 13 (climate action) according to companies, aligns closely with Europe's (environmental) key priorities.

2.2. Sustainability action in the real estate and construction sector

Considering the 17 Sustainable Development Goals (SDGs), the real estate sector most frequently prioritises SDG 11 (Sustainable Cities and Communities), followed by SDG 13 (Climate Action) and SDG 7 (Affordable and Clean Energy). SDG 8 (Decent Work and Economic Growth) is also considered important (Ionascu, Mironiuc, Anghel, & Huian, 2020). Their study also highlighted that real estate companies primarily focus on environmental challenges such as climate change, carbon emissions, and energy consumption, which align with the priorities of both the EU and the UN. The emphasis on SDG 11 is to be expected, as it directly aligns with the core activities of real estate development. Similarly, the focus on SDG 13 is logical given the sector's substantial carbon footprint and the growing external pressure to reduce it. Both SDG 11 and SDG 13 stand out because they reflect the industry's primary impact areas, are measurable through clear indicators, and provide reputational and strategic value when actively addressed. Therefore, the real estate sector is an interesting target group.

Nyoni et al. (2023) have defined sustainability action as "an individual or collective act aiming to promote social, environmental, or economic sustainability action, contributing to achieving the Sustainable Development Goals". In organisational settings these sustainability efforts can take different forms, including the development of strategies and policies, or guidelines that influence day-to-day operational practices (Nyoni et al., 2023). Specific sustainability actions (ranked in order of perceived importance) in the real estate sector that are often mentioned in the literature are as follows:

1. Reduction of energy consumption
2. Production of renewable energy
3. Recycling and reduced waste production
4. Occupant health, comfort, and safety
5. Indoor environmental quality
6. Water management

7. Reducing new materials in construction

(Nyoni et al., 2023)(Piller & Nyoni, 2022).

Efforts to improve energy efficiency and incorporate renewable energy sources are particularly prominent in this context. Moreover, the existing literature is predominantly centred on energy efficiency improvements, often overlooking a broader range of actions that could enhance the overall sustainability of property portfolios. (Bandeiras, Gomes, Coelho, & Fernandes, 2020)(Catrini, Curto, Franzitta, & Cardona, 2020). This high priority for energy-related actions in the real estate sector can be explained by the economic benefits that come with these efforts (Nyoni et al., 2023).

More concrete actions for property owners include installing solar panels, upgrading to more energy-efficient HVAC systems, implementing green roofs, and integrating smart energy management systems to optimise lighting and climate control. Additional measures include adopting water-saving technologies and using sustainable or recycled materials such as reclaimed steel and blended cement. These practical actions are widely supported in Western countries to reduce emissions and resource use. (Shahee, Abdoos, Aslani, & Zahedi, 2024)(Dhingra, 2022)(EPA, 2025).

The study of Nyoni et al. (2023) also confirms that the real estate sector perceives sustainability to be a critical issue. However, the extent of implementation varies widely, from companies that merely outline strategic sustainability plans to those actively executing projects that integrate sustainability throughout their property portfolios. Moreover, important to note is that the literature related to sustainability within the real estate sector remains scarce (Nyoni et al., 2023). Current research mainly focuses on the design and construction phases of buildings, which is why sustainability actions in the construction sector will also be addressed to provide a more comprehensive perspective.

Yilmaz and Bakış (2015) define sustainable construction as ”the application of sustainable development principles to a building life cycle from planning the construction, constructing, mining raw material to production and becoming construction material, usage, destruction of construction, and management of wastes.” On the other hand, O’Connor, Torres, and Woo (2016) focus more broadly on sustainability in construction and discuss it as being part of an industry shift that increasingly prioritises outcomes related to environmental performance, resilience, and long-term value. While both of those studies primarily concentrate on the environmental dimension of sustainability, Cruz, Gaspar, and De Brito (2019) highlight the importance of addressing all three pillars of the sustainability model (environmental, social, and economic) while also emphasising the need to distinguish between short-term and long-term impacts. Their study has developed concrete goals towards ensuring environmental sustainability in the construction sector.

First, the actions on the operational level are shown:

- Improving the environmental management of the construction process (from a lifecycle perspective);
- Decreasing the energy consumption;
- Decreasing green house emissions;
- Decreasing water consumption;
- Decreasing consumption of raw materials;
- Decreasing waste production;
- Increasing recycling of waste.

Second, the actions on the tactical level are described:

- Accommodating environmental goals in the companies strategy;
- Developing quantifiable goals for improving the companies environmental impact;
- Developing roadmaps to guide managerial decisions towards a greater environmental performance.

And last, the actions on the strategic level are given:

- Developing a global strategy to decrease the sectors' environmental impacts;
- Identifying potential synergies with other sectors to minimise environmental impacts.

(Cruz et al., 2019)

Studies by Haitherali and Anjali (2023) and Sizirici, Fseha, Cho, Yildiz, and Byon (2021) define more concrete actions for the construction sector to improve sustainability, but also merely focus on the environmental aspect. Sizirici et al. (2021) emphasised the importance of using carbon reduction techniques, such as the increased use of recycled materials in concrete and asphalt pavement. The incorporation of more energy-efficient building systems, such as efficient HVAC systems and alternative water resources like rainwater harvesting, further decreases operational emissions. While their proposals are very specific, they also argue that raising awareness, improving education, and introducing incentives are key strategies to help reduce the carbon footprint of the construction sector. On the other hand, the study of Haitherali and Anjali (2023) proposed a broader set of strategies to enhance sustainability in construction. Their study emphasises the importance of integrating sustainability considerations from the earliest stages of project development, particularly during planning and design. Furthermore, the authors highlight the need for close collaboration among all stakeholders to ensure a shared understanding of sustainability objectives throughout the project lifecycle. The implementation of sustainable materials, technologies, and construction methods is also deemed important. In addition, increasing awareness and building knowledge through education and training of professionals is considered essential to promote sustainable practices. Lastly, the study stresses the importance of supportive policy measures, including clear regulations and effective incentive structures, to facilitate the sector's transition towards lower carbon emissions. (Haitherali & Anjali, 2023).

To assess how sustainability can be improved, it was essential to first understand how it is currently approached within the construction and real estate sector. Thus, sustainability in real estate and construction is currently tackled through a combination of strategies, such as energy-efficient technologies, using sustainable building materials, improving waste management, and reducing carbon emissions across the building lifecycle. Additionally, many companies adopt certification systems to guide and validate their efforts. Increasingly there is also a focus on circular construction, stakeholder collaboration, and aligning developments with broader environmental goals. However, the level of integration and ambitions vary widely and challenges remain in turning sustainability strategies into consistent operational practices.

2.2.1. Sustainability within property asset management companies

Property asset managers invest and manage real estate portfolios on behalf of institutional investors, such as pension funds and insurance companies (Ross, 2024). According to Scarrett (2010), property asset management involves both the daily supervision of rental properties, and the strategic planning needed to optimise portfolio performance through proactive decision-making and long-term vision. Thus, property asset managers aim for maximising their returns by enhancing the long-term performance of their property portfolios (which they own theirselves). Scarrett (2010) states that to be successful, the company should track developments within their property that may create opportunities for redevelopment, sale, or repurposing. Moreover, he argues that effective property management should take a proactive approach rather than simply responding to changes as they occur.

As property asset managers are interested in long-term valuation, they increasingly integrate sustainability into their strategies. Therefore, they are taking on a greater role in enhancing the environmental performance of their buildings while meeting stakeholder expectations for corporate sustainability (Rising, 2023). Strong ESG integration helps mitigate long-term risks such as regulatory shifts and climate-related impacts while improving financial performance through energy savings, higher property values, and enhanced tenant satisfaction (Forrester, 2020)(Isaiu, 2019). By integrating ESG principles, property asset managers can enhance resilience, create long-term (monetary) value, and future-proof their portfolios (Pyke, 2016). Additionally, both institutional investors and corporate tenants, increasingly prioritise sustainability, seeking properties that align with environmental goals and offer a high-quality and responsible working or living environment (Pyke, 2016)(Halper, Bussiere, & Shriver, 2022). Piller and Nyoni (2022) notice that property asset managers are driven by a variety of factors to implement

sustainability. Financial incentives played a crucial role in maintaining a competitive edge and aligning with industry competitors, but pressure from employees also emerged as a significant factor. The study revealed that while there is a strong desire to expand sustainability efforts, knowledge gaps remain, highlighting the need for more industry leaders to initiate change and demonstrate the benefits of sustainability.

The study of Piller and Nyoni (2022) also highlighted that concrete sustainability actions in property asset management are starting to be adopted. These mainly include improving energy efficiency through technical upgrades (LED lighting or improved HVAC systems), obtaining green building certifications (such as BREEAM or LEED), and monitoring energy performance across portfolios. Other actions include engaging tenants in sustainability initiatives and applying sustainability criteria in procurement of properties. Nonetheless, they observe that such measures are often unevenly applied and primarily focused on cost-saving opportunities, with limited attention to broader environmental sustainability goals.

2.2.2. Frameworks currently used

While it has become clear that the real estate and construction sector increasingly implement practical, tangible measures to improve sustainability, it also relies on a range of formalised frameworks and certifications to structure and communicate its sustainability performance. These frameworks play a crucial role for these sectors in guiding sustainability efforts, measuring progress, and demonstrating accountability to stakeholders. Therefore, it is important to examine the most commonly used frameworks. However, they differ widely across the world, making it difficult to establish a uniform standard or set of benchmarks. BREEAM and LEED are among the earliest and most widely adopted certification systems for individual buildings or infrastructure projects in the real estate and construction sector. (Rogmans & Ghunaim, 2016). BREEAM is mainly used in Europe, and thus in the Netherlands, while LEED is used mainly in the US. Moreover, the GRESB serves as a benchmarking tool for real estate portfolios or entire companies, while the GRI provides a widely recognised global standard for sustainability reporting, both of which are also acknowledged and applied within the Netherlands. (Ionascu et al., 2020).

- **BREEAM** stands for Building Research Establishment Environmental Assessment Methodology and was launched in 1990 in the United Kingdom. It is a certification system that evaluates and provides insights into the environmental sustainability performance of individual buildings. (Rogmans & Ghunaim, 2016). They assess this performance across different categories such as energy, water, materials, transport, waste, pollution, health and well-being. The certification levels range from ”pass” to ”outstanding”. While it provides a structured way of assessing sustainability, Rogmans and Ghunaim (2016) note that it lacks transparency in the justification of how credits are weighted. The Dutch Green Building Council, which is the leading sustainability platform for the built environment in the Netherlands, is the official licensee and operator of BREEAM-NL. This is the Dutch version of the international version and is tailored to Dutch laws, building codes, climate, and construction practices. BREEAM-NL works with the same certification levels ranging from pass, to good, to very good, to excellent, to outstanding, based on a percentage of credit achieved. BREEAM-certified buildings often benefit from lower operational costs and may qualify for various subsidy schemes. It can also serve as a tool to advance sustainability goals while demonstrating progress to both competitors and stakeholders. By applying stricter criteria than current legal requirements, BREEAM-NL also ensures that projects are future-proof and aligned with long-term sustainability goals. Moreover, it can help with compliance to the EU Taxonomy, an official EU certification system, which will be explained below. (BREEAM-NL, 2025).
- **Paris Proof**, developed by the Dutch Green Building Council (DGBC) in collaboration with sector partners and experts, aims to align the built environment with the climate goals of the Paris Agreement. Recognising the limited availability of sustainable energy in the Netherlands, the framework sets ambitious but achievable targets for reducing both operational and material-related carbon emissions. It introduces key tools such as the WEii (Werkelijke Energie-intensiteit indicator), which measures actual energy use, and the Paris Proof protocol for material emissions (PPm), focused on embodied carbon. These instruments help stakeholders to monitor and reduce emissions across the building lifecycle. In practice, many organisations use the Paris Proof targets to

develop concrete roadmaps to guide their transition towards a carbon-neutral built environment. (DGBC, 2025).

- **EU Taxonomy** is a classification system developed by the European Union that defines which economic activities can be considered environmentally sustainable. The EU Taxonomy applies to the same entities as the CSRD, but also extends to financial market participants. In addition to regulatory compliance, banks increasingly require companies to demonstrate alignment with the EU Taxonomy when seeking financing (SPRYG, 2025). The specific activity can be considered sustainable when it makes a substantial contribution to at least one of the six EU environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems. Additionally, the activity must not harm any of the five other environmental objectives. A key feature of the EU Taxonomy is that it defines clear performance criteria. For example, rather than simply asking companies to disclose their environmental impact, it sets quantitative limits that activities must meet. This makes the assessment of sustainability objective and measurable. (DGBC, 2023).
- **GRESB** stands for Global Real Estate Sustainability Benchmark and is an international organisation that provides standardised assessments for the environmental, social, and governance (ESG) performance of real estate companies, funds, and assets. Examples of ESG indicators are energy consumption, water usage, employee training, risk management frameworks, and transparency and reporting. Participants complete an annual assessment based on a wide range of environmental, social, and governance indicators. Their responses are validated and scored, resulting in a GRESB score. This score reflects the organisation's overall ESG performance and is then benchmarked against peers in the same region or sector. The score ranges from 0 to 100 and reflects the company's or portfolio's overall ESG performance. This score allows companies and investors to see how their sustainability efforts compare to others and to identify areas for improvement. (GRESB, 2025).
- **GRI** is the Global Reporting Initiative and was founded in 1997 by the US in response to environmental disasters and growing demand for corporate accountability. It provides a standardised framework for sustainability reporting. It helps companies to disclose their environmental, social, and governance (ESG) impacts in a structured, transparent and comparable way. These GRI standards are the most widely used standards for non-financial reporting worldwide. Examples of the GRI standards are climate and environment, workers and communities, anti-corruption, and much more. In the real estate sector, a significasnt portion of sustainability reports is based on the GRI standards, which helps them to manage risks and opportunities and support strategic decision-making. (GRI, n.d.) (Ionascu et al., 2020).

While the frameworks discussed above, specifically BREEAM, GRESB, and GRI, play a vital role in shaping voluntary sustainability efforts and disclosures within the real estate and construction sector, the Corporate Sustainability Reporting Directive is taking a more prescriptive approach. Nonetheless, the CSRD may benefit from insights offered by these widely adopted frameworks. The implementation of the CSRD marks a fundamental shift: moving sustainability reporting from voluntary to mandatory, requiring companies to disclose standardised, verifiable ESG data. Important to note here is that the CSRD is a reporting directive; it requires companies to disclose their sustainability performance, but it does not define what qualifies as sustainable performance. In contrast, the EU Taxonomy acts as a classification system, providing technical criteria and thresholds that determine whether specific economic activities are considered environmentally sustainable. The implementation of the CSRD has significant implications for the sector, as many real estate companies now fall within its scope. Moreover, also for companies not falling within the scope, it might be interesting to develop a sustainability report to meet investor expectations, secure financing, or align with competitors. Chapter 3 will dive deeper into the objectives, scope, requirements, and process of the CSRD.

Currently, some large construction and real estate companies have already applied the CSRD. For instance, the Royal BAM Group published its 2024 annual report in alignment with the CSRD requirements, incorporating double materiality, detailed ESG disclosures, and an EU Taxonomy overview (BAM, 2025). Similarly, Achmea has expressed confidence in being CSRD-ready by 2025, highlighting their internal preparations, cross-departmental collaboration, and the use of digital tools to streamline

the reporting process. Moreover, Achmea introduced the CSRD as 'fuel for strategy', arguing that it might be used for more than merely compliance. (Achmea, 2024). These examples illustrate that while the directive is still in its early stages, frontrunners are already taking proactive steps to comply and apply.

Although the CSRD was not specifically designed for the real estate or construction sector, it might offer important opportunities for property asset management companies. These organisations manage real estate portfolios on behalf of institutional investors and are increasingly expected to demonstrate the sustainability performance of their assets. Nonetheless, these companies still face knowledge gaps regarding how to implement sustainability effectively in practice. While the directive does not prescribe performance outcomes, it requires companies to assess their sustainability risks, define long-term targets, disclose transition plans, and report consistently across their value chains. This level of transparency could support property asset management companies in improving their sustainability efforts. However, before assessing the potential impact of the CSRD, several aspects must first be explored.

2.3. Business activity levels in sustainability transitions

Beyond the construction and real estate sector, organisations in general have also increasingly acknowledged the importance of integrating sustainability into their business strategies (Welford, 2013). However, to date limited focus has been given to the practical implementation of sustainability, particularly the concrete steps required to translate sustainability strategies into actionable measures (Engert & Baumgartner, 2016). Therefore, for sustainability to become embedded within a company, change needs to take place across all three levels of business activities; strategic, tactical, and operational (Labuschagne & Brent, 2005)(Hernández-Chea et al., 2021). These levels can be described as follows:

- *Strategic level:* This level refers to high-level planning that sets the long-term vision, objectives, and priorities of an organisation (Hernández-Chea et al., 2021). It involves defining the business model, selecting sustainable development goals, and establishing policies that guide corporate sustainability initiatives (Engert & Baumgartner, 2016)(Casadesus-Masanell & Ricart, 2010).
- *Tactical level:* This level is concerned with medium-term planning and the implementation of strategies through structured processes and resource allocation (Hernández-Chea et al., 2021)(Too & Weaver, 2014). It includes creating networks, collaborations, and aligning sustainability initiatives with company operations (Shove, Chappells, & Van Vliet, 2012).
- *Operational level:* The operational level focuses on short-term activities and implementing sustainability at the practical level (Labuschagne & Brent, 2005). It involves executing the strategies and tactics set at higher levels through concrete actions (Hernández-Chea et al., 2021).

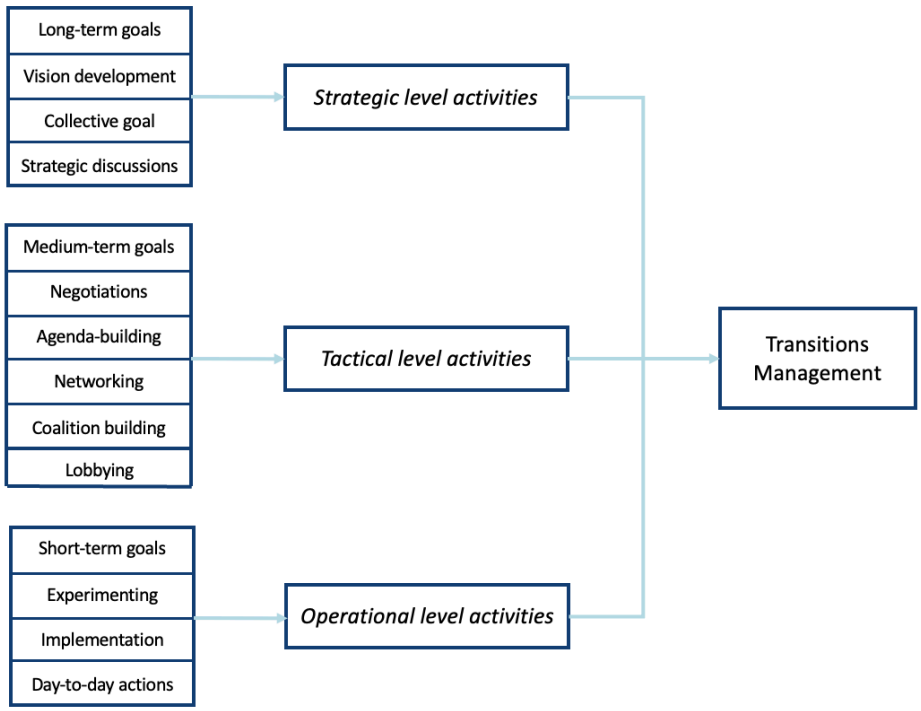

Figure 2.2: Business activities on the three different levels (own work, (Hernández-Chea et al., 2021))

Figure 2.2 shows various business activities that occur at the strategic, tactical, and operational level. Hernández-Chea et al. (2021), use the transition management framework as the basis for the three different levels of activities. Transition management as defined by Loorbach (2010), aims to accelerate long-term societal transitions towards sustainability by influencing complex system changes. He emphasises that in order for sustainability transitions to succeed, all three levels must be interconnected. Hernández-Chea et al. (2021) adapt Loorbach's transition management framework to apply it specifically to businesses.

According to Labuschagne and Brent (2005), sustainability is embedded at the strategic level through the organisation's mission, vision, and overarching strategy. Strategy is the choice of the business model through which a firm will compete in the market, including sustainability as a competitive advantage (Casadesus-Masanell & Ricart, 2010). In this context, they describe the business model as the foundation of a firm's operations, outlining how it functions and generates value for stakeholders. They emphasise that strategic decisions involve long-term commitments that shape an organisation's trajectory. Hernández-Chea et al. (2021) further state that at the strategic level, companies aim to create sustainable value by the adoption of circular business models and innovation. Lastly, Engert and Baumgartner (2016) argue that sustainability must be integrated at the strategic level to ensure its long-term success, emphasising that leadership commitment and corporate culture play crucial roles in effectively implementing sustainability strategies.

According to Too and Weaver (2014), tactical planning is essential to bridge the gap between high-level sustainability strategies and their implementation. Casadesus-Masanell and Ricart (2010) describe tactical activities as the alignment of sustainability initiatives with corporate processes, ensuring that that the sustainable strategies (i.e. business models) are practically executed. Hernández-Chea et al. (2021) explain that tactical-level sustainability involves forming partnerships, structuring sustainable supply chains, and creating networks that align with sustainability goals. Additionally, Casadesus-Masanell and Ricart (2010) highlight that the tactical level determines how firms create their value within the constraints set by their strategic objectives, ensuring that sustainability efforts are aligned with business operations.

Chofreh and Goni (2017) describe operational sustainability efforts as those carried out by employees who implement sustainability plans on the ground level through daily workflows. Hernández-Chea et al. (2021) explain that organisations at this level experiment with sustainable technologies, optimise production processes for resource efficiency, and monitor the impact of their sustainability initiatives. Epstein and Buhovac (2014) state that at the operational level, sustainability performance is measured through direct outcomes such as carbon footprint reductions, water conservation efforts, and compliance with sustainability standards. Too and Weaver (2014) further emphasise that operational sustainability success depends on continuous monitoring and feedback loops to ensure alignment with strategic objectives. However, focusing sustainability efforts exclusively at the operational level, such as implementing isolated green measures without broader strategic integration, is unlikely to lead to systemic or lasting change. Baumgartner (2014) argues that when sustainability is not embedded in the overarching strategy, operational measures risk becoming symbolic rather than transformative. Without alignment to the organisation's long-term vision, such efforts may lack the capacity to address the root causes of unsustainable practices.

Together, these three levels form a hierarchical structure where strategic sustainability objectives are developed at the highest level, translated into structured processes at the tactical level, and ultimately implemented through specific actions at the operational level. Each levels plays a crucial role in integrating sustainability into an organisation, and alignment between them is essential for achieving sustainable impact. This is supported by Epstein and Buhovac (2014), who argue that a sustainability strategy alone is insufficient if it is not effectively executed through tactical planning and operational activities. Moreover, Székely and Brocke (2017), also argue that while the three dimensions of corporate sustainability may appear separate at the operational level, they must be integrated on the strategic level to ensure effective implementation. This further underscores the importance of effectively integrating the three levels.

2.4. Formulation of sustainability visions in organisational settings

Currently, companies mainly base their sustainability visions on (inter)national policies and goals (Hoessle, 2014)(Patuelli & Saracco, 2022). Specifically, the United Nation's Sustainable Development Goals (SDGs) have a huge influence on the formulation of an organisation's sustainability vision (Biermann, Kanie, & Kim, 2017). However, it is also important for a company itself to formulate a clear sustainability vision, as the formulation of a vision is often considered the starting point for a sustainability transition within organisational settings (Kantabutra, 2020). Reinforcing this idea, Engert and Baumgartner (2016), argue that a sustainability vision is essential for integrating sustainability into the organisational culture.

As many organisations face difficulties in integrating sustainability within their company's culture and climate, the formulation of a sustainability vision plays a centrale role (Epstein & Buhovac, 2010). A vision helps organisational members to focus on what is truly important to them and their stakeholders as they work to turn the vision into tangible actions (Ireland & Hitt, 1992). Moreover, according to Baumgartner (2014), developing a corporate sustainability strategy should be guided by a sustainability vision that prioritises long-term value creation for a broad range of stakeholders. In addition, Kantabutra (2020) even argues that in order for a company to survive, it needs to implement a clear sustainability vision. In his research he uses the definition of Baum, Locke, and Kirkpatrick (1998) to define a vision, which reads as follows: "a mental picture of a desired future for an organisation that each organisational member defines". This definition also ensures that a vision should be seen as an overarching goal instead of a very detailed one. In addition, it is important that the vision will be shared among organisational members to ensure alignment in strategy, culture, and operations while enhancing motivation and performance (Berson, Waldman, & Pearce, 2015)(Kantabutra, 2020).

Formulating a strong vision will help to bridge the gap between objectives and practices while ensuring alignment with the corporate culture and values (Graafland & Smid, 2016). Therefore, Kantabutra (2020) has developed a sustainability vision theory in which he introduces seven vision attributes needed in order to ensure corporate sustainability. His model explains how a well-structured vision enhances corporate sustainability performance by integrating vision content and attributes. This has

been visualised below:

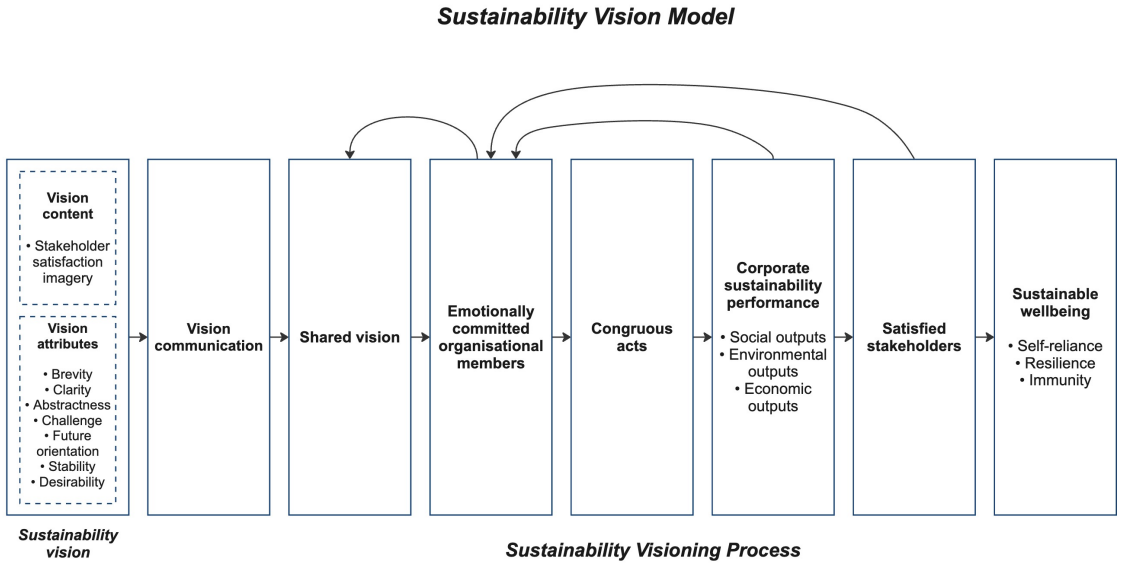

Figure 2.3: Sustainability Vision Model (own work, (Kantabutra, 2020))

Kantabutra's model (2020) starts with arguing the importance of the vision content to the future of the organisation. According to him, the vision content defines an organisation's values, strategic direction, and identity, while ensuring alignment among organisational members and stakeholders. He also states that strong vision content integrates stakeholder satisfaction, thereby balancing economic, social, and environmental goals to support and increase long-term sustainability.

Next, Kantabutra (2020) describes seven vision attributes, which define the characteristics that make a vision effective in guiding an organisation toward its long-term goals. Collectively, they enhance the vision communication and the sharing process. A shared vision allows an organisation to continuously adapt, which is essential for succeeding in the complex corporate landscape (Daft, 2017). The seven vision attributes according to Kantabutra (2009) are described below:

- *Brevity:* The extent to which a sustainability vision contains 11-22 words;
- *Clarity:* The extent to which a vision can be made clear in approximately 5 minutes by pointing directly at an overarching goal;
- *Abstractness:* The extent to which a vision is not a one-time, specific goal that can be achieved, and then the vision is abandoned;
- *Challenge:* The extent to which a vision challenges organisational members to persist with trying their best to deliver desirable outcomes;
- *Future orientation:*The extent to which a vision points toward the long-term perspective of an organisation;
- *Stability:* The extent to which a vision is unlikely to be affected by any environmental change;
- *Desirability:* The extent to which a vision declares an overarching goal that directly appeals to organisational members.

These elements together influence organisational members by reinforcing commitment, motivation, and psychological well-being. A clear vision enables a quick understanding and effective communication, while abstractness ensures that sustainability goals remain long-term and adaptable. Challenge creates intrinsic motivation and perseverance, while future orientation helps employees to adopt a long-term perspective in decision-making. Stability prevents confusion and ensures trust in leadership, and desirability enhances emotional commitment by giving employees a sense of purpose. When these elements align, organisational members internalise this vision, act accordingly, and contribute to improved

corporate sustainability. A reciprocal effect then occurs, where improved sustainability performance and stakeholder satisfaction further strengthen employees' emotional commitment, reinforcing vision sharing and long-term organisational resilience. (Kantabutra, 2020).

Kantabutra's theory thus shows the importance of formulating a strong sustainability vision for enhancing corporate sustainability and translating it into effective operational practices. According to Kantabutra (2020), the goal of a sustainability vision is to guide organisations in fully integrating social, environmental, and economic dimensions into their culture, strategy, and operations to ensure long-term sustainability. It functions as a foundational statement that reflects an organisation's commitment to balancing the needs of various stakeholders while ensuring corporate resilience, adaptability, and long-term value creation. It also outlines seven attributes that companies should adopt in their sustainability vision to motivate organisational members, create alignment, and enhance corporate sustainability performance. Ultimately this improves stakeholder satisfaction and the sustainable well-being of an organisation.

2.4.1. Importance of a sustainability vision within the CSRD

According to *Bruijnes, G* (2023), in the webinar *What does the CSRD mean for the construction and real estate sector?* of the Dutch Green Building Council, DGBC (2023), the importance of establishing a clear vision and ambition early on is also emphasised to ensure that the sustainability goals are genuinely integrated into a company's strategy. He states that companies should dedicate sufficient time to this process, as it serves as the foundation for sustainability reporting. According to him, during this initial phase, businesses must also decide whether to approach the CSRD as more than just a compliance requirement, using it as a tool to actively address identified opportunities, risks, and impacts within their operations. Additionally, it is highlighted that sustainability reporting is not a linear journey. Given the high level of precision and data quality required, companies may also realise that their current processes and strategies are not yet fully optimised for sustainability. This iterative process allows for continuous improvement. In the webinar a structured approach to this journey is visualised as follows:

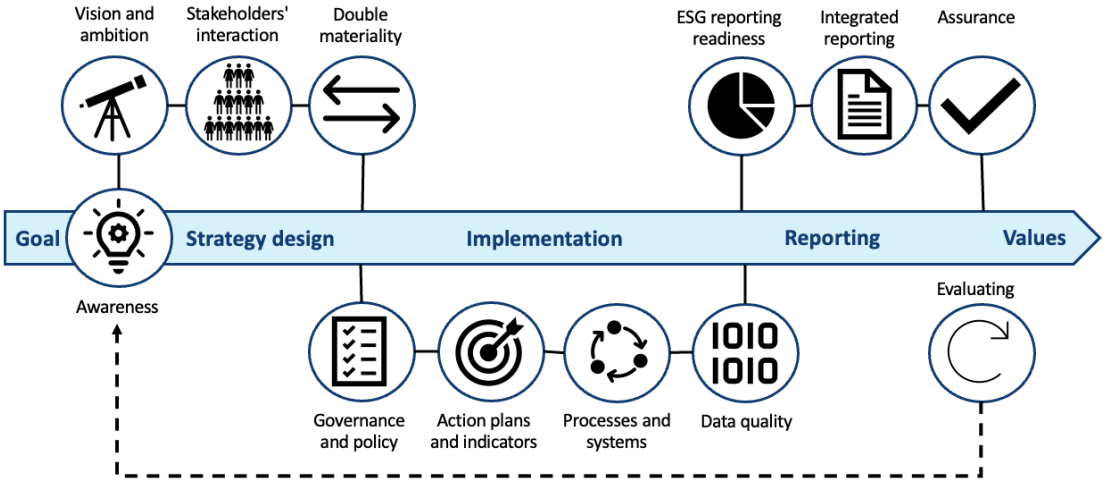

Figure 2.4: Process of reporting (own work, (DGBC, 2023))

In this webinar they also present a timeline, highlighting that for a 2026 report on the 2025 financial year, a company's vision and ambition should already be established by April 2024. This underscores the need for a sustainability vision when desiring a meaningful sustainability reporting process.

2.4.2. Motivations for formulating and implementing a sustainability vision

Companies increasingly formulate sustainability visions as part of their corporate strategy. However, multiple factors motivate companies to embrace and implement sustainability, ranging from external pressures to internal values. Understanding these underlying factors is essential, particularly because

some companies are not required to comply with any environmental regulations at all. Moreover, gaining insight into what drives companies can help explain differences in their level of engagement, the strategies they adopt, and the effectiveness of their implementation. These motivations can be described as follows:

Regulatory compliance
One fundamental motivation is compliance with laws and regulations. Companies often adopt sustainability practices to meet environmental and social regulations and to avoid legal sanctions. Regulatory drivers include both European and national government-imposed standards and rules. At the start of corporate sustainability initiatives, most companies were only motivated to formulate and implement sustainability visions by regulatory requirements (Epstein & Buhovac, 2014). Still, this compliance motive is often the starting point for sustainability engagement, providing a baseline that companies must at least meet before pursuing broader voluntary initiatives. (Simões-Coelho & Figueira, 2021).

Competitive advantage
Beyond mere compliance, companies are motivated by the prospect of a competitive advantage through sustainability. Optimising processes and innovative sustainable products can reduce costs and open new markets, thereby improving a firm's market position. (Simões-Coelho & Figueira, 2021). Moreover, according to Hoepner, Oikonomou, Scholtens, and Schröder (2016), companies have realised that a lack of sustainable practices can put them at a disadvantage, while innovations driven by sustainable development can strengthen their market position (Schneider, 2014). Additionally, Estébanez and Martín (2025) found that companies integrating sustainable practices into their strategy tend to achieve better financial performance, as these practices can improve operational efficiency, reduce costs, and increase customer loyalty. A sustainability vision can thus serve as a strategic tool, helping companies to attract clients and investors, while achieving long-term economic benefits (Simões-Coelho & Figueira, 2021).

Stakeholder pressure
According to stakeholder theory, businesses must respond to the interests and demands of parties affected by or affecting the firm (Haleem, Farooq, Cheng, & Waehrens, 2022). These stakeholders include customers, employees, investors, suppliers, communities, and NGOs, who increasingly expect companies to act responsibly. Literature often presents this as an effort to establish legitimacy: companies seek to "perceive that their actions are appropriate within a system of norms and beliefs" (Simões-Coelho & Figueira, 2021)(Epstein & Buhovac, 2014).

Risk management
Epstein and Buhovac (2014) emphasise that risk management is a key driver for companies to develop and implement sustainability strategies (visions). They argue that firms increasingly recognise that ignoring sustainability risks - such as environmental, social, and governance (ESG) concerns - can lead to financial losses, reputational damage, and regulatory penalties. Additionally, they point out that many companies frame sustainability as a risk management strategy to future-proof their business, recognising that long-term financial success is increasingly tied to environmental and social performance.

Ethical motives
Ethical motives for sustainability, as discussed by Bansal and Roth (2000), stem from a company's intrinsic sense of responsibility rather than external pressures. Some firms integrate sustainability simply because they believe it's the "right thing to do", often influenced by strong environmental values within top management and organisational culture (Wood, 1991)(Starik & Collins, 2014)(Simões-Coelho & Figueira, 2021). Ethical sustainability can also enhance employee morale and reinforce a long-term vision that prioritises societal and environmental well-being. (Bansal & Roth, 2000). These companies often pursue sustainability initiatives due to "serving human needs" rather than just profit (Christos, 2017).

2.5. Identified barriers to sustainability implementation

To ensure that sustainability is implemented in organisations' operational practices, it is needed to translate the sustainability vision into operational objectives. However, due to the absence of structured frameworks for implementing sustainability, objectives often remain at the strategic level, leaving uncertainty about the steps required for operational execution (Epstein & Buhovac, 2014)(Wijethilake, 2017). Moreover, Neri, Cagno, Di Sebastiano, and Trianni (2018) emphasise that even when companies would include sustainability at the strategic level, substantial changes are still required at the technological, managerial, organisational, and behavioural level. In the literature numerous barriers have been identified that hinder sustainability implementation. A complete overview of the identified barriers in the literature can be found in Appendix B. Barriers can in this context be defined as "hindrances in processes and structures that obstruct the achievement of sustainability in organisations" (Ershadi, Jefferies, Davis, & Mojtahedi, 2021). Many scholars classify these barriers into intra-organisational and extra-organisational categories, a distinction that will also be applied in this research (Stewart, Bey, & Boks, 2016)(Álvarez Jaramillo, Sossa, & Mendoza, 2018). The first category relates to internal processes, structures, and tools that organisations use to address sustainability, while the second focuses on external (stakeholder) influences (Gelderman, Semeijn, & Vluggen, 2017). Addressing these barriers is essential for successfully bridging the gap between sustainability strategy and its execution and for the development of successful sustainability strategies (Engert & Baumgartner, 2016)(Hueske & Guenther, 2021). Moreover, Orji (2019) emphasised that failure to address these barriers can lead to inefficiencies, resistance to change, and missed opportunities for sustainability implementation. Therefore, the following barriers have been identified and categorised:

Intra-organisational barriers

Barriers related to the lack of knowledge, skills, and awareness

The literature identifies a lack of knowledge, skills, and awareness as one of the key barriers of implementing sustainability in an organisation (Ershadi et al., 2021). Wijethilake (2017) highlights that corporations often struggle with insufficient managerial processes to translate sustainability goals into tangible outcomes. It emphasises that while top management may be interested in sustainability, it lacks clear knowledge on its execution. Moreover, Ametepey, Aigbavboa, and Ansah (2015) argue that employees lack the necessary expertise and skills as well to effectively implement sustainable (construction) methods. For instance, this includes inadequate familiarity with green building materials and energy-efficient designs. The difficulty of implementing sustainability is reaffirmed by Epstein and Buhovac (2014), as they state that this is fundamentally different from integrating other organisational strategies. On top of that, Fathalizadeh et al. (2021) mention the lack of awareness of the concept of sustainability and of the possible benefits of proactive sustainability measures as a significant barrier. These ambiguities also ensure that inadequate proactive plans are integrated in the organisation's strategy, which is needed to ensure sustainable development and measure corporate sustainability performance (Epstein & Buhovac, 2014)(Kontturi, 2023)(Orji, 2019).

Barriers related to financial and time constraints

These barriers are mainly present due to the persistent focus on short-term economic gain instead of a long-term sustainability vision (Sourani & Sohail, 2011). As sustainable investments often require higher investment costs and longer payback periods, it leads to a lower priority for implementation (Tokbolat, Karaca, Durdyev, & Calay, 2020). Furthermore, according to Ametepey et al. (2015), stakeholders perceive sustainable methods as more expensive, which discourages the adoption. Moreover, empirical research by Caldera, Desha, and Dawes (2019), identified financial and time constraints as major barriers in integrating sustainable practices. According to them, this is due to high initial costs, a lack of immediate financial benefits, limited financial resources, competing business priorities, and the time-intensive nature of sustainability implementation. Trianni, Cagno, and Neri (2017) support this view by stating that firms focus on short-term financial priorities, which reduces their willingness to allocate resources for energy-efficient and sustainable practices.

Barriers related to the organisational resistance to change

According to Lozano (2012), organisations are currently at the centre of the sustainability debate, as they are seen as key players equipped with the resources and technology to contribute to developing

more sustainable societies. However, organisational change is needed to implement these sustainable practices (Orji, 2019). Orji (2019)describes the main objective of organisational change as follows: “an anticipated, prepared for and managed opportunity to transit from a current status quo to a better state”. However, he also emphasises that organisational changes that disrupt the status quo are likely to face resistance across different hierarchical levels within the organisation. According to Kotter and Schlesinger (2008), many managers tend to overlook the underlying causes and severity of resistance to change, which can hinder long-lasting sustainable change. Folger and Skarlicki (1999) explain the resistance to change as “an individual reaction that arises from opposition to change”. Additionally, Siddiqui (2011), identified a lack of understanding among employees regarding the benefits of certain changes as a key reason for their resistance. According to Kontturi (2023), resistance is both one of the most common barriers and also considered very challenging to manage effectively. Bovey and Hede (2001) argue that one of the main reasons resistance is difficult to manage, is that organisations focus on suppressing resistance rather than strategically addressing it. Instead of viewing resistance as a barrier, organisations should recognise it as an opportunity to engage employees in the change process and adapt strategies accordingly (Bovey & Hede, 2001).

Barriers related to the lack of commitment of the (top) management and employees
Many scholars identify the lack of commitment of the (top) management of an organisation as a key barrier for implementing sustainability (Cagno, Trianni, Spallina, & Marchesani, 2016)(Engert & Baumgartner, 2016). According to Wijethilake and Lama (2019), strong commitment from senior management is needed to engage the whole organisation in sustainable projects. Moreover, Ghazilla et al. (2015) argue that resistance will be increased among various organisational levels when this commitment is not present. While integrating sustainability is a shared responsibility among the organisation, achieving alignment across teams and individuals requires strong commitment and leadership (Ershadi et al., 2021). Furthermore, (Sourani & Sohail, 2011), state that the willingness of other managers to embraces sustainability initiatives is closely linked to the commitment of senior management in advocating for such efforts. However, also the motivation of employees contributes to the implementation of sustainable practices (Neri et al., 2018). Engert and Baumgartner (2016) emphasise as well that employee cooperation is essential for sustainability strategy implementation. Therefore, it is essential to ensure commitment and motivation at all levels of the organisation. According to Epstein and Buhovac (2014), managers can strengthen this motivation by introducing formal mechanisms such as incentives/rewards for its employees.

Barriers related to the organisational structure and culture
Kansky (2016) refers to the term organisational structure to whether an organisation is for profit or non-profit, the board composition, its governance structure, and the corporate strategy. He also mentions that while there is no best organisational structure, a sustainable corporation is more likely to succeed when given thoughtful consideration to those fundamental aspects of the organisational design. Furthermore, he warns to be prepared for making tough changes needed to overcome certain barriers. The alignment of sustainability strategies, organisational structure, and organisational processes is very important in the implementation phase. However, to ensure this, clear communication between department heads is essential (Engert & Baumgartner, 2016). Yet, the lack of communication across different departments can also be identified as a huge barrier within organisations (Ershadi et al., 2021)(Orji, 2019). Lastly, the organisational culture is also identified as a barrier by Ershadi et al. (2021), which they define as the combination of beliefs, values, and attitudes that shape the sustainability culture within an organisation. Building a sustainability-positive organisational culture is crucial for aligning structures, people, and processes, thereby ensuring the greatest impact in achieving sustainability goals (Matinaro & Liu, 2017). Another challenge highlighted by Engert and Baumgartner (2016), is that despite having a defined sustainability vision, employees lacked a common understanding of how sustainability relates to their daily activities. This shows that formal structures are not enough, and that cultural integration is necessary.

Extra-organisational barriers

Barriers related to the lack of incentives
According to Hueskes, Verhoest, and Block (2017), corporations require strong incentives to actively invest in all three dimensions of sustainability. Ershadi et al. (2021) identified two key reasons for the lack of incentives: first, existing incentives are ineffective, and second, there are not enough incentives to sufficiently encourage companies to take action. Research by Ghadge, Kaklamanou, Choudhary, and Bourlakis (2017) found that incentives would encourage subcontractors to reduce the environmental impact of their activities while adhering to sustainability principles. Moreover, Trianni et al. (2017), mention that the availability of economic incentives would lower costs associated with implementing sustainability practices, thereby shortening the payback period. Without such incentives, sustainability investments become more costly, which could negatively impact the organisations willingness to adopt sustainable practices (Trianni et al., 2017). In this context, incentives can be either government-driven, such as subsidies and tax exemptions, or market-based, including customer demand and competitive advantage.

Barriers related to the regulatory environment
Many scholars have argued that sustainability regulations (legal requirements and legislation) are ineffective, insufficient, and inadequately enforced to ensure sustainable practices in the private sector (Ershadi et al., 2021). They also highlight the growing importance of auditing in projects to ensure alignment with the sustainability targets set at the start and to prevent deviations. Caldera et al. (2019) also identified weak regulations as a barrier but considered as a less impactful barrier than other literature suggested. Indeed, on the other hand, Stewart et al. (2016) considered effective governmental regulation as a crucial part in sustainability implementation. A study by Vieira and Amaral (2016) shared this view, however they emphasise that regulations should also be seen as an encouragement for sustainability implementation. They argue that the regulations should not merely be considered as a legal obligation, but also as an opportunity for growth and improvement.

Barriers related to the difficulty of defining sustainability performance metrics
Epstein and Buhovac (2014) highlight that sustainability initiatives present unique measurement challenges compared to conventional business strategies. Unlike short-term financial performance, sustainability impacts often unfold over longer periods and involve complex, less tangible factors, making their integration into decision-making more complex. R. A. George, Siti-Nabiha, Jalaludin, and Abdalla (2016) also argue that measuring sustainability performance is challenging due to requiring the integration of economic, environmental, and social factors into a single framework. Moreover, the absence of standardised measurement approaches makes it difficult for organisations to track progress consistently and compare results across industries. Additionally, many companies struggle to align their sustainability goals with their business strategies, as the financial benefits of sustainability initiatives are not always immediately clear or measurable. (R. A. George et al., 2016). These challenges have also been identified by *Translating an ambitious vision into global transformation: the 2030 agenda for sustainable development* (2015), who highlight the lack of standardisation of sustainability performance metrics. Additionally, they argue that many indicators fail to capture the full scope of sustainability, with some focusing on inputs rather than actual outcomes. This mismatch between goals and measurement tools makes it difficult to track progress effectively. These challenges arise from the lack of shared understanding of sustainability values among stakeholders, which is essential for effectively coordinating sustainable initiatives (Ershadi et al., 2021).

2.6. Drivers and enablers to sustainability implementation

Besides barriers to sustainability implementation, the literature has also identified several drivers and enablers to support actual sustainability implementation in operational practices. While there is extensive literature done on barriers to sustainability, research on practical strategies for successfully implementing sustainability remains more scarce and less developed (Klettner et al., 2014). Consequently, managers face considerable challenges in translating sustainability goals into concrete initiatives (Epstein & Roy, 2001). The literature does, however, focus on drivers, which Hueske and Guenther (2021)

define as factors that facilitate the successful implementation of sustainability into a company's operations. Defining these drivers is important as they might improve the chances of successful implementation (Hueske & Guenther, 2021). Furthermore, it is essential to define enablers, which are practical actions that support the adoption and implementation of sustainability initiatives and help mitigate barriers (Neri et al., 2018).

Since the drivers closely align with the barriers, they are also categorised into internal and external drivers and are only briefly discussed below:

Intra-organisational drivers

- An obvious driver would be an *organisation's willingness* to improve their sustainability related performance (Neri et al., 2018)(Vieira & Amaral, 2016).
- The same applies for *management and employee commitment* to enhance sustainability. (Neri et al., 2018)(Trianni et al., 2017)(Manninen & Huiskonen, 2022)(Hueske & Guenther, 2021).
- This commitment can be strengthened through *training and education programs*, which help to raise awareness and enhance knowledge among both management and employees. (Neri et al., 2018)(Gelderman et al., 2017)(Engert & Baumgartner, 2016)(Manninen & Huiskonen, 2022)(Hueske & Guenther, 2021).
- *Effective leadership* plays a role in driving commitment as well, while also supporting the implementation of a sustainability strategy. (Engert & Baumgartner, 2016)(Vieira & Amaral, 2016).
- When a company's values and culture align with sustainability principles, they serve as a key driver for adopting sustainable practices (Neri et al., 2018). Numerous studies have emphasised the crucial role of *organisational culture* in the successful implementation of corporate sustainability. A sustainability-focused culture is believed to positively influence the behaviour of both managers and employees, guiding them toward sustainable practices. (Engert & Baumgartner, 2016)(Vieira & Amaral, 2016)(Engert, Rauter, & Baumgartner, 2016)(Hueske & Guenther, 2021).
- The *organisational structure* can also have a positive influence on sustainability implementation, particularly in defining who is responsible for sustainability initiatives and how these efforts are structured and communicated within the company. (Engert & Baumgartner, 2016)(Hueske & Guenther, 2021).
- To strengthen sustainability efforts, sustainability principles should be embedded in the company's vision and mission and *integrated into the overall firm strategy* with a long-term perspective. (Neri et al., 2018)(Cagno et al., 2016)(Hueske & Guenther, 2021)(Engert et al., 2016).
- A company's commitment to complying with both *current and future regulations* (Neri et al., 2018).
- A strong dialogue and *effective communication* within an organisation can encourage the exchange of sustainability information among employees and management. (Neri et al., 2018)(European Environment Agency, 2024)(Manninen & Huiskonen, 2022)(Hueske & Guenther, 2021).
- Organisations that view sustainability as an *ethical responsibility* and acknowledge their social and environmental impact tend to integrate sustainability more quickly. (Gelderman et al., 2017)(Engert & Baumgartner, 2016).

Extra-organisational drivers

- *Regulatory pressure* has been identified as one of the most significant external influences, including the desire to avoid sanctions. (Neri et al., 2018)(Gelderman et al., 2017).
- *External support* from parties such as the government, consultants, and industrial associations. This includes both financial support and the provision knowledge, advice, and resources. (Neri et al., 2018)(Gelderman et al., 2017)(Hueske & Guenther, 2021).
- Moreover, *external pressures* from customers, communities, partners, shareholders, competitors, and the public can enhance sustainability implementation. (Neri et al., 2018)(Gelderman et al., 2017). The respective risk to reputational damage also serves as a strong incentive for improvement. (Vieira & Amaral, 2016)(Engert et al., 2016).
- Lastly, when a company views sustainability as a strategic advantage, it will become a key priority in achieving business goals. Sustainability implementation will then be considered a *competitive advantage*. (Neri et al., 2018)(Engert et al., 2016)(Manninen & Huiskonen, 2022).

As seen, (most of) these drivers do not provide concrete actions to overcome barriers but rather serve as guiding principles to support sustainability implementation within an organisation. Therefore, it is important to identify enablers as well, which refer to practical activities that can help to overcome the identified barriers.

Enablers

The enablers outlined below focus on addressing the intra-organisational barriers, as these are the aspects that organisations can directly influence and have received the most attention in the literature. Moreover, Gelderman et al. (2017) found that organisations are influenced by internal drivers rather than external drivers, which is why the focus is placed on these factors.

Enablers related to the lack of knowledge, skills, and awareness

- *Invest in education and training:* A recurring recommendation in the literature is to build internal capacity through sustainability education and training programs (Neri et al., 2018). Such programs raise awareness and provide employees with the necessary skills to implement sustainability practices (Adelusola, 2024). For example, companies can conduct workshops, e-learning courses, or certification programs focused on sustainable operations and problem-solving (Engert & Baumgartner, 2016). Continuing professional education and even communication training have also been identified as enablers to address knowledge gaps (Aboueid, Beyene, & Nur, 2023).
- *Develop sustainability "champions" and teams:* Designating in-house "sustainability champions" or forming cross-functional green teams can drive knowledge-sharing and enthusiasm (Adelusola, 2024). Moreover, research has emphasised that motivated individuals can be key enablers, as having dedicated employees focused on sustainability helps to spread expertise and awareness across the organisation (Aboueid et al., 2023).
- *Leverage external expertise:* If in-house skills are lacking, a possibility is to bring in outside expertise (Shabaya, 2014). Hiring specialised sustainability consultants or partnering with academic and industry experts might fill knowledge gaps. These experts can provide training for management, who can then transfer their knowledge to employees. (Adelusola, 2024).

Enablers related to financial and time constraints

- *Secure financial support and incentives:* Financial barriers might be overcome by actively seeking external funding. Studies on SMEs find that applying for grants, subsidies or low-interest green loans is a practical way to fund sustainability initiatives (Durrani, Raziq, Mahmood, & Khan, 2024). Moreover, the government might offer financial incentives, such as tax breaks (Adelusola, 2024). Internally, organisations should incorporate sustainability into their financial planning by accounting for long-term cost savings from these initiatives (Muyiwa-Ajayi, Sobowale, & Augoye, 2024). Emphasising cost benefits (energy savings, waste reduction savings, improved reputation) can make the upfront investment more acceptable (Adelusola, 2024).
- *Allocate time and resources strategically:* Time constraints often stem from employees already having full workloads and seeing sustainability as "additional" work (Zhang, Zhang, Liu, & Chen, 2022). To tackle this, companies can embed sustainability tasks into existing roles and processes. This can be done by dedicating staff and budget resources to sustainability projects (Aboueid et al., 2023).

Enablers related to the organisational resistance to change

- *Show benefits of sustainable change:* Resistance to change is a common organisational hurdle, coming both from employees and management. A first step is to communicate a clear vision and the benefits of sustainability to all members of the organisation (Adelusola, 2024). Explaining how sustainability initiatives align with the company's core values or long-term success can also help to show the personal and organisational relevance of the changes (Gannon & Hieker, 2022). Moreover, research has indicated that enhancing employee engagement and showing tangible benefits are effective strategies to convince those hesitant of change (Aboueid et al., 2023).
- *Create individual willingness to change:* To enhance an individual's willingness to change, the framework of Siddiqui (2011) identified five key elements. Self-efficacy boosts employees' confidence in their abilities, reducing anxiety and resistance. Principal support from top management

provides necessary resources and encouragement, creating a collaborative environment. Discrepancy highlights the gap between the current and desired future state, motivating change. Appropriateness ensures that proposed changes align with organisational goals and challenges. Finally, personal valence emphasises the personal benefits of change, which can increase employee engagement and reduce resistance, ultimately supporting successful organisational change.

- *Leadership and incentives:* Effective leadership is important in overcoming internal resistance. Leaders and top managers should consistently demonstrate commitment through their actions. (Engert & Baumgartner, 2016). For instance, by adopting sustainable practices in their own departments and recognising teams that contribute to sustainability goals (Adelusola, 2024). Additionally, aligning incentive structures, such as recognition for sustainable behaviour, can encourage people toward embracing sustainability (Chu & Cheung, 2018). Moreover, Machado, De Lima, Da Costa, Angelis, and Mattioda (2017) argue that leaders must communicate their sustainability vision consistently to all employees and stakeholders.
- *Employee collaboration:* Research on organisational sustainability change highlights that employees are more likely to overcome initial resistance when they feel part of a team, working together toward a meaningful goal (Ispiryan, Pakeltiene, Ispiryan, & Giedraitis, 2024).

Enablers related to the lack of commitment of the (top) management and employees

- *Demonstrate (top) management commitment:* To counter a lack of management commitment, companies should ensure visible and active support from senior leadership (Epstein & Buhovac, 2014). In practice, this means that executives need to actively support sustainability into the corporate culture, integrating it into the corporate mission/strategy, talking about it in communications, and allocating resources to it. (Engert & Baumgartner, 2016)(Neri et al., 2018). This leadership role is crucial, and setting up formal governance structures (like sustainability councils or committees) helps to embed that commitment into the organisation. (McGrady & Golicic, 2023).
- *Engage employees:* Commitment at the employee level can be created by engagement initiatives that make sustainability personally relevant and rewarding (Neri et al., 2018). This idea is reinforced by Epstein and Buhovac (2014), who argue that the use of incentives, such as a reward system, can help to increase commitment. Kucharska (2020) pointed out that when sustainability efforts are directly aligned with the core values of the organisation and employee roles, they become more motivating. According to Hueske and Guenther (2021), creating a culture of open knowledge sharing between colleagues can encourage employees to feel more involved and thus engaged in sustainability initiatives. Moreover, (Ispiryan et al., 2024) argue that people are more committed when they see their work as part of a larger purpose.
- *Establish a clear sustainability vision:* The model of Kantabutra (2020) highlights that a strong, well-structured vision can serve as a motivational tool, aligning employees and management towards shared sustainability objectives. According to him, a sustainability vision should possess seven key attributes, that facilitate vision communication, alignment, and emotional commitment among employees (see section 3.3). When employees internalise the vision and see how their roles contribute to long-term sustainability goals, their motivation increases.

Enablers related to the organisational structure and culture

- *Integrate sustainability across organisational structure:* Rather than limiting sustainability to a small CSR department, research suggests that it should be embedded in every aspect of the organisation. In practical terms, this could mean establishing cross-functional teams or committees that bring together different departments to work on sustainability projects. Regular cross-department meetings ensure information flows and an understanding of how their function contributes to broader sustainability goals. (Ispiryan et al., 2024). It's also useful to assign clear tasks and responsibilities for sustainability initiatives, so each department knows its role (Jenkins, 2002).
- *Integration into the core strategy:* According to Epstein and Buhovac (2014), sustainability should be embedded in the core organisational strategy, rather than being a separate initiative. They argue that to make sustainability work, it must be aligned with the company's mission, vision, and long-term goals. This ensures that sustainability is a fundamental part of the organisation's

operations. Manninen and Huiskonen (2022) emphasise as well that the culture should value sustainability highly across all levels of the organisation, making it part of daily operations instead of merely an isolated goal. This can be done by internal marketing that connect sustainability to the company's identity and celebrating sustainability success companywide (Polman & Bhattacharya, 2016).

- *Create a supportive and sustainable culture:* According to Manninen and Huiskonen (2022), when sustainability becomes integrated in the organisational culture, employees naturally align their actions with the organisation's sustainability goals. Moreover, Epstein and Buhovac (2014) highlight the importance of creating an environment where sustainability is not merely a set of policies but is integrated into the company's core values and daily operations. Additionally, a sustainability culture can be further strengthened through other enablers previously mentioned, such as strong leadership and employee commitment, knowledge sharing, and targeted training programs (Manninen & Huiskonen, 2022). By taking these steps, Epstein and Buhovac (2014) suggest that organisations can create a proactive, sustainability-oriented culture that drives long-term success.
- *Effective communication:* According to Babatunde (2015), effective communication starts with the clarity of the message. Moreover, he advocates for choosing the right method of communication (written, verbal, or non-verbal) depending on the audience and context. His article also emphasises the importance of establishing a feedback loop, which allows employees to ask questions and provide input. Lastly, he argues that messages about sustainability should come from credible sources within the organisation and should be repeated consistently across all departments.

Thus, the literature has identified various barriers to sustainability implementation, categorised into intra- and extra-organisational barriers. Additionally, several drivers of sustainability implementation have been recognised, which largely mirror these barriers and often serve as their counterparts. To address the intra-organisational barriers, specific enablers have been identified, offering more concrete actions than the broader drivers. An overview of how the intra-organisational barriers relate to the enablers can be found below:

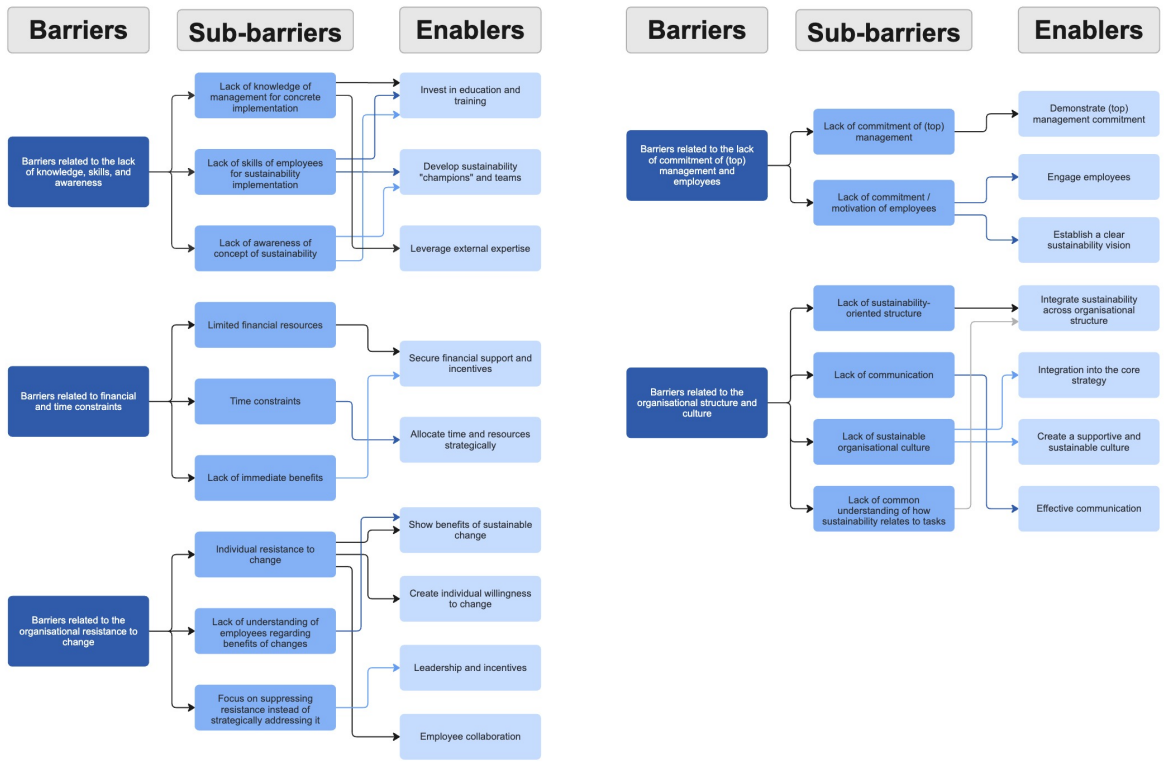

Figure 2.5: Overview (sub)barriers and enablers (own work)

2.7. Conclusion and next steps

This literature review has provided a conceptual foundation for understanding sustainability in the context of the United Nations, the European Union, and specifically the real estate sector and property asset management companies. This revealed that the ESG framework is increasingly used as the dominant lens through which sustainability is defined at the corporate level. This framework is also embedded in key instruments such as the CSRD and the EU Taxonomy, further reinforcing its relevance in both policy and practice. Additionally, the review showed that for a company to be considered truly sustainable, sustainability must be embedded across all organisational levels: strategic, tactical, and operational. This means aligning long-term vision and goals, translating these into internal processes and structures, and ensuring they are reflected in concrete, day-to-day actions.

In terms of current practice, property asset management companies primarily focus on environmental sustainability, with a strong emphasis on reducing energy consumption and improving energy efficiency in building portfolios. To guide these efforts, companies often rely on established frameworks like BREEAM and GRESB. However, these frameworks are largely assessment-oriented: they focus on evaluating and disclosing performance outcomes, rather than providing structured guidance on how to achieve those outcomes. As a result, they offer limited support for organisations seeking to better integrate sustainability within their properties.

The literature also identified a range of motivations that drive sustainability implementation, such as regulatory compliance, competitive advantage, stakeholder pressure, risk management, and ethical values. At the same time, organisations face numerous barriers, including limited internal capacity, a resistance to change, and short-term financial thinking. Various strategies have been suggested to overcome these barriers, such as embedding a strong sustainability vision, investing in education and training, and the creation of a supportive and sustainable culture. However, these insights remain mostly conceptual and are not specific to the Dutch property asset management context.

This points to a broader gap in both academic literature and practice: there is currently no comprehensive, action-oriented framework that describes specifically how property asset management companies can improve their internal sustainability implementation. As a result, it remains unclear how these companies can best translate sustainability ambitions into practice; both at the strategic level and within day-to-day operations. Addressing this gap requires a deeper understanding of the organisational dynamics, being the motivations, barriers, and strategies that shape sustainability efforts in the specific property asset management context. This will be explored through an empirical research in Chapter 5. Additionally, a detailed understanding of the CSRD is needed to assess the role this Directive can play in supporting sustainability implementation, which will be explored in the next chapter.

3

Document review

This document review will start by discussing the general context and objectives of the Corporate Sustainability Reporting Directive (CSRD). This is followed by examining the scope of the CSRD, after which the structure with the essential principles is discussed. Subsequently, the requirements of the CSRD as stated in the European Sustainability Reporting Standards (ESRS) are elaborated on. The last section provides a conclusion of this chapter and describes the next steps. This chapter reviews two official EU documents. First, the Directive (EU) 2022/2464, and second, the Delegated Regulation (EU) 2023/2772. The outcome of this review should largely answer the second sub-question and also contributes to answering the fourth.

3.1. Corporate Sustainability Reporting Directive (CSRD)

The Corporate Sustainability Reporting Directive (CSRD) is a European Directive that initially came into effect on 5 January 2023, as a part of the European Green Deal (European Commission, n.d.-a). The Directive requires companies to disclose standardised information about their environmental, social, and governance (ESG) impacts in a sustainability report. The report should (among others) cover the company's impact on people and the environment, the role of sustainability in the corporate governance, the financial sustainability risks and opportunities in both the short- and long term, how sustainability is part of the business strategy, and the company's sustainability objectives. This report will have to become a part of the annual board report and must be assessed by an external auditor (Directive (EU) 2022/2464). Each year, more companies are required to prepare this report, with estimates suggesting that approximately 50,000 companies of the European Union will ultimately fall under the scope of the CSRD. (SER, n.d.). The CSRD will replace voluntary sustainability reporting with a uniform and mandatory standard, ensuring greater transparency regarding the sustainability performance of organisations (NBA, 2025).

Important to note is that on the 26th of February of 2025, the European Commission has proposed a new set of proposals to simplify certain EU rules, which they describe as "a major step forward in creating a more favourable business environment to help EU companies grow" (European Commission, 2025). These proposals aim to simplify EU regulatory requirements for all businesses while significantly reducing administrative costs. If these proposals were to be approved by the Parliament and the Council, they will have a major impact on the scope of the CSRD. Firstly, this would result in approximately 80% of the companies being excluded from the CSRD's scope, shifting the focus primarily to the largest corporations that have the greatest impact on both society and the environment. Secondly, these proposals ensure that sustainability reporting requirements for large companies do not place a burden on smaller businesses in their value chains. These are the most significant changes regarding the CSRD, though the content remains (largely) unchanged. It is uncertain when a decision on these changes will be made, but the Commission has requested that these changes receive priority consideration by the co-legislators. (European Commission, 2025).

Yet, these changes will have a minimal impact on the continuation of this research, as (property asset management) companies are still confronted with the same fundamental question: how to integrate sustainability into their operations. While the CSRD may no longer be as prescriptive, it might still serve as

a guiding framework for sustainability implementation. This perspective is supported by Meijer (2025), CSRD expert at Sweco, who notes: “From the market, you hear that the (property management) parties already working on CSRD reporting are continuing as planned. A lot of work is already set in motion, so this isn’t stopping them.”

Moreover, according to de Waal (2025) in the webinar *construction companies and the CSRD*, the CSRD also presents an opportunity for companies to stand out. As sustainability becomes increasingly important, meeting CSRD standards can position them as forward-thinking and responsible industry leaders. By actively integrating sustainability efforts, companies might attract new partners and clients who prioritise environmental and social responsibility. These benefits remain the same, regardless of whether the CSRD will be mandatory or not. This first statement has also been supported by the European Commission, which mention that high-quality sustainability reporting might improve companies’ access to finance, as investors and lenders increasingly consider ESG factors in their decision-making (Directive (EU) 2022/2464, recital 11&12).

3.1.1. General context and objectives

In response to the Paris Climate Agreement of 2015, the European Union launched the European Green Deal in 2019. The Green Deal consists of a set of policy initiatives, with the main goal to become the world’s first climate neutral continent by 2050. (Council of the European Union, 2024). The Green Deal committed to revising non-financial reporting to ensure reliable and comparable sustainability information. To achieve this, the Corporate Sustainability Reporting Directive (CSRD) was introduced. (Jurgens-Boot & van Wijk, 2024). With this introduction, the CSRD also immediately replaced the Non-Financial Reporting Directive (NFRD). The NFRD had similar objectives as the CSRD, but merely applied to large, listed companies, bank, and insurance companies with more than 500 employees and a public interest (Hahnkamper-Vandenbulcke, 2021). The CSRD has thus significantly broadened this scope, now applying to nearly all large companies as well as listed medium-sized and small enterprises (see section 3.1.2 for the exact scope). While the CSRD mostly focuses on who needs to report and why sustainability reporting is required, the European Sustainability Reporting Standards (ESRS), are the technical standards developed under the CSRD to specify what and how companies must report (European Commission, 2023). Both of these regulations base the definition of sustainability on the EU Taxonomy Regulation (which in turn bases its definition on the 17 SDGs), which serves as a classification system that sets criteria for determining whether an economic activity qualifies as environmentally sustainable. This regulation states that an economic activity can only be considered sustainable if it contributes substantially to one of the six environmental objectives and does not seriously harm the other five (Do No Significant Harm, DNSH). (Jurgens-Boot & van Wijk, 2024). These environmental objectives are as follows:

- Climate mitigation;
- Climate adaptation;
- Sustainable use and protection of water and marine resources;
- Transition to a circular economy;
- Prevention and control of pollution;
- Protection and restoration of biodiversity and ecosystems.

(Art. 9 Regulation (EU) 2020/852)

In turn, this EU Taxonomy stems from the renewed Action Plan on Financing Sustainability Growth, which outlines a comprehensive strategy to align the financial system with the sustainability goals and which again stems from the EU Green Deal (European Commission, 2020).

It has thus become clear that the CSRD is closely linked to multiple other regulations, but from now on the focus will be solely on the CSRD and the ESRS. The European Commission proposed the Directive in April 2021, and it was adopted by the European Parliament on 10 November 2022. After approval by the European Council, the CSRD was published in the Official Journal of the EU in December 2022, under Directive (EU) 2022/2464. As mentioned, after this publication, the Directive entered into force on 5 January 2023. Hereafter, the implementation period started for the EU member states. Officially,

the Dutch legislator had 18 months from then on (until July 2024) to transpose the CSRD into national law. However, this transposition has not yet been completed. (SER, n.d.). Mainly two implementation proposals are important regarding the implementation of the CSRD in Dutch legislation:

1. Sustainability Reporting Directive Implementation Act ("the Bill): This Bill focusses on the parts of the CSRD that amend the Audit Directive and Transparency Directive. Following a consultation held in 2023, an (amended) Bill has been accepted by the Council of State. Currently, the Bill has been submitted to the House of Representatives. Afterwards, it still needs to be adopted by the Senate. (van Dijk, M Cremers, Rietveld, & Bier, 2024). The progress of the Bill is visualised below:

Figure 3.1: Progress of implementation of the Bill (own work, (Overheid.nl, 2024a))

2. Implementation Decree Sustainability Reporting Directive ("the Implementation Decree"): This Decree regulates (among others) what sustainability information companies must report on. The Decree was on 12 June 2024 presented to the Senate and House of Representatives. After a period of four weeks, this Decision must be submitted to the Advisory Division of the Council of State before final adoption. (Van Dijk et al., 2024). The progress of the Bill is visualised below:

Figure 3.2: Progress of implementation of the Decree (own work, (Overheid.nl, 2024b))

The contents of the Bill and the Implementation Decision are not yet final until the time of their adoption (Van Dijk, 2024). However, as the Dutch legislator has chosen to implement the CSRD into Dutch laws and regulations on a policy-neutral basis, most provisions from the CSRD will be adopted word for word, without any additional requirements being introduced (Laan, 2024). Therefore, this thesis will assume the CSRD as it is currently stated in the Directive (EU) 2022/2464, even though it is not transposed to Dutch law yet.

Objectives CSRD

In the official published Directive, the European Commission has formulated several reasons for implementing the CSRD. The full overview of these reasons, including their exact recitals, can be found in Appendix A. However, only the four most important objectives are written down below. This section is based on their direct relevance to property asset management companies and their role in linking sustainability reporting to actual implementation and impact. These can be summarised as follows:

1. *Ensuring transparency, reliability, and comparability of sustainability information:*
   The CSRD aims to enhance transparency, reliability, and comparability of sustainability information across the EU. The Directive responds to the European Green Deal and the Action Plan on Financing Sustainable Growth by establishing mandatory sustainability reporting standards, ensuring that ESG data is complete, standardised, and trustworthy. This addresses previous gaps in non-financial disclosures, as identified in the review of the NFRD, where many companies failed to report critical sustainability impacts, including greenhouse gas emissions, and biodiversity loss. The CSRD mandates a common reporting framework to improve comparability, preventing inconsistencies that resulted from voluntary guidelines, and strengthening corporate accountability to investors, stakeholders, and policymakers. Additionally, the directive aligns with international and EU sustainability frameworks, including the UN Sustainable Development Goals and key EU regulations such as the SFDR, and the EU Taxonomy.

2. *Extending corporate accountability:*
   The CSRD strengthens corporate accountability by expanding sustainability reporting requirements to all large undertakings, ensuring they are responsible for their environmental and social impacts across their value chains. The directive addresses the lack of material sustainability disclosures, which has previously hindered transparency and oversight, by introducing mandatory and standardised ESG reporting. Without clear reporting rules, stakeholders such as NGOs, social partners, and local communities have struggled to hold companies accountable for their sustainability performance. By enhancing audit requirements and ensuring consistent disclosures, the CSRD provides a framework for greater corporate responsibility and oversight.
3. *Strengthening the European Green Deal and climate neutrality goals:*
   The CSRD reinforces the European Green Deal and the EU's climate neutrality objectives by requiring corporate sustainability reporting that aligns with key environmental goals. It directly supports the EU's commitment to achieving climate neutrality by 2050, as set out in Regulation (EU) 2021/1119, and integrates the EU Biodiversity Strategy for 2030 to ensure companies disclose their impact on biodiversity, resource conservation, and pollution reduction. Furthermore, the CSRD mandates that companies disclose climate transition plans aligned with the Paris Agreement's 1.5°C target to ensure robust sustainability strategies. They also highlight that climate-related reporting can be used for companies to assess risks and opportunities, attract a diverse investor base, and reduce capital costs.
4. *Facilitating sustainable finance and redirecting capital flows:*
   The CSRD plays a key role in facilitating sustainable finance by ensuring that capital flows are redirected towards environmentally and socially responsible investments. It supports the objectives of the Action Plan on Financing Sustainable Growth by enhancing transparency and managing financial risks associated with climate change. Recognising the European Parliament's call for mandatory non-financial reporting standards, the directive expands reporting obligations and introduces audit requirements to strengthen investor confidence. With the rising demand for corporate sustainability information, the CSRD ensures that investors and stakeholders have access to reliable and comparable ESG data to make informed decisions.

(Directive (EU) 2022/2464)

Consequences of failure to comply
Currently, there are no official consequences for companies that fail to meet the CSRD requirements. However, according to Meijer (2025), a CSRD expert at Sweco, failure to comply with the CSRD may result in the auditor refusing to approve the annual report. This can lead to indirect market repercussions, as it may discourage potential partners from collaborating with the company or investors from committing to it.

In line with this, the Dutch professional body for accountants (NBA) notes that although the CSRD has not yet been transposed into Dutch national law, organisations are already expected to act in accordance with the proposed regulations. Auditors are advised to take these expectations into account during their review process. As such, even in the absence of formal legal enforcement, both companies and auditors are encouraged to begin aligning their practices with the CSRD framework as much as possible. (NBA, 2025).

3.1.2. Scope of the CSRD

When the new proposals of the Commission are not adopted, the CSRD will eventually apply to around 5,000 Dutch companies, with the first companies required to report on the 2024 financial year (SER, n.d.). Below is a clear timeline outlining when different companies will be required to report under the CSRD:

From 2025 onwards, all organisations already covered by the Non-Financial Reporting Directive (NFRD)* regulations, will be required to report on their 2024 sustainability performance. These companies must meet the following two conditions:

- >500 employees (average workforce at balance sheet date)

- Enterprise of public-interest (banks, insurance companies, listed entities)

From January 2026, large European companies (vennootschappen), including banks and insurance companies (with or without listing) will also have to report on their 2025 sustainability performances. This includes companies that meet at least two of the following three criteria:

- >250 employees
- > €50 million turnover
- > €25 million balance sheet total

From January 2027, listed European SMEs (excluding micro-enterprises) must report on their 2026 sustainability performance as well. This includes companies that meet at least two of the following three criteria:

- 50-250 employees
- €10 million - €50 million turnover
- €5 million - €25million balance sheet total

From January 2029, non-European companies with at least one branch or daughter company in Europe generating more than €150 million in turnover will be required to report for the first time, covering their financial activities for the 2028 fiscal year.

(Willems, 2024)(Laan, 2024)(Directive(EU)2022/2464)

* The Non-Financial Reporting Directive (NFRD) can be seen as the predecessor of the CSRD. The NFRD falls short in providing comparabile and reliable non-financial disclosures. Once the CSRD is fully implemented, replacing the NFRD, it is expected to address these shortcomings. The NFRD required companies to disclose non-financial information with the objective to enhance transparency on social and environmental impact of companies and to support sustainable economic growth. The NFRD merely applied to large, listed companies, bank, and insurance companies with more than 500 employees and a public-interest. (Hahnkamper-Vandenbulcke, 2021). (Directive 2014/95/EU).

An important consideration in this context is that also companies not directly subject to reporting obligations under the CSRD are still likely to feel its impact. This is because companies required to report under the CSRD must also disclose various material sustainability indicators across their value chain. As a result, for instance suppliers or producers working with a reporting company may be asked to provide information on certain sustainability factors, even if they are initially not obligated to report on of them. (SER, n.d.). This is explicitly outlined in Article 19bis(2)(f), which requires companies to consider not only the negative effects of their own activities but also those arising within their value chain (ter Hoeven, 2023)(Directive (EU) 2022/2464). There are even specific ESRS standards, such as ESRS E1 that require value chain information, including CO2 emissions across the chain (EFRAG, 2024).

However, if the proposal is adopted by the European Parliament and Commission, it will impact the scope of the CSRD, limiting reporting requirements to the following companies:

- >1000 employees, and:
- >€50 million net turn over, or:
- >€25 million balance sheet total

Applicability CSRD to property asset management companies

Following the explanation of the CSRD's general scope, it is important to clarify how the directive applies specifically to the property asset management companies involved in this study. Seven out of the nine interviewed companies would fall under the scope of the CSRD based on the current criteria, see Table 5.1 for the precise respondents. However, the proposed Omnibus amendments (if adopted) will significantly reduce the number of companies required to report, as they aim to ease the reporting burden and postpone certain obligations. This would ensure that only two out of the nine companies would still fall under the scope when the Omnibus proposals would be approved. This would include

respondent 1 and 7, as can be seen in the same Table. This highlights the significant impact of the proposed amendments on property asset management companies, which are often relatively small in size. As a result, it is essential that the interviews also explore the voluntary motivations for sustainability implementation and reporting.

3.1.3. Structure of the CSRD: Directive (EU) 2022/2464

The CSRD is officially published as "Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022" in the Official Journal of the European Union. This Directive amends Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, all in regards to corporate sustainability reporting.

The Directive starts with 84 recitals, which explain the context, rationale, and objectives behind the amendments to various EU regulations and directives concerning corporate sustainability reporting. They can be used for justification and interpretation but are not legally binding. These recitals are followed by eight articles that define the legally binding obligations that companies, auditors, and regulators must follow (once they are transposed to national law). These contain the legally binding provisions of the CSRD. An overview of a summary of all of these recitals can be found in Appendix A. However, certain principles are also worth highlighting here, as they form the foundation for how the reporting requirements are structured and interpreted.

- The concept of **double materiality** has been introduced first in these recitals. This requires companies to report both on how sustainability issues may create financial risks to the company (financial materiality / outside-in), but also on the company's impact on people and the environment (impact materiality / inside-out). The report should contain all material information, meaning the information that is material from both perspectives as well information that is material from only one perspective.
- These recitals also address the need for sustainability information to consider short-, medium-, long-term horizons, as well as to include the undertaking's whole value chain.
- The European Sustainability Reporting Standards (ESRS) are introduced in here as well and define the content and format of the CSRD sustainability report. They are technical standards that companies must use to meet the requirements of the CSRD. The content of these standards is discussed in section 2.2. The European Financial Reporting Advisory Group (EFRAG), is the technical body responsible for drafting the standards, ensuring they reflect stakeholder interests and regulatory needs.
- An important recital is that it requires companies to include the CSRD (the sustainability report) in the annual board report.
- Lastly, the recitals mandate that sustainability reporting must be independently verified by auditors or accredited assurance providers to ensure its credibility, similar to financial reporting.

(Directive (EU) 2022/2464)

Thus, the CSRD mainly establishes who must report, why sustainability reporting is necessary, and how reporting should be assured and supervised. However, the specific content and structure of the requirements are determined by the European Sustainability Reporting Standards (ESRS). The CSRD does require companies to report via the ESRS, but it does not define them. Therefore, the next section will discuss these ESRS requirements.

3.2. European Sustainability Reporting Standards (ESRS)

As mentioned, the European Sustainability Reporting Standards (ESRS) define the content and format of the CSRD sustainability report. They are technical standards that companies must use to meet the requirements of the CSRD. The ESRS specify the information that a company must disclose about its material impacts, risks, and opportunities in relation to environmental, social, and governance matters (Regulation (EU) 2023/2772). The ESRS are developed by the European Financial Reporting Advisory Group (EFRAG). They prepare the draft ESRS and send it for advice to the European Commission. The European Commission then adopts the ESRS as directly effective EU legislation, without transposition needed into national law. This means that the regulation is directly applicable in all EU member states

(SER, n.d.). The ESRS are officially named the “Commission Delegated Regulation (EU) 2023/2772” in the Official Journal of the European Union. It also immediately mentions here that it supplements the Directive 2013/34/EU (the predecessor of the new Directive (EU) 2022/2464) as regards to the sustainability reporting standards.

The structure of the ESRS slightly differs from that of the CSRD, as its main content is found in the Annexes instead of in the recitals and articles. Still, it begins with seven recitals, followed by two articles. However, in this case, the focus will be on the Annexes, as they contain the detailed reporting requirements that companies must follow.

ESRS 1: General requirements

The first Annex contains information on ESRS 1, the general requirements, and starts with an explanation of the different categories of ESRS standards. The EU Commission adopted this first set of general ESRS standards in July 2023. They are organised in three main categories:

- ‘Cross-cutting standards’: These include ESRS1 and ESRS2, which cover the general requirements and general disclosures. They apply to all companies subject to the CSRD. They provide the foundational framework necessary for implementing the topical standards.
- ‘Topical standards’: These include ten standards (E1 to E5, S1 to S4, and G1) that address specific Environmental, Social, and Governance (ESG) topics. Each topical standard outlines disclosure requirements across key areas such as governance (GOV), strategy and business model (SBM), impact, risk, and opportunity management (IRO), and metrics and targets (MT).
- ‘Sector-specific standards’: These are not developed yet, but they will provide detailed requirements for specific industries.

(SER, n.d.)(Regulation (EU) 2023/2772)

To better visualise these standards, the Figure below has been created:

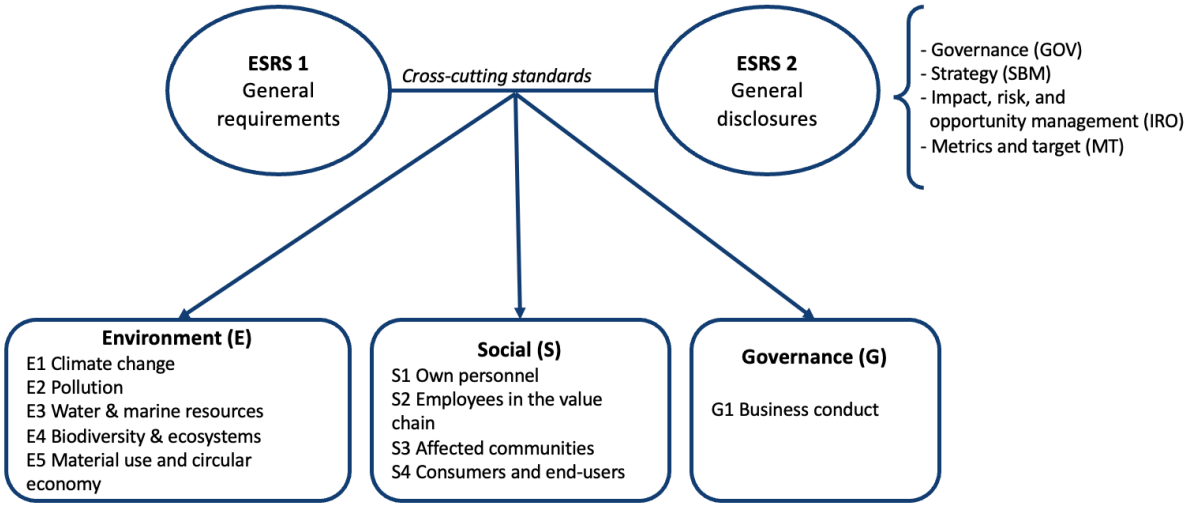

Figure 3.3: Visualisation of general ESRS standards (own work, (SER, n.d.))

Furthermore, the general requirements of ESRS 1 establish the fundamental principles, structure, and methodologies that guide the sustainability reporting. The requirements share similarities with those outlined in the CSRD, including the principle of double materiality, the inclusion of the entire value chain (both upstream and downstream), reporting on sustainability risks and opportunities across different timeframes, alignment with other EU regulations, the certainty of data quality, and provisions for assurance and digitalisation. Still, several statements gave new insights on how companies should approach reporting:

1. *Forward-looking information:* The ESRS require undertakings to disclose forward-looking sustainability-related information, including strategies, targets, and transition plans. This means that companies must explain how they plan to manage sustainability risks and opportunities, their pathways towards sustainability objectives, and key milestones in their transition efforts. (6).
2. ***Materiality analysis:*** This assessment is central to sustainability reporting under the ESRS. As mentioned, companies must assess both financial materiality and impact materiality. If a topic is assessed as immaterial, the company may omit these disclosures. The analysis process is described in the general disclosures (IRO-1). This analysis should be performed before preparing the sustainability disclosures. (3).
3. *Mandatory disclosure for climate change (ESRS E1):* While companies may omit topics deemed immaterial, ESRS E1 (climate change) is an exception. If a company decides climate change is not material to them, they still should provide a detailed explanation of why this is the case.
4. *Due diligence:* This is a continuous process by which undertakings identify, prevent, mitigate, and account for how they address the actual and potential negative impacts on the environment and people within their business. These include the negative impacts of their own operations, but also of their value chain and business relationships. Once the risks are identified, companies must take action to prevent harm and regularly review their efforts. It is not a separate process, but part of the materiality assessment, the GOV-4 disclosure, and the S1-S4, and G1 topical standards. (4).

(Regulation (EU) 2023/2772)

ESRS 2: General disclosures

While the general requirements (ESRS 1) mandates companies to apply those principles to structure their sustainability reporting, the general disclosures (ESRS 2) specify what companies must report on in their sustainability statement. They apply to all companies regardless of their sector and serve as a foundation for topic-specific ESRS disclosures. Every general disclosure has been explained in detail in Appendix A.

Basis for Preparation (BP) disclosures

The disclosures start with Basis for Preparation (BP) disclosures. They consist of BP-1: General basis for preparation of the sustainability statement and BP-2: Disclosures in relation to specific circumstances. They outline the foundational principles and methodologies that companies must follow when preparing their sustainability statement. The sustainability statement refers to the sustainability report under the CSRD and ESRS but is referred to as such within the management report. The BP focus on how the sustainability statement is structured, ensuring consistency, transparency, and reliability.

After the BP disclosures, the framework continues with the disclosures detailing what companies must report on regarding sustainability. The first of these are governance disclosures, which aim to increase accountability by requiring transparency on responsibilities surrounding sustainability within a company.

Governance (GOV) disclosures

The governance disclosures (GOV-1 to GOV-5) ensure transparency on how sustainability is integrated into corporate decision-making, oversight, and risk management. Companies must disclose board composition, sustainability expertise, and oversight responsibilities (GOV-1), how governance bodies receive and act on sustainability information (GOV-2), and whether executive incentives are linked to sustainability performance (GOV-3). Additionally, they must clarify where due diligence processes are reported (GOV-4) and explain how sustainability risks are identified, managed, and communicated within the organisation (GOV-5).

Second, the strategy disclosures (SBM) are discussed, which help stakeholders to understand how sustainability affects the undertaking's operations, financial performance, and future direction.

Strategy and business model (SBM) disclosures

The strategy and business model disclosures (SBM-1 to SBM-3) ensure transparency on how sustainability is integrated into corporate strategy, stakeholder engagement, and risk management. Companies must disclose how sustainability influences their business model, revenue streams, and value

chain (SBM-1), how they engage with stakeholders and incorporate their views into decision-making (SBM-2), and identify material impacts, risks, and opportunities (IROs), including their financial effects and strategic response (SBM-3).

Third, the Impact, Risk, and Opportunity (IRO) management disclosures must be included. They ensure transparency on how companies identify, assess, and prioritise sustainability-related impacts, risks, and opportunities.

Impact, Risk, and Opportunity (IRO) management disclosures
The IRO disclosures ensure companies systematically assess and report on sustainability impacts, risks, and opportunities. IRO-1 requires companies to disclose their **materiality analysis** process. Companies must outline their methodologies, assumptions, thresholds, and criteria used to determine what is material, taking into account stakeholder engagement, severity, likelihood, scale, and scope of impacts. Thus, a company cannot simply deem a topic non-material at its own discretion. IRO-2 mandates transparency on which ESRS disclosures are included in the sustainability statement, justification for omitting certain topics (especially climate change), and the criteria used to determine materiality.

Lastly, the minimum disclosure requirements are discussed. First, disclosures on the policies and actions to manage sustainability matters are shown. Second, they set out minimum requirements regarding metrics and targets to ensure accountability and comparability in sustainability reporting.

Minimum disclosure requirements (MDR)
The minimum disclosure requirements ensure companies provide structured, transparent sustainability reporting. MDR-P requires companies to disclose policies for managing material sustainability matters, including objectives, scope, accountability, and external standards. MDR-A focuses on key actions taken and planned, their expected outcomes, resource allocation, and financial links. MDR-M ensures clarity in sustainability metrics, requiring companies to disclose methodologies, external validation, and financial consistency. MDR-T mandates detailed reporting on targets, including their alignment with policies, scope, baseline values, scientific basis, stakeholder involvement, and progress tracking.

(Regulation (EU) 2023/2772)

Every company is required to report on all general disclosures, regardless of their sector or specific sustainability focus. After performing a materiality analysis, companies must disclose information on the topical standards that are relevant (material) to them. The next section will examine the environmental disclosure requirements, after which the social and governance requirements are discussed as well. The detailed requirements for the environmental disclosures are outlined in Appendix A.

ESRS E1: Climate change
This standard is the first out of the five environmental disclosures that will be discussed. ESRS E1 is the most comprehensive environmental standard, requiring companies to disclose their climate-related impacts, risks, and opportunities. As mentioned before, this is the only standard that requires companies to provide a detailed justification if they choose to omit it. The disclosure follows a structured approach, beginning with the transition plan (E1-1), where companies must outline their strategy for reducing greenhouse gas (GHG) emissions in line with the Paris Agreement and EU climate neutrality goals. Next, policies (E1-2) must be disclosed, detailing measures for mitigation, adaptation, energy efficiency, and renewable energy adoption. Companies then report on actions and resources (E1-3), specifying key initiatives, financial commitments, and progress in implementing climate policies. This is followed by targets (E1-4), requiring companies to set and disclose absolute and relative GHG reduction goals across direct (Scope 1), indirect (Scope 2), and value chain (Scope 3) emissions.

Companies must also report on energy consumption and mix (E1-5), breaking down their reliance on fossil fuels, renewables, and overall efficiency improvements. GHG emissions (E1-6) must be disclosed comprehensively, covering Scope 1, 2, and 3 emissions. Additionally, firms need to report on GHG removals and carbon credits (E1-7), detailing carbon offset strategies and their credibility. Internal carbon pricing (E1-8) disclosures ensure transparency on how companies incorporate carbon costs

into decision-making. Lastly, anticipated financial effects (E1-9) require companies to assess the short-, medium-, and long-term financial risks and opportunities arising from climate change. They must quantify the monetary impact of physical risks (e.g., extreme weather, rising sea levels), transition risks (e.g., policy changes, market shifts), and climate-related opportunities (e.g., energy cost savings, new revenue streams from low-carbon products).

ESRS E2: Pollution

ESRS E2 requires companies to disclose their material impacts, risks, and opportunities related to pollution of air, water, and soil, ensuring transparency on pollution prevention, control, and remediation. Companies must report their policies (E2-1) for managing pollution, specifying how they address emissions reduction, substance substitution, and incident response. They must also disclose key actions and resources (E2-2) allocated to pollution mitigation, following the hierarchy of avoidance, reduction, and restoration. To track progress, companies must set pollution-related targets (E2-3), covering air, water, and soil emissions, as well as hazardous substances. They must also provide detailed data on their pollutant emissions (E2-4), including microplastics, and disclose the use, production, and commercialisation of substances of concern (E2-5). Finally, companies must assess the financial effects of pollution-related risks and opportunities (E2-6), quantifying impacts on revenue, operational costs, and regulatory compliance where possible.

ESRS E3: Water and marine resources

The third environmental disclosure requires companies to report on their impact, risks, and dependencies related to water use, pollution, and marine resources. The standard ensures businesses disclose their policies (E3-1) for managing water consumption, sourcing, treatment, and pollution prevention, particularly in high water-stress areas. They must also outline actions and resource allocation (E3-2), categorising them within a mitigation hierarchy: avoiding, reducing, reclaiming, or restoring water and marine ecosystems. Companies must set and disclose targets (E3-3) aligned with conservation efforts, including water quality improvement, responsible marine resource use, and consumption reduction. Detailed water consumption data (E3-4) must be provided, including total usage, intensity per revenue, and storage or recycling efforts. Lastly, companies must assess the financial impact of water-related risks and opportunities (E3-5), estimating potential costs and dependencies on water access, pollution regulations, and climate-related water risks.

ESRS E4: Biodiversity and ecosystems

This standard requires companies to disclose their impacts, risks, and dependencies on biodiversity and ecosystems, ensuring alignment with global and EU biodiversity frameworks. Companies must assess how biodiversity risks and opportunities affect their strategy and business model (E4-1) and disclose policies for managing biodiversity impacts, dependencies, and conservation efforts across their value chain (E4-2). They must report on actions and resource allocation (E4-3), specifying how they apply the mitigation hierarchy (avoidance, minimisation, restoration, compensation). Companies must also set and disclose targets (E4-4), explaining their connection to ecological thresholds and regulatory commitments. Measuring biodiversity impacts is essential, requiring companies to report on affected areas, land-use change, species conservation, and ecosystem health metrics (E4-5). Finally, businesses must estimate the financial effects of biodiversity-related risks and opportunities (E4-6), assessing potential costs, dependencies, and long-term sustainability challenges.

ESRS E5: Resource and circular economy

The last environmental disclosure focuses on how companies manage their resource efficiency, use of natural resources, and transition to a circular economy, ensuring sustainable sourcing and minimisation of waste. Companies must disclose policies (E5-1) on reducing reliance on virgin materials and increasing recycled content across their value chain. They must also report actions taken (E5-2), such as improving resource efficiency, implementing circular design principles, and extending product lifecycles through refurbishment, reuse, and recycling. Targets (E5-3) should align with circular economy principles, covering areas like product durability, recyclability, and waste reduction. Businesses must disclose resource inflows (E5-4), including the total weight of materials used, the proportion of recycled and sustainably sourced materials, and their methodology for tracking resource use. Likewise, resource outflows (E5-5) must be reported, detailing waste generation, disposal methods, and circular

product design strategies. Finally, companies must assess the financial effects of resource use and circular economy-related risks and opportunities (E5-6), evaluating their potential impact on financial position, performance, and future sustainability transitions. These disclosures drive accountability for responsible resource management and support the shift towards a circular economy.

Structure environmental disclosures

Thus, it seems that the environmental disclosure requirements (E1-E5) follow a structured approach. Each standard begins at a strategic level, with policies and transition plans outlining how companies identify, assess, and manage material environmental impacts, risks, and opportunities. These disclosures set the foundation for sustainability integration into business strategy and governance. This is followed by disclosures on concrete actions and resource allocation, detailing specific initiatives and investments to implement these policies. Next, companies must set and report on measurable targets, tracking progress towards sustainability objectives. Finally, financial impact disclosures quantify the anticipated financial effects of environmental risks and opportunities, ensuring transparency on how sustainability influences business performance over time. This structured approach allows for a logical flow from commitment to implementation, performance tracking, and finally, financial accountability.

ESRS S1: Own workforce

The ESRS S1 standard requires companies to disclose their impact, risks, and opportunities related to their own workforce. It includes 17 disclosure requirements, ensuring transparency on workforce policies, engagement processes, remediation actions, and management of material risks and opportunities. Companies must disclose policies (S1-1) addressing employment conditions, social dialogue, fair wages, and equal treatment. They must report on processes for worker engagement (S1-2) and mechanisms for addressing concerns and grievances (S1-3). Actions taken to mitigate negative impacts and enhance workforce well-being (S1-4) must be outlined, along with targets (S1-5) for improving working conditions, diversity, inclusion, and health and safety. Workforce characteristics (S1-6, S1-7) should be detailed, covering demographics, employment types, and collective bargaining agreements (S1-8). Companies must disclose metrics on diversity (S1-9), fair wages (S1-10), social protection (S1-11), disability inclusion (S1-12), training (S1-13), health and safety (S1-14), work-life balance (S1-15), and pay equity (S1-16). Finally, they must report on incidents, complaints, and severe human rights violations (S1-17).

ESRS S2: Workers in the value chain

Beyond their direct workforce, companies are required to assess and disclose their impact, risks, and opportunities concerning workers in their value chain. Companies must disclose policies (S2-1) on working conditions, fair wages, social dialogue, health and safety, and human rights. They must report on engagement processes (S2-2) with value chain workers and grievance mechanisms (S2-3) for raising concerns. Actions taken to mitigate risks and improve worker well-being (S2-4), such as supplier due diligence and ethical sourcing, must be outlined. Finally, companies must disclose targets (S2-5) for improving conditions, including eliminating child labour and ensuring fair wages.

ESRS S3: Affected communities

Companies must disclose policies (S3-1) addressing economic, social, cultural, civil, and political rights, including those of indigenous peoples. They must report on processes for engaging with affected communities (S3-2) to assess and address material impacts. Companies must outline grievance mechanisms (S3-3) for affected communities to raise concerns and seek remediation. Actions taken to manage risks and promote positive impacts (S3-4), such as social investment programmes and responsible business practices, must be described. Finally, companies must disclose measurable targets (S3-5) for improving community well-being, mitigating harm, and ensuring accountability.

ESRS S4: Consumers and end-users

Companies must disclose policies (S4-1) on consumer rights, product safety, responsible marketing, and data privacy. They must report on engagement processes (S4-2) with consumers and end-users to assess and address material impacts. Companies must outline grievance mechanisms (S4-3) that allow consumers and end-users to raise concerns and seek remediation. Actions taken to mitigate risks and enhance consumer well-being (S4-4), including product safety improvements and ethical business practices, must be described. Finally, companies must disclose measurable targets (S4-5) for reducing negative impacts, enhancing consumer protection, and managing risks and opportunities.

Structure social disclosures

The social disclosure requirements (S1-S4) follow a structured approach as well. Each standard begins with policy disclosures, where companies outline their commitments to protecting and improving conditions for different stakeholder groups. Next, companies must disclose engagement processes, explaining how they interact with stakeholders to assess and address material social impacts. This is followed by grievance mechanisms, ensuring that affected individuals and groups have formal channels to raise concerns and seek remediation. Companies must then detail actions taken to mitigate risks and enhance positive outcomes, such as initiatives promoting fair wages, diversity, social well-being, or responsible marketing. Finally, target setting plays a key role in social disclosures, requiring companies to define measurable objectives and track progress over time.

ESRS G1: Business conduct

Companies must disclose policies (G1-1) on corporate culture and business conduct, covering topics such as whistleblower protection, anti-corruption, and ethical decision-making. They must report on supplier relationship management (G1-2), detailing fair procurement practices, payment policies, and sustainability criteria for supplier selection. Companies must outline their approach to preventing and detecting corruption and bribery (G1-3), including internal monitoring, compliance mechanisms, and staff training. Additionally, disclosures on confirmed incidents of corruption or bribery (G1-4) must be provided, reporting legal cases, fines, and disciplinary actions. Businesses must also be transparent about their political influence and lobbying activities (G1-5), including financial contributions and advocacy efforts. Finally, payment practices (G1-6) must be reported, particularly regarding late payments to SMEs. These disclosures ensure accountability in corporate governance, promoting ethical business practices and responsible stakeholder engagement.

Structure governance disclosure

The governance disclosure requirements (G1) follow a structured approach to ensure transparency and accountability in corporate conduct. Each standard begins with policy disclosures, where companies outline their commitments to ethical business practices and responsible corporate behaviour. This is followed by management processes, detailing how governance frameworks are implemented and monitored. Grievance mechanisms ensure that stakeholders have formal channels to report concerns related to misconduct or unethical behaviour. Next, action plans outline specific measures taken to uphold corporate integrity and mitigate governance-related risks. Finally, performance metrics and incident reporting provide quantifiable insights into governance effectiveness, tracking compliance and accountability over time.

(Regulation (EU) 2023/2772)

3.3. Conclusion and next steps

The aim of this document review was to provide clarity on the Corporate Sustainability Reporting Directive regarding its objectives, scope, and requirements. The review highlighted that the CSRD aims to enhance transparency and comparability in sustainability reporting, aligning with the EU's broader sustainability goals. This framework ensures corporate accountability while also supporting sustainable finance initiatives. Following the Omnibus changes, the scope of the CSRD has been significantly reduced; excluding many companies from mandatory compliance. As a result, only two out of the nine interviewed respondents would still fall within the scope of the CSRD.

The European Sustainability Reporting Standards (ESRS) can be seen as the requirements of the CSRD. They include five environmental standards, four social standards, and one governance standard. To reflect the practical context of this research, this section briefly assesses whether these requirements primarily target the strategic, tactical, or operational level within organisations. The structure and main components of the ESG disclosures are as follows:

- *Environmental disclosures (E1-E5):* Include strategic policies and transition plans, tactical targets, and operational actions and resource allocation, as well as financial impacts of environmental risks and opportunities.

- *Social disclosures (S1-S4):* Consist of strategic commitments, tactical processes like stakeholder engagement and grievance mechanisms, and operational initiatives and measurable outcomes.
- *Governance disclosures (G1):* Focus on strategic commitments to ethical behaviour, supported by tactical governance processes and operational actions tracked through performance metrics.

In conclusion, it seems that the CSRD tries to cover all three organisational levels, though with varying degrees of depth and guidance. This can create challenges for organisations that are looking for more concrete guidance on how to operationalise their sustainability ambitions. This also shows that the directive outlines what companies must report, but not how to strengthen sustainability strategies internally. The latter should thus be further explored.

By analysing both the official documents of the CSRD and the ESRS, the reporting sequence has been identified. This overview outlines the steps required for companies that fall within the scope of the CSRD. These steps are specifically aimed at achieving compliance with the directive and do not reflect broader sustainability ambitions or implementation efforts. A small overview will be given below:

Step 1: Perform a materiality assessment
Goal: Determine which sustainability topics (impacts, risks, opportunities) are material.
How:

- Conduct a double materiality assessment (impact materiality + financial materiality).
- Consider internal operations + upstream/downstream value chain.
- Engage with stakeholders (e.g., employees, suppliers, investors, communities).
- Use due diligence to identify key issues.

Outcome: The company determines which topical ESRS standards apply.

Step 2: Follow the general requirements (ESRS 1)
Goal: Follow the fundamental principles for sustainability reporting.
How:

- Ensure forward-looking information is included.
- Use accurate estimations if precise data is unavailable.
- Align reporting with due diligence and risk management processes.

Outcome: The company establishes a structured and reliable reporting approach.

Step 3: Report on general disclosures (ESRS 2)
Goal: Provides a structured and transparent foundation for sustainability reporting and is mandatory for every company. They provide essential context for understanding a company's sustainability approach, governance, risks, and performance.
How:

- Governance (GOV-1 to GOV-5): Explain who is responsible for sustainability oversight, risk management, and target-setting.
- Strategy & Business Model (SBM-1 to SBM-3): Explain how sustainability is integrated into business operations.
- Impact, Risks, and Opportunities (IRO-1 & IRO-2): Describe the materiality assessment process and results.
- Metrics & Targets (MDR-M & MDR-T): Disclose key sustainability KPIs and progress tracking.

Outcome: Companies explain how sustainability is managed across all business functions.

Step 4: Report on topical standards
Goal: Report on only the topical standards that were identified as material in Step 1. This step allows organisations to focus on the most significant sustainability impacts, risks, and opportunities relevant to their business activities.
How:

- If pollution (ESRS E2) is material for example, disclose full pollution-related reporting.
- These topical standards usually follow a structured approach of first disclosing policies and strategies, followed by actions and resources, after which metrics and targets are discussed, and end with the financial impact.
- If biodiversity (ESRS E4) is not material for instance, the company can omit it (except for climate change, which requires an explanation if omitted).

Outcome: The company only provides detailed sustainability disclosures for topics that are material.

Step 5: Prepare the final sustainability statement
Goal: Publish a structured, comprehensive sustainability report that meets CSRD and ESRS requirements.
How:

- Includes general disclosures + material topical standards.
- Ensures consistency with financial reporting.
- Uses digital reporting (XHTML format) for compliance with EU Single Electronic Format (SEF).

Outcome: The company produces a compliant, transparent, and comparable sustainability report.

However, while this step-by-step plan outlines the reporting sequence according to EU documentation, it raises a critical question: can this process also serve as a framework for companies to strengthen and operationalise their own sustainability ambitions? To answer this, it is essential to compare the steps needed for sustainability implementation (which will be explored in the empirical research) with the components of the CSRD. Ultimately, these findings will help assess which role the CSRD can play in supporting actual sustainable impact.

4

Research methodology

This chapter outlines the research methodology used to address the research questions in this study. It explains how both theoretical and empirical research components were integrated, including the structured literature review, document analysis of the CSRD, and interviews with property asset management companies and CSRD experts. The chapter also describes the data collection procedures and the thematic data analysis process used to derive insights from the interviews. Together, these methods form the foundation for the empirical findings discussed in the next chapter.

4.1. Theoretical research

This study started with a theoretical exploration consisting of a literature review and document analysis to establish a strong conceptual foundation. The literature review followed a structured approach, primarily focusing on identifying barriers, drivers, and enablers to sustainability implementation in a general context. Academic databases such as Google Scholar were used, with a focus on sourcing information from reputable platforms including ScienceDirect, MDPI, ResearchGate, Emerald, Springer, Wiley, and Taylor & Francis. The initial search was broad; covering key concepts such as ”sustainability implementation”, ”sustainability definition”, and ”sustainability real estate sector” - and later refined to more specific terms like ”barriers to sustainability implementation”, ”drivers for sustainability implementation”, and ”enablers for sustainability implementation”. Specifically for the latter terms, the selection was guided by criteria such as recent publication date and relevance to large organisations. A substantial number of articles on the barriers, drivers, and enablers to sustainability implementation were reviewed. From these, the most relevant and recurring elements were identified, documented, and systematically analysed. A part of this analysis process is provided in Appendix B.

While this structured approach was applied for the identification of sustainability implementation challenges and enablers, other concepts, such as the definition and importance of sustainability and the distinction between strategic, tactical, and operational levels, did not require such an extensive review process. These elements are more conceptual of nature and well-established across literature. Therefore, they were based on a smaller number of authoritative sources, without the need for systematically analysing a large set of articles.

The second part of the theoretical research included the document review of the official EU documents of the CSRD and the ESRS. First, the Directive (EU) 2022/2464, and second, the Delegated Regulation (EU) 2023/2772 were analysed. These documents were thoroughly reviewed to gain a deeper understanding of the objectives, scope, and reporting requirements of the CSRD. Special attention was paid to the principles of double materiality, the structure of the reporting process, and the specific disclosure requirements.By systematically analysing both the legal articles and explanatory recitals, the analysis clarified the reporting sequence and identified the structure and content of the environmental, social, and governance disclosures.

Altogether, this structured theoretical exploration provided essential insights that informed the design of the interview protocols and supported the continuation of the research.

4.2. Empirical research

Empirical research plays a crucial role in this study and will be conducted in the form of interviews. Two types of interviews will be used in this study: exploratory interviews and semi-structured interviews. The latter will be the primary focus of the empirical research and will involve interviews with key stakeholders, including property asset management companies and (independent) CSRD experts. These interviews will contribute to the research findings, whereas the exploratory interviews are merely used to help refine the scope and problem definition. This section elaborates on the purpose of both interviews, the participant selection, the interview structure and protocol, and finally data management plan and the data analysis methodology.

4.2.1. Role and purpose of the interviews

In the early stage of the research, exploratory interviews were conducted to gain an initial understanding of the research environment, key issues, and context. According to T. George (2023), exploratory interviews are designed to gain deeper insights in a topic upfront. They help to establish foundational knowledge and identify connections between ideas, allowing for a clearer understanding of the subject without introducing prior assumptions.

Two exploratory interviews have been conducted with different advisors from Sweco, as can be seen in Table 4.1. The first interview aimed to provide a broad understanding of the CSRD landscape within the real estate sector. This helped to identify property asset management companies as the primary focus and revealed that many of these companies still perceive the CSRD as a challenge rather than an opportunity to enhance sustainability. The second interview delved deeper into the CSRD reporting process, with a particular focus on the challenges involved there. It revealed that for most companies, the extensive data collection requirements are perceived as the primary obstacle in the reporting process. This interview also provided valuable insights into how companies perceive the potential changes to the CSRD and how they respond to them. Insights from both exploratory interviews were used to clearly define the scope and problem of this research.

After the exploratory interviews and the literature, and document review, the semi-structured interviews will be performed. Conducting semi-structured interviews with both property asset management companies and independent CSRD experts plays a central role in this research. The interviews with the property asset management companies will help to answer sub-question 1: *What are the current motivations, barriers and strategies of property asset management companies in translating their sustainability vision into operational practices?* Additionally, it will contribute to answering sub-question 3: *How can property asset management companies translate their sustainability ambitions across strategic, tactical, and operational levels?* The interviews with the independent CSRD experts will be used to partly answer sub-question 4: *To what extent do the tools provided by the CSRD meet the practical needs of property asset management companies in pursuing their sustainability goals?* Both interviews aim to provide practical insights and real-world perspectives. The qualitative interview data will be collected using semi-structured interviews. These types of interviews offer a key advantage: they provide a clear focus while allowing the interviewer the flexibility to explore relevant topics that emerge during the conversation (Adeoye Olatunde & Olenik, 2021). This adaptability helps to gain deeper insights into the experiences of property asset management companies and the knowledge of CSRD experts. Moreover, since the semi-structured interviews still follow a structured approach, as all participants are asked the same questions in the same order, the collected data remains consistent and comparable, allowing for a thorough analysis (McIntosh & Morse, 2015). The detailed data analysis process is explained in section 4.3. The interview process will continue until the point of thematic saturation is reached; that is, when additional interviews no longer yield new insights or concepts relevant to the research questions, indicating that the data collected are sufficiently comprehensive for meaningful analysis (Saunders et al., 2017).

On the one hand, semi-structured interviews with a wide range of property asset management companies in the Netherlands will be conducted. The objective of the interviews with property asset management companies is to gain practical insights into how these organisations currently approach the implementation of sustainability within their operations. The interviews aim to explore the underlying

vision, motivations, drivers, barriers, and strategies that influence sustainability implementation in the organisation. By examining these aspects in detail, the interviews seek to uncover common motivations, challenges, effective practices, and organisational dynamics that shape sustainability implementation in the Dutch property asset management sector. This also allows the interviews to reveal whether these strategies occur at the strategic, tactical, or operational level. Additionally, the (possible) role of the CSRD will be explored to understand whether, why, and how it influences sustainability implementation. However, the core emphasis of the interviews remains on the motivations, challenges, and opportunities surrounding sustainability implementation, while the CSRD serves as a complementary topic in this case. To ensure a diverse range of perspectives, each interview will be conducted with a representative from a different property asset management company. These representatives will mainly include ESG managers (or other sustainability specialists), as they have been identified as the key figures responsible for sustainability initiatives and CSRD implementation within their organisations (Geertens, 2024). On the other hand, interviews will be conducted with various independent CSRD experts. The main objective of these interviews is to assess the potential of the Corporate Sustainability Reporting Directive (CSRD) in supporting companies (in the real estate sector) in implementing and improving sustainability beyond compliance. These interviews aim to gain expert perspectives on possible improvements of the CSRD to ensure that it supports actual sustainability impact. The interview with the CSRD expert of the EU has the same objective, but slightly different questions. The goal of all interviews is to gather information from a wide range of stakeholders who either have substantial experience with sustainability implementation or with CSRD implementation. Each group of interviewees has a target number of interviews, aiming for a total of 14-16 interviews. As previously mentioned, two exploratory interviews have already been conducted at the start of the research. Moreover, the study aims to conduct interviews with 8-10 different property asset management companies and 4-6 independent CSRD experts (including an expert of the EU). Some interviewees were selected through Sweco's network, while others were identified via personal connections and the attendance of ESG/CSRD-related events (see section 4.2.3). The goal is for the main part of each interview to last around 30 minutes. Table 4.1 shows the desired number of interviews per group.

Table 4.1: Explanation and amount of interviews

Interviewee:	Explanation:	#Interviews:
Exploratory interviews with Sweco advisors	Industry professionals from Sweco with expertise in sustainability, property asset management, and the CSRD.	2
Property asset management company	Organisations responsible for managing and optimising building portfolios. Specifically, ESG managers who have knowledge on the company's sustainability strategies and CSRD.	8–10
CSRD expert EU	Regulatory experts from EU institutions, such as the EU Commission, EU Parliament, or EU Council, with direct involvement in the CSRD/ESRS/EU Green Deal.	1–2
CSRD expert independent organisation	CSRD experts from independent institutions, with specialised knowledge of corporate sustainability reporting, ESG frameworks, and regulatory compliance.	3–4
Total number of interviewees	This is the total number including the exploratory interviews.	**14–16**

4.2.2. Interview protocol

The interview protocol is important to adhere to when conducting the interviews, and can be found in Appendix C. One protocol has been developed for the property asset management companies and another for the independent CSRD experts. The additional questions that were asked during the interview with the CSRD expert of the EU are also shown. While the introduction and closing part stay the same, the main and most specific part differs for both groups. The Appendix shows the English

protocol, however, every interview will be conducted in Dutch.

Both types of interviews start in the same way, where the interviewer and the interviewee will be formally introduced. This is followed by a discussion on confidentiality and data use, ensuring that the interviewee fully understands the purpose and application of the interview. This process concludes with the completion and signing of the informed consent form, which can be found in Appendix D. Next, an explanation of the research will be provided to the interviewee, outlining the objectives of both the interview and the thesis.

Following the introduction, the interviews with property asset management companies moves onto part 2: sustainability implementation. This part begins with general questions to explore the company's activities, objectives, and corporate strategy. The interview then shifts to the company's sustainability vision, examining whether a vision exists, how it was formulated, and the motivations behind sustainability implementation. Next, the focus moves to how the company currently integrates sustainability into its operations (building portfolios), including specific examples and most important sustainability initiatives. This part also focuses on the drivers that the company applies to stimulate sustainability in the organisation and the associated responsibilities/task divisions. The interviews also explore how the organisation ensures that its sustainability vision is effectively translated into practice. Lastly, the interview will explore the barriers and challenges companies encounter in successfully implementing sustainability. The third part focuses on the CSRD and distinguishes between CSRD-compliant and non-CSRD-compliant companies. For CSRD-compliant companies, questions will be more detailed, focusing on whether they perceive the CSRD as an opportunity for enhancing sustainability and the challenges they face in preparing the report. For both groups, the interview will also investigate whether they see any other (voluntary) reasons for drawing up a sustainability report, acknowledging that sustainability requirements will eventually apply to all companies in some form. Eventually, identifying these barriers, strategies, and motivations will help determine whether the CSRD can be used to address them and how it might be integrated into existing sustainability strategies.

The interviews with the CSRD experts will follow a different structure. These interviews explore how the CSRD can better support sustainability implementation beyond mere compliance, including potential improvements. The interviews begin by examining the added value and unique characteristics of the CSRD compared to other reporting frameworks. The second part focuses on how the directive can be used as a tool in practice, which elements are considered most useful, and how companies might transition from compliance to strategic integration of sustainability. Lastly, the interviews include reflective questions on the future development of the CSRD, such as the effects of the Omnibus amendments, possible unintended consequences, and opportunities for improving the directive. The structure of these interviews will be slightly adjusted depending on whether the interviewee is from the EU or another CSRD-related institution.

Both types of interviews conclude by inviting the interviewee to discuss any additional aspects they find relevant. The session then ends with thanking the interviewee for participating to the research.

4.2.3. Observations at ESG/CSRD events

Throughout the research, observations will be conducted at ESG or CSRD-related events with a focus on the real estate sector. These observations will not serve as a primary data source but rather to develop a broader understanding of current developments in the sustainability implementation and reporting sector. The attended events were as follows:

- SPRYG Real Estate Academy: ESG & Real Estate 2025 event, which took place on 25-03-2025 (SPRYG, 2025). The event highlighted that real estate companies continue to prioritise ESG factors, even if they are no longer subject to CSRD requirements. Additionally, it provided concrete strategies for ESG implementation within the sector and emphasised the continued importance of advancing sustainability in real estate.

4.2.4. Data management plan and consent form

To ensure ethical and responsible handling of research data, a data management plan (DMP) was developed in accordance with TU Delft's research integrity guidelines. The DMP (ID 171386) was reviewed and approved by the faculty's data steward and the Human Research Ethics Committee before the start of data collection. It outlines how interview data are handled, including procedures for secure storage, anonymisation, restricted access, and eventual deletion after project completion.

In addition, an informed consent form was prepared for all interview participants. This form explained the objective of the study, the voluntary nature of participation, the possibility to withdraw at any time, and how the data would be used and protected. Participants were asked for both written and verbal consent before the interview started. Explicit permission was requested for audio recording. These recordings were used only for transcription purposes and were deleted once transcripts were completed and verified.

Each transcript was anonymised and, if requested, shared with the interviewee for review and approval. Only the anonymised data were used in the analysis. Both the data management plan and the consent form are included in Appendix D.

4.3. Data analysis

Data analysis is a crucial step in qualitative research, serving as the foundation for interpreting findings and drawing meaningful conclusions. It refers to the systematic process of gathering, refining, and interpreting data to identify patterns, relationships, and trends (Huebner, Vach, & Cessie, 2015). The data from both interviews will be analysed through a thematic analysis. Thematic analysis, as described by (Braun & Clarke, 2006), is a qualitative data analysis method that involves identifying, analysing, and interpreting recurring patterns across a dataset by selecting codes and developing themes to provide descriptive insights. It is a valuable approach for exploring common themes in experiences, thoughts, or behaviours across a dataset (Braun & Clarke, 2012), making it suitable to identify patterns in the barriers, strategies, and motivations for sustainability and CSRD implementation. In this sense, themes are defined as "actively constructed patterns derived from a data set that answer a research question" (Kiger & Varpio, 2020).

According to Kiger and Varpio (2020), there are six steps that should be followed when engaging in thematic analyses:

1. **Familiarising with the data:** This process provides a foundational understanding before coding begins, and if transcription is required, it can serve as a valuable way to engage with the data while ensuring accuracy (Nowell, Norris, White, & Moules, 2017). Familiarisation should be created by reading actively and repeatedly through the data (Braun & Clarke, 2006).
2. **Generating initial codes:** In this step, researchers begin coding, which involves systematically identifying and labelling key data segments to organise information at a detailed level (Boyatzis, 1998). This process requires a structured coding framework to ensure consistency, allowing researchers to recognise patterns and relationships, that will later contribute to the theme development (Braun & Clarke, 2006).
3. **Searching for themes:** In the third step, the coded data will be analysed to identify broader themes, which are actively constructed by comparing, combining, and mapping relationships between codes rather than simply emerging from the data (Braun & Clarke, 2006)(Varpio, Ajjawi, Monrouxe, O'Brien, & Rees, 2017). Themes should each hold independent significance, but must also connect cohesively to create a meaningful narrative within the analysis (Clarke & Braun, 2014).
4. **Reviewing themes:** Next, themes undergo a two-level review to ensure they accurately represent the coded data and overall dataset. First, it should be assessed whether each theme has sufficient supporting data, maintains coherence, and is distinct from others. Second, themes are evaluated in relation to the entire dataset to confirm that they meaningfully reflect the research questions. This requires re-reading, re-coding, and refining until no further substantial changes are needed. (Braun & Clarke, 2006).

5. **Defining and naming themes:** Here, researchers refine and define, ensuring it clearly contributes to the broader research questions (Braun & Clarke, 2006). This involves naming themes in a way that is concise yet descriptive, identifying the key aspects they capture within the dataset. Researchers also examine overlaps between themes, potential sub-themes, and select data extracts that best illustrate the key features of each theme, providing context to support their interpretation (Braun & Clarke, 2006)(Braun & Clarke, 2006).
6. **Producing the report:** In the last step, researchers compile the final analysis and findings into a structured report (Braun & Clarke, 2006). Rather than being a separate stage, this step is a continuation of the analytical process. It integrates narrative descriptions and representative data extracts to provide a clear, logical, and well-supported interpretation of the data (King, 2004).

To obtain enough data for the analysis, each interview will be recorded through MS Teams or a microphone, after which it is literally transcribed to MS Word. This step ensures familiarisation with the data by reading it thoroughly (1). The transcripts will then be translated to English and sent to the interviewees for a last validation of the data. Once validated, the transcripts will be uploaded to Atlas.ti, a qualitative analysis tool that facilitates thematic analysis and pattern identification by giving codes to the data (Atlas.ti, 2024). The first step in this software is identifying and labeling recurring quotes across data segments, from which initial codes are developed (2). Codes can be defined as short, descriptive labels that capture the core meaning or topic of a segment of the data. They serve as tools to help organise and interpret initial patterns in the data. (Chametzky, 2016). These codes will be assigned through open coding, using inductive reasoning. This allows new codes to emerge directly from the data itself, ensuring that new insights are captured effectively. (Bingham, 2023). Chapter 5 will elaborate on the applied codes and will explain which quotes were labelled together under one code. Next, these codes will be grouped by similar characteristics, allowing the development of overarching themes (3). These identified themes will then be reviewed to make sure that the codes are categorised correctly (4). This will be followed by refining the names of the themes to ensure that the key aspects of the data sets are captured. Potential subthemes will also be identified in this step. (5). When the thematic analysis is completed, the results should be written in the report, integrating it logically (6). This systematic method enables a well-organised interpretation of the data, helping to uncover meaningful insights from the interviews. The results from the thematic analysis can be found in Chapter 5.

4.3.1. Differences in data analysis for both groups

For the interviews with property asset management companies, thematic data analysis will be used to identify common patterns in the motivations, barriers, and strategies behind implementing sustainability in their properties. First, quotes related to motivations were coded and subsequently categorised into thematic groups. Next, the barriers were coded and aligned with the same themes as the motivations to ensure consistency and allow for meaningful comparison. Finally, the strategies were analysed by grouping quotes with similar characteristics into codes, which were then clustered under broader themes. Unlike the motivation and barrier themes, these strategies are more overarching in nature and will thus not be grouped under the same themes. Moreover, it can be identified whether the respondents have implemented a clear sustainability vision or policy and how they adhere to this vision or policy. Additionally, the analysis will explore themes in the challenges and motivations driving (voluntary) CSRD sustainability reporting. It will also explore what improvements are considered essential for the CSRD to effectively support meaningful sustainability implementation, rather than serving solely as a compliance tool. For the interviews with the CSRD experts, themes will primarily focus on suggested improvements or additions to the CSRD to ensure its use beyond compliance. Additionally, the interviews will explore which elements of the CSRD are considered most relevant for concrete sustainability implementation and identify the areas where the directive can provide the greatest support to companies. The themes identified in both types of interviews will eventually be used to provide a comprehensive understanding of sustainability implementation and CSRD reporting and how the two might reinforce one another.

5

Empirical research and data analysis

This Chapter presents the empirical findings of the research, based on qualitative data collected through interviews with ESG professionals from property asset management companies. The results are structured around four key areas: the motivations for implementing sustainability, the barriers encountered, the strategies adopted, and the perceived role of the CSRD. Additionally, each section aims to uncover patterns, contradictions, and insights from practice, and to compare these with the expectations and findings from the literature review. At the end of the chapter, a concluding section brings together the most important insights. This chapter will help to answer both sub-question 1, 3, and 4.

5.1. Interviews with stakeholder groups

The table below provides an overview of the respondents interviewed for this research. It also indicates whether each company was CSRD-compliant before and after the Omnibus amendments. As shown, only two out of the nine property asset management companies remain compliant following these changes. Additionally, the interviews revealed that companies assumed that the proposals would be fully implemented.

Table 5.1: Overview of Interviews

Respondent	Interviewee company	CSRD-compliant before Omnibus	CSRD-compliant after Omnibus	Interview date
1	Property asset management	Yes	Yes	09/04/2025
2	Property asset management	Yes	No	10/04/2025
3	Property asset management	Yes	No	14/04/2025
4	Property asset management	Yes	No	15/04/2025
5	Property asset management	No	No	08/04/2025
6	Property asset management	Yes	No	17/04/2025
7	Property asset management	Yes	Yes	07/04/2025
8	Property asset management	Yes	No	23/04/2025
9	Property asset management	No	No	16/04/2025
10	CSRD-expert (independent)	-	-	07/04/2025
11	CSRD-expert (independent)	-	-	08/04/2025
12	CSRD-expert (EU)	-	-	09/04/2025
13	CSRD-expert (independent)	-	-	14/04/2025

The interviews with these respondents form the foundation for the empirical analysis in this chapter. In the following sections, their insights are examined in more depth to explore the motivations, barriers, strategies, and perceptions related to sustainability implementation within property asset management companies.

5.2. Results data analysis

This section presents the key empirical findings based on the semi-structured interviews with property asset management companies. The results are structured around the four main elements identified in the conceptual framework: motivations, barriers, strategies, and the perceived role of the CSRD. Each of these topics is analysed in detail to explore how sustainability is currently approached in practice.

5.2.1. Motivations for sustainability implementation

In recent years, sustainability has gained increasing global significance, driven by initiatives such as the United Nations Sustainable Development Goals (SDGs), the Paris Agreement, and the European Green Deal. These global developments have shaped the expectations of both governments and society, urging companies to engage more proactively with sustainability. This broader shift has influenced nearly every sector, including property asset management, where organisations are increasingly expected to demonstrate their contribution to sustainable development. One respondent clearly reflected this evolution, stating:

”Meanwhile, the societal landscape was also shifting. Everyone was starting to work on sustainability, and we had the Energy Agreement, the Paris Agreement, and all kinds of international developments. Therefore, a few years later, I think around 2019 or 2020, our organisation also introduced a sustainability goal.”

This quote illustrates how sustainability has become an inescapable theme across industries, increasingly embedded in corporate strategies. Given this trend, it is essential to start the data analysis by examining the motivations behind sustainability implementation. The motivations behind sustainability efforts form the basis for how organisations prioritise, allocate resources, and translate ambitions into action. Companies driven by intrinsic values, such as social responsibility, may approach sustainability differently than those motivated primarily by external pressures, such as investor demands or regulatory compliance. Identifying these motivations is crucial because they influence not only the degree of commitment to sustainability but also the types of barriers companies encounter and the strategies they adopt. Therefore, this section begins by analysing the motivations for implementing sustainability as expressed by each interview respondent. This provides essential context for interpreting later findings on operational challenges, success factors, and eventually the possible role of the CSRD in driving or supporting sustainability improvements.

In Table 5.2, each motivation that was mentioned by the respondents is shown. This offers a first insight into the drivers behind sustainability implementation in the property asset management sector. The codes were derived from respondent quotes, with similar statements grouped under a single code to capture recurring ones consistently. For instance, the following two quotes were labelled as ”maintaining control”:

”At first, we did not have certifications like BREEAM, but we noticed that we were losing control a bit. So, we decided to pursue certification after all, which now allows us to stay in control.”

”We want to stay ahead of developments, because that way we remain in control. Otherwise, we risk becoming a plaything of everything that comes our way. So, we need to anticipate these changes ourselves.”

These quotes illustrate that “maintaining control” refers to a company’s ability to proactively respond to rising expectations, regulations, and stakeholder demands related to sustainability. In the first quote, the respondent explains that the absence of clear sustainability practices (like BREEAM certification) initially led to confusion and a sense of losing grip on sustainability efforts. Gaining certification helped standardise their approach and regain control without added effort. In the second, staying ahead of regulatory and stakeholder demands is seen as a way to remain in control and avoid becoming reactive. In both cases, control is about being prepared and structured in the changing sustainability landscape.

Table 5.2: Codes motivations ranked

Code	Times mentioned	Respondent
Long-term value creation per property	10	2, 4, 5, 6, 8, 9
Contribution/responsibility to society	9	1, 3, 5, 7, 8, 9
Obligation/pressure from investors	8	4, 5, 6
Attracting investors and buyers	6	2, 3, 4, 5, 6
Intrinsic motivation	6	3, 4, 5, 6, 7, 9
Tenant requirements	6	1, 4, 6, 7, 8
Risk mitigation measure	5	1, 2, 6, 9
Shareholder requirements	5	2, 6, 7
Certification needed for funding	4	4, 6
Fulfilling a societal role	4	2, 7, 9
Improvement of resident well-being	4	2, 3, 9
Regulatory obligations	3	7, 8
Anticipate and lead	3	2, 7
Obligation to meet energy label C	3	2, 4, 7
Serving pension beneficiaries	3	5, 9
Bonuses for top management on KPIs	2	1, 9
Governmental subsidy	2	4
Maintaining control	2	4, 7
Pressure from the market	2	1, 4
Stand out through sustainability	2	5
Creation of a positive business case	1	4
Social ”license to operate”	1	9

The codes in the above table are ranked based on the total number of times they were mentioned. This shows that “long-term value creation per property” is mentioned most frequently, which is particularly interesting as it appears to be a financially driven motivation. On the other hand, the second most mentioned code is “contribution/responsibility to society”, which reflects a more morally based motivation. Thirdly, “obligation/pressure from investors” is mentioned most, again reflecting a very different underlying motivation. These three top motivations already illustrate that the drivers behind sustainability efforts differ significantly, ranging from financial objectives to societal responsibility and investor expectations.

When examining the distribution across respondents, it becomes apparent that while different types of respondents share similar motivations, these are not shared equally or consistently. Some respondents consistently mention both financially driven and socially motivated reasons, suggesting that companies do not exclusively prioritise one type of motivation. Instead, a mix of strategic, moral, and market-based factors influences their sustainability approach. This diversity among respondents underlines the complexity of translating a sustainability vision into concrete operational practices, as companies may weigh different factors depending on their own context and priorities.

Next to these three, nineteen other codes have been identified that play a role in the motivations of property asset management companies to implement sustainability. At this stage, it is still difficult to thoroughly analyse the individual motivations due to their large number and overlap. To better assess the importance and relationships between the motivations, it is necessary to categorise them thematically. This has been done by grouping the individual codes based on their shared characteristics. This led to the development of overarching themes that reflect the underlying types of motivations. These themes are therefore based directly on the insights gathered from the interviews. After creating the initial themes, the grouping was carefully reviewed to ensure that each code was categorised appropriately. Finally, the names of the themes were refined to accurately capture the key aspects of the underlying data. The resulting themes are presented in the table below.

Table 5.3: Overview of themes and codes of motivations

Theme	Code
Financial	Attracting investors and buyers Bonuses for top management on KPIs Certification needed for funding Creation of a positive business case Governmental subsidy Long-term value creation per property Stand out through sustainability **Total times mentioned: 26**
Social and moral-based	Contribution/responsibility to society Fulfilling a societal role Improvement of resident well-being Intrinsic motivation Serving pension beneficiaries Social ”license to operate” **Total times mentioned: 26**
Pressure from stakeholders	Obligation/pressure from investors Pressure from the market Shareholder requirements Tenant requirements **Total times mentioned: 19**
Risk management	Anticipate and lead Maintaining control Risk mitigation measure **Total times mentioned: 9**
Regulatory compliance	Obligation to meet energy label C Regulatory obligations **Total times mentioned: 6**

This table demonstrates that the codes have been categorised into five main motivational themes. The findings show that financial considerations and social or moral motivations are most frequently mentioned by respondents, each with 26 references across the dataset. External stakeholder pressure also plays a significant role (19 mentions), whereas risk management and binding regulations appear to serve more as supporting or enabling factors (9 and 7 mentions respectively). This distribution suggests that sustainability decisions are shaped by a balance between intrinsic moral values, financial business logic, and stakeholder pressures.

It is particularly noteworthy that financial motives and social or moral-based motivations were mentioned with equal frequency. The prominence of financial considerations is understandable given that the respondents represent companies that must remain economically viable. However, the equal emphasis on social and moral-based motivations suggests that many respondents are also strongly guided by a sense of societal responsibility and ethical commitment. To identify which factors within the themes have the greatest influence, each theme is analysed separately. In doing so, relevant quotes from respondents are included to provide deeper insight into their underlying motivations.

Financial motives

This theme is mainly influenced by ”long-term value creation per property” (mentioned 10 times), ”attracting investors and buyers” (mentioned 6 times), and ”certification needed for funding” (mentioned 4 times). Many respondents indicated that integrating sustainability into their properties helps to increase the long-term value of those assets. For instance, a respondent mentioned: *”We truly believe that, in the long term, a building will be worth significantly more if it is a sustainable building.”*. Another respondent stated: *”What is encouraging, is that sustainable buildings currently have a higher value.”*. This

indicates that respondents believe sustainable buildings will generate greater value, thereby strengthening their financial position. This increasing value is thus for many respondents a key reason for implementing sustainability into their properties. Moreover, many of them believe that implementation of sustainability attracts investors and buyers, as stated by a respondent: *"Sustainable properties are also easier to sell and attract new investors and buyers. Ultimately, finance remains the main driving force."*. This quote again reflects a financial motive, as the respondent indicates that implementing sustainability makes investing and selling more attractive. In addition, respondents mentioned that a certification (such as BREEAM or GRESB) is often needed to receive funding from banks. The following statement was made on this by one of the respondents: *"These days, it is almost impossible to obtain financing from banks without a BREEAM certificate."*. Another respondent also showed that these type of certifications are not only important for banks, but also for investors: *"In real estate, you have GRESB of course, but that's a score for your entire portfolio. And there's CREM, but that's based on a single building. Still, these types of certifications are becoming increasingly important, because the main investors are placing more and more value on them."*. Together with the other codes under financial motives, this theme highlights that maintaining and improving the company's financial strength remains a key consideration and reason for implementing sustainability efforts.

Social and moral-based motivations

This theme is mainly determined by two codes, with the first one being "contribution/responsibility to society" (mentioned 9 times) and "intrinsic motivation" (mentioned 6 times). Additionally, "fulfilling a societal role" and "improvement of resident well-being" also play a significant role (each mentioned 4 times). One respondent stated *"Because we invest on behalf of pension funds, it is naturally important for us to contribute to society. We simply want the people who have invested their pensions with us to be able to enjoy their retirement."*, reflecting a strong sense of responsibility to society. By stating that they invest on behalf of pension funds and want those pension holders to enjoy their retirement, the respondent frames sustainability not merely as a business strategy, but as a moral obligation to future beneficiaries. This shows that for some organisations, sustainability is driven by a deeper responsibility to serve societal well-being. Another respondent expressed a similar sense of responsibility, extending it even more broadly to society as a whole: *"We stand for a society in which everyone is equal and can live and coexist in a healthy, vital, and future-proof way. Sustainability is an important pillar in that. And within that, there's also a sense of cooperative thinking and a responsibility we have toward society."*. This sense of responsibility is in essence a part of intrinsic motivation, as both stem from internal values rather than external pressure. In both cases, sustainability is pursued because it aligns with what the organisation believes is the right thing to do. This similarity is clearly reflected in the following quote: *"Our motivation for implementing sustainability is, on the one hand, truly intrinsic; simply wanting to contribute to a healthy and thriving society."*. The motivations of fulfilling a societal role and improving resident well-being also align closely with the other two motivation codes. For instance, one respondent stated: *"We also won't sell projects that, for example, have an energy label lower than C, because that's where our societal role comes into play. If we sell something, we want it to be at least at a decent level."*. This statement reflects a clear sense of responsibility towards future owners or users, indicating that sustainability is not only about meeting minimum requirements, but also about ensuring a socially acceptable quality standard. Together with the other codes within this theme, it becomes clear that companies are also strongly driven by social and moral-based motivations to implement sustainability.

Pressure from stakeholders

The third theme is mostly influenced by "obligation/pressure from investors" (mentioned 8 times), followed by tenant requirements (mentioned 6 times), and shareholder requirements (mentioned 5 times). For instance, one respondent stated: *"The level of sustainability implementation also largely depends on the wishes of the investor."*. With another mentioning: *"Investors often have specific requirements regarding the level of scores in frameworks like GRESB. So, if you achieve a high score there, you also attract new investors. In that sense, it's actually the investors who determine the extent to which sustainability is implemented."*. Both quotes highlight how investor requirements play an important role in determining the extent to which sustainability is implemented. Other respondents also emphasised the importance of the tenant requirements: *"Ultimately, we rent out our buildings to tenants, and they expect sustainable properties. In the short term, you might still get away with no sustainability, but in the long run, you will simply attract fewer tenants. That alone is already a reason for us to prioritise*

it.". Another respondent conveyed this even more clearly by providing a specific example: *"At the moment, we're building one of the most sustainable industrial buildings. It will be completely water-neutral. And we're doing that at the request of our tenant, as their work involves various forms of water treatment."*. Interestingly, this respondent went on to say the following: *"Unfortunately, we don't get any extra points for it in the BREEAM system, because it doesn't recognise it. So that's quite frustrating."*, suggesting that without the tenant's requirement, the measure likely would not have been implemented. Yet another respondent pointed to the importance of the shareholders' wishes, *"We are also required to report to our shareholders, so one way or another, we are obliged to take the lead in this area."*. This demonstrates that companies are often pressured by certain stakeholders to implement sustainability, which influences their decision to do so. Additionally, it is noteworthy that pressure from both tenants and investors often stem from financial considerations as well.

Risk management

This theme is mentioned far less than the other three themes, and can thus be considered as a less important motivator. The theme is mainly determined by the code "risk mitigation measure" (mentioned 5 times). For instance, a respondent stated: *"Sustainability is, on the one hand, a risk mitigation measure to ensure that your real estate does not become stranded over time."*. This quote frames sustainability as a way to safeguard long-term asset value by reducing the risk of real estate becoming outdated or unattractive to future investors or tenants. Another respondent referred to it as a way to mitigate slightly different types of risks: *"On the one hand, it is a risk mitigation measure, helping us reduce future costs related to regulations."*. These quotes illustrate that many respondents view sustainability implementation as a way to manage risks. However, again, they also reveal a prominent financial dimension, as respondents often emphasise risk mitigation to prevent financial losses.

Regulatory compliance

This theme is mentioned the least and might therefore be considered as a less important motivation for why property asset management companies implement sustainability. It consists of two codes, "regulatory obligations" and "obligations to meet energy label C", both of which are mentioned equally often (3 times). One respondent mentioned the following: *"In general, companies must comply with a wide range of requirements and expectations imposed by laws and regulations."*. Other respondents also primarily referred to laws and regulations in general, rather than specific ones related to sustainability. These were mostly framed as barriers rather than motivations, which also may indicate that there are currently few regulations that actively encourage sustainability implementation. Interestingly, one respondent did specifically mention the CSRD as a motivation for improving their sustainability efforts: *"We selected around 12 different themes and developed KPIs for each of them, covering the E, S, and G aspects. We did this with the idea that the CSRD was on its way, but since we didn't have anything documented yet, we knew we had to take action. These themes and KPIs were developed internally, so not necessarily based on the CSRD."*. This might suggest that the CSRD could be useful only for those companies not having anything documented or structured yet. Additionally, very specifically, three respondents mentioned the obligation of energy label C as a separate regulation as to why they upgraded their energy labels: *"At a certain point, it was no longer permitted to rent out offices with a C label or lower. So we made adjustments and, where possible, upgraded them directly to an A label."*. The fact that this theme was mentioned the least often can thus have several reasons.

Although property asset management companies appear motivated (for various reasons) to implement sustainability, several barriers still prevent them from doing so as effectively as they might have intended. Therefore, the respondents were also asked which barriers they face when implementing sustainability. The following section will highlight these barriers.

5.2.2. Barriers to sustainability implementation

The interviews revealed numerous barriers that explain why sustainability implementation does not always succeed. The codes for the barriers were also derived from respondent quotes, using the same approach as for the motivations. To provide an example as well, the following two quotes from different respondents were all labelled as "the term sustainability is too broad/unclear":

"You notice that the term sustainability is still very much an umbrella concept. So, the question is, what exactly is sustainable?"

"Sustainability is, of course, quite a vague and all-encompassing concept."

These quotes illustrate that one barrier to effective sustainability implementation is the vagueness and conceptual ambiguity of the term itself. Respondents describe sustainability as an "umbrella concept" that is "vague," "all-encompassing," and "highly hybrid." This lack of clarity can lead to confusion within organisations about what sustainability actually entails in practice, and what actions are considered meaningful or sufficient.

The barriers have been categorised into the same themes as the motivations. This has been done to ensure analytical consistency and draw meaningful connections between what drives sustainability implementation and what hinders it. This allows for a direct comparison within each theme: while certain factors may strongly motivate companies to pursue sustainability, corresponding barriers within the same theme often explain why implementation does not always succeed. Structuring the analysis this way helps to identify targeted areas for possible intervention. Each barrier was assigned to the theme it most directly obstructed. For instance, if a barrier prevented a company from realising a financially driven motivation, it was placed under "financial". This approach allowed for a direct link between what drives organisations to pursue sustainability and what hinders them from acting on those same drivers. Moreover, this approach provides clarity on which specific ambitions are most difficult to achieve in practice. For example, when both financial motives and financial barriers are prominently mentioned, it suggests that although companies value long-term economic returns, cost structures or investment risks still prevent these goals from being fully realised. The barriers have been categorised in these same themes in the table below.

Table 5.4: Overview of themes and codes of barriers

Theme	Code	Times mentioned
Financial	Balance between sustainability and profitability	9
	External business case thinking	4
	Internal business case thinking	6
	Lack of clear return on investment	4
	Requires high investment costs	5
	Total times mentioned:	**28**
Social and moral-based	Increased workload due to sustainability tasks	5
	Lack of 70% participation residents	2
	Lack of awareness	3
	Lack of commitment (top/middle) management	3
	Lack of commitment tenants	1
	Lack of knowledge and skills to create impactful change	4
	Short-term focus of employees	1
	The term sustainability is too broad/unclear	3
	Unclear sustainability performance indicators	10
	Total times mentioned:	**31**
Pressure from stakeholders	Split incentives	1
	Wrong incentives	1
	Total times mentioned:	**2**
Risk management	Lack of capacity suppliers	3
	Lack of data (quality)	4
	Limited availability of sustainable innovations	3
	Sustainability considered too late in the process	2
	Total times mentioned:	**12**
Regulatory compliance	Regulatory complexity and overload	8
	Regulatory costs limits improvement	2
	Total times mentioned:	**10**

The table immediately offers some interesting insights. One of the first things that stands out is that most of the identified barriers are social and moral in nature (mentioned 31 times), which is followed by barriers related to financial motivations (mentioned 28 times). However, since social and moral-based, and financial motivations were also the most frequently mentioned drivers, it is logical that this is also where most barriers arise. This clearly demonstrates that the areas where companies focus most of their efforts are also, logically, where they encounter the greatest challenges.

In contrast, relatively few barriers were linked to stakeholder pressure, despite it being mentioned quite frequently as a motivation. This could indicate that while investors and tenants play an important role in initiating sustainability efforts, they may not be perceived as the source of direct obstacles during implementation. This can be explained by the fact that respondents mainly perceived stakeholder expectations as a given or a market condition; something to respond to, rather than something that actively obstructs internal decision-making. Finally, when sustainability is driven by risk management or binding government regulations, there are respectively 12 and 10 corresponding barriers identified, that may hinder implementation. To better understand the specific influence of each barrier on the corresponding motivations, the barriers will be analysed individually within each theme.

Financial related barriers

For the property asset management companies driven by financial motives, several key barriers emerged that can hinder the implementation of sustainability. The most frequently mentioned barrier in this theme is the perceived need to maintain a balance between sustainability and profitability. This indicates that many companies still view financial stability as a precondition before pursuing sustainability. For instance, one respondent stated: *"We actively seek a balance between financial performance and ESG performance. We want to achieve financial performance, but we also want to bring it into balance with ESG."*. Another respondent expressed it from the opposite perspective, yet still emphasised the need for balance: *"Of course, we need to generate a good return, but we also pay attention to the societal impact we have."*. These quotes suggest that for many companies, financial viability takes precedence over sustainability considerations. It may (again) indicate that financial motives ultimately carry more weight than social and moral-based ones. This perspective is reinforced by the barrier "internal business case thinking" (mentioned 6 times), which shows that conventional investment logic still dominates in many cases, causing sustainability to be considered only at a later stage. A respondent mentioned the following: *"On the other hand, in organisational decision-making, conventional investment approaches versus sustainability investments often still require extra explanation to clarify the alternatives and the associated costs. People tend to quickly revert to business case thinking."*, highlighting that it is often still difficult to justify sustainable investments within an organisation. Additionally, the barrier "high investment costs" suggests that companies are sometimes reluctant to invest heavily in sustainability, as they perceive it to be too costly. One respondent mentioned the following: *"These are significant investments, and you need to be able to calculate them properly. You can go all the way with ESG, but you still need to meet your financial commitments, and vice versa."*. This quote also further illustrates the trade-off between cost considerations and the implementation of sustainability efforts. One reason respondents mentioned for their reluctance to make large sustainable investments, is the lack of a clear return on investment. This concern is reinforced by the continued dominance of external business case thinking. A respondent indicated that most external parties are still merely focused on the business case without considering sustainability: *"All business models (already starting with the municipality)are based on standard indicators that do not yet account for sustainability. This also applies to land development calculations, which are still based solely on standard volumes and figures. The entire system still revolves around business case models that have not yet incorporated sustainability."*. Another respondent indicated the following: *"The valuation methodology is simply not yet up to date when it comes to sustainability. Valuation only looks backwards, not forwards. As a result, sustainability is not given enough weight and is not properly factored into a building's value. For example, when we plan to renovate a building, they're still hesitant to estimate how much it will be worth afterwards — and that makes things difficult for us."*, showing that external business case thinking plays a significant role in hindering further sustainability implementation. These barriers directly hinder financially driven motivations, as they highlight that sustainability can still lead to higher costs (and does not always result in a directly and recognised higher value), which discourages companies whose primary focus is financial performance.

Social and moral-based related barriers

Most barriers were categorised under this theme, indicating that while many companies are socially or morally motivated to implement sustainability, they also face many related challenges. These barriers highlight that the social and organisational conditions needed to support such motivations are often lacking or insufficiently developed. The most frequently mentioned barrier in this theme is “unclear sustainability performance indicators” (10 mentions), which suggests that even when people want to do the right thing, they often struggle to measure or define what that actually entails. As mentioned by one of the respondents: *”Establishing clear metrics is still a challenge for certain topics. Not everything has been fully developed yet, and there is no leading party currently addressing this.”*. Additionally, this respondent indicated that because of that difficulty, the following has happened several times: *”For example, we built a certain apartment complex entirely out of wood, which was about 20% more expensive. So then we’re doing the right thing, but it’s not fully reflected in the numbers. And that doesn’t help when trying to tell the story and get everyone moving in the same direction.”*. This shows that unclear performance indicators can hinder organisations from demonstrating the value of their sustainability efforts, making it more difficult to justify investments and build support. For the barrier ”the term sustainability is too broad or unclear” the same problem applies. Moreover, several barriers point to a lack of commitment from both management and employees. For instance, one respondent said: *”ESG is not necessarily part of people’s day-to-day work; it’s seen as something additional. Even though that’s not actually the case, it’s still often perceived that way.”*, illustrating that many employees still perceive sustainability as an extra task on top of their regular work. Other respondents reinforced this concern, pointing out that sustainability can introduce additional complexity to existing roles: *”It can be quite overwhelming for colleagues — there are so many components, and it really broadens their field of work. Especially in the field of development, which is already very complex, so this definitely adds an extra layer for them.”*. Another respondent also observed a lack of commitment from their top management:*”Look, the owner of our company races old cars and flies around the world with them, so he has a very different perspective.”*. The barrier of lack of awareness reinforces both types of commitment issues. In addition, companies must secure approval from at least 70% of residents to move forward with sustainability plans. However, respondents indicated that residents often oppose these plans, particularly because they are typically linked to slight rent increases. This resistance makes it difficult to meaningfully improve resident well-being or contribute to broader societal goals. These findings show that although many organisations are genuinely motivated by a sense of social responsibility and a desire to contribute to well-being, these ambitions are often undermined by a lack of internal commitment and awareness, a lack of knowledge and skills, unclear performance indicators, and resistance from key stakeholders.

Pressure from stakeholders

Interestingly, only two barriers were identified under the theme “Pressure from stakeholders,” despite this theme being mentioned several times as a motivation. This contrast suggests that while stakeholder expectations may play a significant role in encouraging sustainability, they do not necessarily translate into practical obstacles. This can be explained by the nature of stakeholder influence: it is relatively easy for stakeholders, such as investors, shareholders, or tenants, to set requirements or express ambitions. The real challenges only arise during the internal execution of those demands, rather than at the moment those expectations are communicated. The two barriers mentioned, “split incentives” and “wrong incentives,” point to structural misalignments between parties, but overall, the data suggest that stakeholder pressure functions more as a directional force than as a barrier.

Risk management

The barriers grouped under the theme of risk management relate to more indirect obstacles that limit a company’s ability to proactively anticipate and control sustainability-related risks. These include the lack of capacity among suppliers, poor data quality, limited availability of sustainable innovations, and the fact that sustainability is often considered too late in the process. Each of these factors weakens the ability to anticipate and mitigate future financial, regulatory, or reputational risks; key aspects of effective risk management. For instance, one respondent mentioned the following: *”For some things, there simply isn’t enough data available at all, and for others, data may exist, but the quality isn’t good — so it ends up being more of an estimate. For example, the method used to assess flood risks hasn’t been updated since 2012, even though more recent maps are available.”*. This quote

illustrates how a lack of high-quality data leads to uncertainty, making it difficult for organisations to make well-informed, risk-based decisions. Additionally, several respondents noted that the limited availability of innovations hinders the adoption of certain sustainability initiatives. For instance, one respondent mentioned: *"Innovations sometimes prevent us from really progressing quickly. We prefer to source them from the Netherlands to keep the process as sustainable as possible. But this isn't always possible, which means we're sometimes unable to implement certain sustainability initiatives."*. Another respondent noticed the same problem: *"If we want to reach zero CO_2 emissions, we need materials that don't emit CO_2, but those simply don't exist yet. So, we're very dependent on what the market offers and which innovations currently exist in product development."*. These quotes illustrate that a lack of available sustainable innovations limits a company's ability to take proactive steps toward reducing long-term environmental risks. When the necessary materials or technologies to reach goals like net-zero CO_2 emissions are not yet available, organisations are unable to act, even if they are willing and motivated to do so. While these barriers may not immediately disrupt sustainability efforts, they create conditions of uncertainty, inefficiency, or delay that can undermine long-term resilience. For that reason, they are grouped under the risk management theme. These findings show that while some organisations are motivated to implement sustainability as a way to reduce long-term risks, their ability to act on this motivation is often hindered by practical limitations such as poor data, limited innovation, and weak supply chain capacity.

Regulatory compliance

Although regulatory compliance was mentioned as a motivation to implement sustainability, they were not cited as frequently as other themes. Nevertheless, several barriers were mentioned (10 in total), most of which relate to the complexity and overload of regulatory requirements. This indicates that companies may feel obligated to comply, but at the same time find the volume, inconsistency, or administrative burden of regulations difficult to navigate. To illustrate this further, one respondent stated the following: *"Moreover, there is an increasing amount of regulation, which creates significant obstacles. The language used in these regulations is also very difficult to understand."*, showing that both the amount of regulations and the complexity of their language play a significant role. Another respondent mentioned that they had analysed how many of their properties would need to be renovated to meet the Paris Proof standard by 2040, and how many projects would need to be completed annually to achieve this goal. He then went on to provide a concrete example of regulatory complexity during the start of these project: *"And then you realise that there's quite a lot involved. For example, we have to take the Nature Conservation Act into account. You can't just add something to the cavity walls or the roof; you have to apply for various exemptions. That process takes about a year and a half and results in a lot of extra costs, which in turn hinders us from reaching our 2040 goals."*. This example shows that even when legal compliance is well intended, the long lead times, cost implications, and procedural delays might obstruct the achievement of sustainability goals. In addition, one respondent raised concerns about the actual impact of compliance-focused instruments: *"Due to the constant requirement to renew certifications, you're essentially being pushed into spending more. After all, you want to achieve the maximum number of points. But the building doesn't actually improve. The money goes toward recertification, while the building itself doesn't become any more sustainable."*. Here, the focus on formal compliance is perceived to detract from actual environmental improvement. These findings suggest that respondents are quick to focus on the negative aspects of regulations, indicating that the issue may lie less in the regulations themselves and more in how they are perceived and experienced in practice.

5.2.3. Strategies for sustainability implementation

In addition to the barriers, respondents also mentioned a range of strategies they use to support the implementation of sustainability. Unlike the motivations and barriers, these strategies are not grouped under the same five themes, as many of them are more overarching in nature and cut across multiple categories. Moreover, it is important to acknowledge that there are two types of strategies. Some strategies are specifically aimed at mitigating certain barriers, while others are more general implementation strategies that help advance sustainability in general. The latter may, in some cases, also introduce barriers of their own. While not all strategies can be clearly linked to a specific barrier or theme, exploring their intended purpose and level of application helps to better understand how organisations navigate sustainability in practice.

The codes for the strategies were derived using the same approach as for the motivations and barriers; by identifying respondent quotes that shared overlapping characteristics. As an example, the following two quotes (out of nine in total) from different respondents were all coded under “quick win sustainability measures”:

”So we looked at the composition of our portfolio and asked: where can we make the most impact? That naturally led us to our older properties, where small and easy measures can have a significant effect.”

”We actually put together a kind of standard package of measures for those properties, so you don’t have to start from scratch with each project. These are quick wins, since everything is already prepared. Moreover, these are also the easiest assets to tackle.”

These quotes illustrate how some companies focus on implementing small, low-effort actions that still achieve significant impact, especially in older or more accessible assets. The respondents emphasised the importance of identifying quick wins and developing standardised solutions that streamline implementation. This approach reflects a practical strategy to accelerate progress.

Additionally, the following two quotes were grouped under the code ”learning from colleagues”. These quotes illustrate how peer learning is actively encouraged within the organisation as a strategy to enhance sustainability implementation. Rather than relying solely on external expertise or formal training, the focus here is on internal capacity-building through recognising and sharing colleague-specific knowledge.

”To enhance the learning effect, we’ve listed for all highly sustainable projects which colleague has delved into it, so they can develop as a sort of expert from whom others can learn.”

”It also helps to make use of each other’s knowledge, and it is clearly promoted when a colleague has delivered a strong performance in terms of sustainability, so that others can learn from it.”

Figure 5.1 presents the identified strategies, already categorised by code, along the horizontal axis. Along the vertical axis, it shows the barriers. As mentioned, the relation between barriers and strategies is less straightforward, as some strategies are aimed at addressing specific barriers, while others are more overarching. By examining logical overlaps between the two, this matching approach helps identify mitigation strategies that may support property asset management companies in overcoming implementation challenges. These strategies serve as one possible interpretation of how specific barriers might be tackled in practice, based on the interviews. The table distinguishes between strategies that directly mitigate barriers, marked with an ’X’, and those that have an indirect influence, marked with a ’*’. This distinction is important because it highlights which strategies can be immediately applied to remove specific barriers, and which ones create enabling conditions that support broader implementation efforts over time. All strategies identified in the empirical analysis have been included in the table, regardless the frequency. This is because some of the most effective strategies may not yet be widely implemented or recognised across organisations. In contrast, only barriers that were mentioned three times or more have been included.

Solving → Barriers

Strategies ↓

	Balance between sustainability and profitability	External business case thinking	Internal business case thinking	Lack of clear return on investment	Requires high investment costs	Lack of awareness	Perception increased workload due to sustainability tasks	Lack of commitment (top/middle) management	Lack of knowledge and skills	The term sustainability is too broad/unclear	Unclear sustainability performance indicators	Lack of capacity suppliers	Lack of data (quality)	Limited availability of sustainable innovations	Regulatory complexity and overload
"Voluntary" certifications				*		*		*		X	X				
Creation of own performance/impact system	*		*	*		X	*	X	X	X	X				
CSRD as mandatory mechanism						*		*		X	*				
Environmental policy translated into concrete themes						*	*	*	*	X	X				
Formulation of KPIs								*	*	X	X				
Quick-win sustainability measures				X	*		*		X	*	*				
Roadmap with specific measures for ParisProof							*		X	X	X				
Campaigns/trainings to educate employees	*		*	*		X	X	*	X	X	X				*
Commitment management	*		*			*	*	X	*	*	*				*
Forwarding work-related sustainability issues		*							X						
Learning from colleagues						X	*		X						
Organising events dedicated to sustainability	*		*	*		X	X	*	X	X	*				*
Program to ensure sustainability implementation	*		*	*		X	X	X	X	X	X				*
Sustainability positive culture	*		*			X	X	X	X	*					
Tracking/check of sustainability team			*			*		X							
Tracking/check of (top)management			*			*		X							
Clear structure and team for sustainability	*		*			*	X	*	X	*	*				*
Clear sustainability goals or vision	X		X	*		X	X	X	*	*	*				*
Clear targets per assignment				X	*	*	X	X		*	X				
Commitment to SDGs	*		*	*		X	*	X	*	X	X				
Sustainability strategy same as core strategy	X		X	*		X	X	X	*	*	*				
Bonusses for management on KPIs								X							
Mandatory reporting to shareholders			*			*		X							
Sessions with external expertise	*		*			X	*	X	X	*	*				*
Show financial benefits of sustainability	*		X	X				X							
Negotiating with residents						X									

Figure 5.1: Impact of strategies on barriers

The links shown in Figure 5.1 between strategies and barriers are based on how respondents described the role and effects of these strategies in the interviews. In some cases, a strategy was mentioned as directly addressing a specific barrier; in others, it contributed more indirectly to overcoming certain challenges or enabling broader progress. The following section includes illustrative quotes to clarify how these connections were interpreted and why particular strategies were linked to specific barriers.

In particular, several strategies were directly mentioned by participants as being aimed at strengthening management engagement, or improving employee awareness and their perception towards sustainability. To illustrate this with concrete examples, the following quotes demonstrate it clearly:

> *"Internally, we definitely see barriers as well. The owner often asks whether things could be done more cheaply. But to convince him, we consistently keep showing the benefits and the increased*

value of sustainable properties."

"Some KPIs are linked to something called variable compensation. Senior management then receives a bonus or financial reward for those, which leads to stricter steering on those specific KPIs."

The first quote has been grouped under the code "show financial benefits of sustainability", while the second quote has been grouped under "bonusses for management on KPIs". These quotes clearly demonstrate that these strategies are aimed at mitigating the lack of commitment at the management level. Additionally, the quotes above once again highlight the strong emphasis on financial benefits when implementing sustainability, apparently particularly at the management level.

"An e-learning module was developed last year, which every employee is required to complete. In that e-learning, they learn why we want to become more sustainable, what our objectives and strategy are, and how they can contribute to that in their day-to-day work."

"I started in 2020, and sustainability was approached quite differently back then. You could really see that things have progressed significantly in the past few years. Some colleagues were on board right away, but others had their doubts. However, through training, awareness has increased among the team, and by now, sustainability has truly become part of the norm."

"Through the training sessions, we not only increase awareness among colleagues, but of course, it also helps them gain more knowledge about the topic. This, in turn, makes the concept of sustainability clearer and helps them better understand how they can contribute to it."

These quotes illustrate the strategy of internal trainings to increase awareness as a means to support sustainability implementation. Additionally, it shows that these kind of trainings help to make the term sustainability and its performance indicators more clear, which in turn strengthens knowledge and skills surrounding this topic. Other strategies are even more clearly focused on mitigating unclear performance indicators and making the term sustainability more clear. The following quotes show which strategies ensure this:

"We actually started this system to gain better insight into all the different aspects of sustainability. Underneath it, there are 48 objectives, each with a basic and an advanced level, and I believe around 200 measures that we've defined to support them."

"We selected around 12 different themes/topics and developed KPIs for each of them, covering the E, S, and G aspects. In doing so, the term sustainability became clearer, as we really developed this framework ourselves."

The first quote was coded under "creation of own performance/impact system" and illustrates how such a system is used to gain clearer insights into what sustainability entails, thereby enhancing employees' knowledge and skills. By making sustainability more concrete and measurable, such a system helps organisations better understand the impact of their actions and justify investments. It allows for clearer communication of sustainability outcomes, which can strengthen the business case and reduce uncertainty around return on investment. The second quote was coded under "environmental policy translated into concrete themes", illustrating a direct impact on the clarity of the term sustainability and its performance indicators. Other strategies have a more indirect impact across multiple barriers, especially those aimed at establishing clear sustainability goals, targets, or organisational structures. The following two quotes examplify this:

"For the past few years, we've set a clear goal for ourselves, and we've noticed that this really served as a starting point to ensure everyone was committed to achieving it, which also made sustainability a bit more tangible. Additionally, it helps with the financial barriers I mentioned earlier, because it shifts the focus more toward achieving the sustainability goal instead of solely making a profit."

"It is organised in a decentralised way, but we do have a dedicated team that works full-time on sustainability, while many other employees are also partly involved. However, having this full-time team really helps to get things off the ground, and we notice that it supports the actual implementation of plans."

The first quote shows that defining a clear goal not only boosts internal commitment and clarity but also (indirectly) helps overcome financial barriers by shifting focus from short-term profit to long-term sustainability outcomes. This indicates that a well-communicated goal can make sustainability more concrete and actionable. The second quote illustrates that a clear organisational structure, with a dedicated sustainability team, helps turn plans into action. Even in a decentralised organisation, having a central team ensures coordination and setting priorities, which are all crucial for overcoming operational and process-related challenges.

What stands out in Figure 5.1 is that the majority of strategies are aimed at internal barriers, particularly those related to awareness, knowledge, commitment, and clarity of sustainability indicators. In contrast, most external barriers are barely addressed by the strategies, if at all. These include external business case thinking, lack of supplier capacity, poor data quality, and limited availability of sustainable innovations. Additionally, the barrier of regulatory complexity and overload is only addressed indirectly by a few of the strategies. Both can be explained by the fact that these external factors lie largely beyond the control of property asset management companies, and thus are not directly addressed.

Moreover, notable is that some strategies directly mitigate barriers, while others only indirectly influence certain barriers. Barriers that are frequently mitigated directly include the lack of awareness, the perception of an increased workload, the lack of commitment of management, the lack of knowledge and skills, the unclarity of the term sustainability, and unclear performance indicators. It also seems that many strategies focus on raising awareness, strengthening commitment, and clarifying sustainability-related concepts through tools and systems. It is therefore logical that the corresponding barriers are often directly addressed. However, some of these strategies also introduce new challenges. For instance, while the development of company-specific performance or impact systems helps create internal clarity, it also complicates the ability to compare sustainability efforts across organisations. Nonetheless, addressing these barriers remains crucial, especially given their frequency, as highlighted in Table 5.4. What stands out, however, is the relatively limited number of strategies targeting financial barriers, despite the fact that these were among the most frequently mentioned obstacles.

The only strategies that directly address the barrier of balancing sustainability with profitability, as well as internal business case thinking, are clear sustainability goals or vision and sustainability strategy same as core strategy. These strategies can be considered foundational, as they not only target specific barriers but also serve as overarching enablers that shape the broader organisational approach to sustainability. By embedding sustainability into the core of strategic decision-making, they help align long-term objectives with day-to-day operations and enable companies to move beyond isolated initiatives. Their influence extends across multiple barriers, both directly and indirectly, making them essential for creating coherence and internal commitment throughout the organisation. Additionally, strategies such as dedicated events or training sessions are important, as they contribute to creating a sustainability-positive culture within the organisation. However, their impact is primarily limited to social or moral-based barriers, making them less broadly applicable than the two more overarching strategies mentioned earlier.

In conclusion, the ten most effective strategies are the following (based on both their direct and indirect influence on barriers):

- Creation of own performance/impact system
- Campaigns/trainings to educate employees
- Commitment management
- Organising events dedicated to sustainability
- Program to ensure sustainability implementation
- Clear structure and team for sustainability
- Clear sustainability goals or vision
- Commitment to SDGs
- Sustainability strategy same as core strategy
- Show financial benefits of sustainability

Each of these strategies addresses nine or ten barriers, either directly or indirectly. Most of these strategies are mainly focused on mitigating a lack of awareness, the perception of an increased workload, the lack of commitment of management, lack of knowledge and skills, the unclarity of the term sustainability, and the unclarity of performance indicators. A few of these strategies also address the balance between sustainability and profitability, internal business case thinking, lack of clear return on investments, and regulatory complexity and overload. However, most of these strategies influence these barriers indirectly rather than addressing them through direct mitigation. This also indicates that most of these strategies are directly targeted at social and moral-based barriers, with some addressing financial barriers indirectly. However, as previously noted, financial barriers require greater attention. The fact that these barriers are primarily addressed through indirect strategies highlights a gap that may hinder effective implementation.

Table 5.5 provides a thematic grouping of the individual strategies presented in Figure 5.1. These are thus the strategies that are currently being used by the respondents. This section concludes with a brief reflection on the effectiveness of these strategies. This table organises the strategies from Figure 5.1 into broader categories based on their underlying purpose.

Table 5.5: Overview of themes and codes of strategies

Theme	Code	Times mentioned
Strategies through tools and performance systems	”Voluntary” certifications	11
	Creation of own performance/impact system	4
	CSRD as mandatory mechanism	3
	Environmental policy translated into concrete themes	7
	Formulation of KPIs	4
	Quick-win sustainability measures	9
	Roadmap with specific measures for ParisProof	7
	Total times mentioned:	**43**
Strategies to improve employee awareness and commitment	Campaigns/trainings to educate employees	8
	Commitment management	4
	Forwarding work-related sustainability issues	2
	Learning from colleagues	3
	Organising events dedicated to sustainability	3
	Program to ensure sustainability implementation	1
	Sustainability positive culture	7
	Tracking/check of sustainability team	1
	Tracking/check of (top)management	5
	Total times mentioned:	**34**
Making sustainability part of the overall business strategy	Clear structure and team for sustainability	8
	Clear sustainability goals or vision	13
	Clear targets per assignment	6
	Commitment to SDGs	1
	Sustainability strategy same as core strategy	5
	Total times mentioned:	**33**
Strategies to strengthen commitment at management level	Bonusses for management on KPIs	2
	Mandatory reporting to shareholders	5
	Sessions with external expertise	1
	Show financial benefits of sustainability	4
	Total times mentioned:	**12**
Strategies to engage external stakeholders in sustainability efforts	Negotiating with residents for sustainability initiatives	2
	Total times mentioned:	**2**

A few things become clear from this Table. The most frequently mentioned strategies fall under the theme “Strategies through tools and performance systems” (43 mentions), which suggests that organisations are placing strong emphasis on creating structure, measurability, and accountability in their sustainability efforts. This includes the use of certifications, internal systems, concretise ambitions, KPIs, and roadmaps to operationalise sustainability goals. The high number of mentions is not surprising, given that the most frequently cited barrier was “unclear sustainability performance indicators.” Several respondents also mentioned the importance of making sustainability more concrete, so that employees would find it easier to understand and be more willing to apply it in practice. As one respondent stated: *”And you see that by narrowing down the topic, it becomes much more manageable for colleagues. It’s more like, oh, we can do this, and we can do that, which made them see it as less of an effort, so that really helped.”*. However, since many respondents mentioned this strategy, each had developed their own set of themes and KPIs, effectively creating their own system for measuring and defining sustainability. As another respondent again mentioned their own way of narrowing down sustainability: *”We selected around 12 different themes/topics and developed KPIs for each of them, covering the E, S, and G aspects. In doing so, the term sustainability became clearer, as we really developed this framework ourselves.”*. This can make it difficult to compare which organisations are genuinely sustainable and which are not. A few respondents also specifically mentioned this creation of their own performance or impact systems: *”We actually started this system to gain better insight into all the different aspects of sustainability. Underneath it, there are 48 objectives, each with a basic and an advanced level, and I believe around 200 measures that we’ve defined to support them.”*. Other frequently mentioned strategies within this theme include ”voluntary certifications” (such as BREEAM) and ”quick-win sustainability measures”. These strategies do not address specific barriers, but instead contribute more broadly to the integration of sustainability within the organisation’s properties. One respondent mentioned: *”The strategy of certifying everything—just using what’s available in the market—has definitely helped. That way, there’s a fixed structure in place. Even if you don’t fully understand it and just apply the highest BREEAM standards, at least you have an easy checklist with a high baseline. So in doing that, you’re already covering quite a lot.”*, showing that certifications can make it easier to incorporate sustainability without demanding significant additional work. However, not all respondents are equally positive about these types of certifications: *”GRESB is starting to lose some of its strength. You can see that the Dutch residential funds are pretty much all achieving 5 stars (the maximum), so as a benchmark, it doesn’t mean that much anymore. And it’s quite expensive to keep recertifying. Unfortunately, it’s still necessary because investors still consider this score important.”*. This quote illustrates a critical perspective on sustainability certifications. On top of that, respondents also cited regulatory complexity and overload as a barrier, noting that the growing number of certifications can lead to viewing them as a goal in itself rather than as a means to achieve meaningful sustainable implementation.

The second most mentioned group, “Strategies to improve employee awareness and commitment” (34 mentions), shows that many organisations recognise the importance of internal engagement and commitment as part of their sustainability approach. The strategies within this theme are all aimed at increasing employee awareness and commitment. As such, they most logically serve to mitigate barriers related to the social and moral-based theme. Additionally, since many of the respondents were ESG managers, who often play a key role in initiating or influencing these strategies, it is unsurprising that they were mentioned frequently. At the same time, the literature analysis highlighted awareness as one of the first essential steps for organisations to begin engaging with sustainability. This suggests that these strategies may also be viewed as overarching and foundational, serving not so much as responses to specific barriers but rather as prerequisites for successful sustainability implementation. The most mentioned strategy within this theme is ”campaigns/trainings to educate employees”, which very directly influences the behaviour of employees. The directness of this strategy can be shown by one of the quotes: *”One of our goals is to send zero waste to incineration by 2030. This means we’ve launched various campaigns aimed at influencing employee behaviour and encouraging waste separation, so that this goal is more widely embraced within the organisation.”*. Similar strategies include dedicated sustainability events or specialised programmes designed to support effective implementation. However, the intensity of these trainings and events vary across companies. In some cases, they are extensive and mandatory, while in others they are offered on a voluntary basis and occur less frequently. The quote on page 65 illustrates that the company implemented mandatory e-learning courses, which all employees were required to complete. On the other hand, the following respondent

indicated that training was provided only to those directly responsible for sustainability: *"Each division has someone responsible for sustainability, and we organise training sessions for them. These are more specifically focused on their role, aimed at sharing knowledge."*. Some respondents even mentioned dedicating several days a year entirely to sustainability, reflecting a more advanced level of organisational commitment: *"For several years now, we've organised the 'Climate Week', during which we host various events such as lectures, challenges, and workshops. It has always been very successful and received with great enthusiasm. It really helped raise awareness among our employees about the impact we can have."*. These quotes illustrate that even when sustainability events or trainings are organised, there are significant differences in how they are implemented; and consequently, in how effective they are. The strategies within this theme are all focused on internal improvements, addressing both some specific barriers and broader, overarching aspects of sustainability implementation.

The third frequently mentioned theme involves strategies aimed at making sustainability part of the overall business strategy. The literature analysis already highlighted the importance of having a clear sustainability vision, as it is often seen as the starting point for a sustainable transition and provides direction for both management and employees. This was also agreed by respondents as most had a clear goal in mind, which they were trying to work towards in the coming years. For instance, one respondent mentioned the following goal: *"We've stated a net-zero target for 2030, but we've mainly focused that on operational emissions. Thus, reducing the energy consumption. That's the goal we've clearly set for ourselves."*. Other respondents shared similar goals: *"Our own goal is simply to reach net zero by 2050, in line with the Paris Agreement."* and *"We aim to have climate-neutral internal operations by 2030, and we are pursuing this using the OGSM model (Objectives, Goals, Strategies, Measures)."*. These quotes illustrate that even when companies share a common goal or vision, there are significant differences in what they aim to achieve and by when. While some companies focus on meeting minimum requirements, others take a more proactive approach by setting ambitious sustainability targets. It is interesting to note that just over half of the respondents referred to sustainability as part of their core strategy, which was captured under the code "sustainability strategy same as core strategy." One respondent who highlighted this expressed it as follows: *"Sustainability is reflected in all aspects of our work, which is why it's truly embedded in the company's vision and strategy."*. In contrast, other respondents highlighted a focus on operational efficiency and asset value optimisation in their company's strategy: *"The current strategy is mainly focused on service delivery to our clients; so as efficiently and cost-effectively as possible, ensuring good management of the assets."* and *"In principle, the focus is simply on how we can increase the value of our real estate."*. Moreover, it is noteworthy that nearly every company indicated having a clear organisational structure for sustainability, ensuring that responsibilities are clearly defined and effectively communicated to employees throughout the organisation. As one respondent mentioned: *"Three years ago, I was the first person solely focused on sustainability, and recently a colleague joined me. We are both responsible for everything at the group level, such as the sustainability policy, for example. There are also two colleagues from the development team who work full-time on sustainability, but then more on the technical/content side."*. The other seven respondents also indicated that at least a few individuals within their organisation were fully dedicated to sustainability, while many others were involved in the topic to some extent alongside their regular responsibilities. Only one company indicated that it did not have employees working full-time on sustainability, stating that the topic is not considered as a very high priority: *"We are mainly focused on sustainability to make our properties more financially attractive. Additionally, we're a small organisation, so it might not always be a top priority."*. This may indicate the importance of having a dedicated group of employees focused on sustainability; to shape policy, facilitate dialogue, and ensure effective communication throughout the organisation. The strategies within this theme do not mitigate a specific barrier, but rather help the organisation define a shared direction, align internal efforts, and strengthen the integration of sustainability into its overall strategy and culture.

Besides employee commitment, the respondents also acknowledged the importance of strengthening commitment at the management level. Respondents mentioned several strategies to strengthen this, with "mandatory reporting to shareholders" and "showing the financial benefits of sustainability" being the most frequently cited. These strategies differ from those aimed at employee commitment, as they focus more on financial incentives or obligations rather than increasing awareness of sustainability. This obligation is illustrated in the following quote: *"We also have to report to our shareholders about*

our sustainability efforts, so one way or another, we owe it to ourselves to lead the way in this area.". Additionally, the reliance on financial incentives is evident in the following quote: *"The owner often asks whether things could be done more cheaply. But to convince him, we consistently keep showing the benefits and the increased value of sustainable properties."*. This may indicate that while (senior) management is driven by financial incentives or external accountability, there may be less emphasis on creating genuine awareness or intrinsic motivation. These strategies mainly focus on mitigating the barrier "lack of commitment (top/middle) management". However, since this barrier was not frequently mentioned by respondents, it may also suggest that increasing this commitment is not necessary perse.

The final theme includes only one strategy, which specifically targets a single barrier: the "lack of 70% resident participation". This is illustrated by the following quote: *"We also see that participation plays a relevant role in such a sustainability process. That means we need to offer something to the resident as well, for example, in another project we installed a dormer. You can really tell that this helps get the signature sooner, which means the project can also move forward more quickly."*. This quote illustrates how incentivising residents can be an effective strategy to overcome the barrier of securing the required 70% participation threshold for implementing sustainability measures in housing projects. Given its specificity, this strategy appears to be less broadly applicable, and therefore less significant, compared to the others.

Reflection of strategy effectiveness

The strategies identified in this section were shared by the interviewed companies and reflect the approaches they currently apply to implement sustainability. However, given that these companies lack a complete overview, it is essential to critically assess the strategies they propose. The strategies suggested by the respondents appear to be well-founded and show substantial overlap with academic literature. Yet, the strategies are highly fragmented across the respondents. For instance, looking at the ten most effective ones, none of the companies applied all of them, or even most. This suggests that while the strategies themselves are strong, meaningful improvement in sustainability implementation requires a more integrated approach that combines multiple strategies. The absence of certain strategies can be expected, as individual companies often operate with limited perspective. Therefore, it is important to bring different strategies together in a coherent way.

Figure 5.1 helped to combine several strategies, which were mentioned by different companies. This allowed the previously fragmented strategies to be brought together easily. Of the ten most effective strategies, only one might require adjustment, being the "creation of own performance/impact system". While this seemed an effective strategy, it is not practical for every company to develop its own system, as this would make it nearly impossible to compare sustainability performance across organisations. Therefore, it would be more effective for companies to adopt an existing performance or impact measurement system. However, a key challenge here is the absence of a general, widely accepted framework, which makes it difficult for companies to determine which system to use. In addition to these ten strategies, it is likely that others are also needed to fully embed sustainability within the organisation. Some of these strategies were probably mentioned by respondents but received lower scores in Figure 5.1. However, it is also likely that additional, unmentioned strategies exist that were not identified by any of the respondents, simply because they do not have a complete overview. However, these missing elements can only be identified in Chapter 6 during the development of the flowchart, as it is only at that stage that any gaps will become apparent.

Another important insight that emerged and that perhaps can be seen as a sort of strategy in itself, is the foundational role of an emerging motivation/ambition in the implementation of sustainability. As seen, this ambition can originate from various sources, such as regulatory pressure, risk management, stakeholder expectations, financial incentives, or intrinsic motivation. While any form of emerging ambition may initiate sustainability efforts, the findings reveal a clear distinction between extrinsically and intrinsically motivated organisations in terms of how deeply and consistently they implement sustainability. Several respondents indicated that once sustainability became a shared ambition, other efforts followed more naturally. In these cases, sustainability was not treated as a separate project, but as a principle embedded in everyday decisions. The interviews also showed that these companies were generally more advanced in integrating sustainability into their operations, and in organising related

events, developing KPIs, and having a strong sustainability-positive culture. For instance, one respondent explained: *"It's part of how we work; because we develop for the long term, we simply have to do it right for people and the planet."*. Another noted: *"We just see sustainability as part of who we are; there doesn't always have to be a business case. That's why we believe it's important to put significant effort into our sustainability measures."*. Lastly, one respondent mentioned: *"I think that because our commitment to sustainability truly comes from within, it makes it easier for us to make decisions about integrating it. Its importance is also strongly emphasised within the organisation, which ensures that everyone is involved."*. These quotes illustrate that when sustainability is internally driven and embedded in the organisational mindset, it becomes a natural part of decision-making and daily operations. In contrast, organisations whose motivation was primarily financial or externally driven were often less likely to implement sustainability measures. For instance one respondent mentioned: *"The first thing management asks when we come up with a measure is: what does it cost?"*. This respondent also noted that the organisation does not have a dedicated sustainability team and only takes sustainability measures when they are financially beneficial. This contrast suggests that intrinsic motivation plays a unique and reinforcing role. It is also important to acknowledge that some form of ambition is necessary to initiate action. However, the findings suggest that it is intrinsic motivation in particular that most strongly supports the consistent, long-term integration of sustainability into the organisation.

5.2.4. Perception and influence of the CSRD

The empirical study has identified numerous barriers and strategies, but the question remains whether the CSRD can help mitigate some of these barriers or if it serves solely as a reporting tool without offering deeper support for implementation. Therefore, respondents were asked about their perceptions of the CSRD. As shown in Table 5.1, only two respondents remain CSRD-compliant following the Omnibus amendments. However, prior to these changes, most organisations were compliant and had already begun preparations. The respondents expressed the following challenges and criticisms regarding the CSRD:

- Accountants reluctant to provide assurance due to uncertainty (1x).
- CSRD adds little value on top of existing reporting frameworks (1x).
- CSRD is an administrative burden (3x).
- CSRD risks becoming a tick-box exercise without real impact (3x).
- CSRD risks being treated as a goal instead of a means (2x).
- Lack of clarity and standardisation of CSRD requirements (4x).
- Lack of strict demands in the CSRD (2x).
- Materiality analysis is too subjective (1x).
- Overload of CSRD requirements (4x).

The criticisms raised by respondents reveal several recurring concerns about the CSRD's practicality and effectiveness. The most frequently mentioned issues were the "lack of clarity and standardisation of requirements" and the "overload of CSRD obligations", both mentioned four times. For instance, one respondent mentioned: *"You can barely make sense of half of the original ESRS standards. So it would be great if an alternative were developed that is manageable for smaller organisations as well."*, illustrating the difficulties organisations face in interpreting and applying the CSRD standards. In addition, several respondents described the CSRD as an administrative burden or a tick-box exercise without real impact (each mentioned 3 times), indicating scepticism about whether the CSRD leads to meaningful change or simply adds reporting pressure. The fact that some respondents also fear the CSRD is being treated as a goal in itself rather than a means to improve sustainability further supports this concern. As mentioned by one of the respondents: *"I'm not saying that the CSRD couldn't contribute, but the danger with these kinds of frameworks is that people start focusing too much on the letter of the law. The CSRD does, of course, have a clear purpose. But sometimes the regulation itself is treated as the goal, rather than as a means. In reality, it's meant to be a strong instrument to ensure that sustainability measures are actually implemented and to create a level playing field so that everyone can be compared on the same basis. But all the paper tigers can, of course, make it look great on paper. So the goal becomes complying with the CSRD, while the actual sustainability impact becomes less important. You end up with a beautiful report that might not reflect anything that works in practice."*. This quote perfectly illustrates that while most respondents understood the intention behind

the CSRD and recognised its potential benefits, many remained hesitant about whether it would lead to meaningful impact in practice.

When asked about the potential benefits, most respondents acknowledged that the CSRD could help create a level playing field by enhancing comparability and transparency. Some companies even recognised that it could support sustainability improvements by making goals more tangible or by providing a clearer structure for initiatives they were already pursuing. One of these respondents mentioned: *"But it does allow you to clearly communicate to employees: Okay, listen, these are all the topics we consider material, this is what we want to improve, and this is how we're going to do it. So it does help to get certain things done. It's also more structured, because right now you're just doing things based on what you think is right."*. Additionally, several respondents noted that the CSRD may serve as an incentive for companies to begin considering sustainability more seriously. As one respondent mentioned: *"Knowing that the CSRD was on its way did push us to start putting things on paper, which we hadn't done before. That's why I do believe the CSRD can act as an incentive for certain actions."* Still, although many respondents acknowledged the potential benefits of the CSRD, these were not sufficient to justify continuing with it after losing compliance due to the Omnibus changes. Several noted that the CSRD had simply become too burdensome. While most agreed that the underlying idea was sound, they felt it needed to be significantly simplified. Only one respondent indicated that they would continue working with the CSRD, despite no longer being compliant. This respondent gave the following reason: *"We have a lot of loans (bonds and such), so the CSRD can therefore be used a reporting tool for us, and it can be helpful. I do think we somewhat underestimated how much work it would be when we decided to proceed with it. But it does provide transparency externally. For those loans, you want to be able to refer back to the CSRD to show that we're a reliable party. That lowers the perceived risk for them and might even allow us to negotiate a lower interest rate. But of course, it's also about transparent entrepreneurship when it comes to ESG."*. This indicates that the respondent's decision to continue with CSRD reporting is not primarily driven by a desire to improve sustainability within the organisation, but rather to demonstrate transparency and reliability, partly motivated by potential financial benefits. Another respondent who remained compliant after the Omnibus appeared to be the most positive about the CSRD. This respondent stated the following: *"The CSRD was really just a welcome format, finally something we could align our initiatives with. So, it helped us move forward with what we were already working on. I also think it supports our strategy and helps give it shape, thereby creating a certain structure."*. He also mentioned the following: *"I do believe the CSRD contributes to improving sustainability. It adds just a bit more structure to the things we were already doing, and in areas where we weren't yet active, it brings a broadening of our scope."*. These quotes reflect a rather positive view of the CSRD from this respondent, raising the question of why this company perceives it as a supportive tool, while others do not.

To explore how the implementation of the CSRD could be improved to place greater emphasis on genuinely enhancing sustainability instead of mere compliance, interviews were conducted with several independent CSRD experts. These were not legal experts but rather sustainability consultants with a focus on CSRD alignment and operational integration. These interviews generated an extensive range of suggestions, which are listed below:

- Add performance requirements (2x).
- Clarification of language of the directive (1x).
- CSRD lacks practical tools; support must come from the market (3x).
- Define a limited set of EU-wide focus themes to streamline CSRD reporting (1x).
- Encourage leadership and intrinsic motivation to drive impact (1x).
- EU-Taxonomy can help to classify/clarify performance (4x).
- Focus on material topics, not on reporting everything (1x).
- Involve sector organisations in CSRD assessment (1x).
- Link the CSRD to KPIs and targets (2x).
- National governments should be more actively involved in CSRD implementation (3x).
- Remove non-essential themes (1x).
- Use CSRD as a framework to learn from market frontrunners (1x).

- Use dashboards to set and track sustainability goals (1x).
- Use VSME format to make CSRD principles more accessible (3x).

The suggestions provided by the CSRD experts reveal several recurring themes aimed at shifting the CSRD's focus from compliance-driven reporting towards more meaningful sustainability impact. Many of the recommendations highlight the need to make the directive more focused, practical, and user-friendly. This includes calls to clarify the language of the directive, remove non-essential themes, and concentrate reporting efforts really only on material topics rather than trying to report on everything. A number of suggestions also propose narrowing the scope of the CSRD by defining a limited set of EU-wide focus themes, thereby reducing complexity and enabling more targeted action. In addition to streamlining content, several recommendations emphasise the importance of supporting tools, such as the EU Taxonomy for classifying performance, dashboards for tracking progress, support tools from the market, and KPIs to link reporting more closely to measurable outcomes. Notably, some experts pointed to the need for external support from the market, sector organisations, and national governments to ensure effective implementation. The VSME format was also mentioned as a promising alternative. It stands for 'Voluntary Small and Medium Enterprise' to support non-listed small and medium-sized undertakings that fall outside the CSRD scope. Its main goal is to offer a proportionate and simplified alternative to the full European Sustainability Reporting Standards (ESRS), with more clarity and more focus. (EFRAG, 2024). Finally, some suggestions focused on broader themes, such as encouraging leadership and intrinsic motivation, and using the CSRD as a learning framework rather than just a reporting obligation. Altogether, these expert insights reflect a shared concern that implementation of the CSRD risks becoming overly bureaucratic, and a clear desire to refocus it as a tool for real impact. At this stage, the challenges associated with the CSRD may outweigh its potential benefits. It can therefore be concluded that, while the CSRD has the potential to be a useful tool in addressing certain barriers, its current form does not yet offer sufficient support for effective sustainability implementation.

5.3. Conclusion and next steps

The empirical findings reveal a nuanced understanding of how property asset management companies approach sustainability. They contribute to understanding how these companies can effectively implement sustainability across both strategic planning and operational practice. Financial motives and social and moral-based motivations were mentioned most often by respondents, indicating that both are key drivers. However, the data also showed that many respondents expressed a willingness to act more sustainably, but only when the financial case is sound. This suggests that while companies may be morally committed to sustainability, financial considerations still take precedence in decision-making.

Another important insight from the findings is the foundational role of organisational ambition in initiating sustainability efforts. While some form of ambition, whether driven by external pressure or internal values, is necessary to initiate action, the findings highlight a clear distinction between types of motivation. In particular, organisations driven by intrinsic motivation appear more likely to embed sustainability deeply and consistently across their operations. This suggests that intrinsic motivation acts as a reinforcing condition that enhances the effectiveness and durability of sustainability strategies. This distinction was not explicitly emphasised in the literature and therefore represents an important contribution of this study.

Still, the presence of strong motivations does not necessarily translate into smooth implementation. A range of barriers were identified across the same themes, with the majority (logically) also falling under the financial and social and moral-based categories. Compared to the literature, the empirical study found that both internal and external barriers play a significant role in hindering sustainability implementation.

Figure 5.1 provided an important visual overview of how identified strategies relate to the most frequently mentioned barriers. This cross-analysis highlights that while some strategies directly address specific challenges, others operate more indirectly or systemically. Notably, the most effective strategies tend to be those that support internal structure, awareness, and alignment; underlining the importance of internal support systems for sustainability implementation. However, while social and moral-based barriers were widely addressed, few strategies appear to target financial barriers directly; sug-

gesting a gap between internal efforts and the most pressing implementation challenges.

Finally, the role of the Corporate Sustainability Reporting Directive (CSRD) is still up for debate. While most respondents recognised its potential to enhance transparency and comparability, many doubted whether it would drive actual sustainability impact. The CSRD was often described as too complex, with many respondents expressing concerns about its clarity. Several independent CSRD experts suggested improvements, such as simplifying the standards, providing more focused guidance on what and how to report, and external support from the market, sector organisations, and national governments. However, this raises the question of whether all these suggested improvements should be incorporated directly into the CSRD itself, or whether they would be better addressed through tailored implementation; allowing member states some flexibility to adapt and apply certain elements based on their national context.

Overall, the empirical research gave more clarity on how property asset management companies currently implement sustainability and what motivates them to do so. To translate these insights into practical guidance, the next chapter introduces a flowchart that brings together the most important findings. Here, it is essential to critically assess which strategies are still missing and how all identified strategies can be effectively integrated into the flowchart. This flowchart offers a structured, step-by-step approach to support companies in strengthening their sustainability implementation. Finally, these steps will have to be confronted with the CSRD again to assess whether the directive can meaningfully support this process.

6

Flowchart and comparison CSRD

This chapter first presents a flowchart to improve sustainability within property asset management companies. It then compares this flowchart with the CSRD to assess which role the directive plays in supporting such efforts. This chapter will help to answer the third and fourth sub-question.

6.1. Development of flowchart

To support property asset management companies in enhancing their sustainability implementation, this section presents a practical flowchart based on the findings from Chapter 5. Rather than repeating abstract recommendations or a long list of strategies, the flowchart offers a concrete, step-by-step guide that aligns with a company's current context, helping them move forward based on their own starting point, internal structure, and level of maturity. The flowchart is specifically developed for companies within the property asset management sector, with a primary focus on those that do not fall under the CSRD's scope. Still, it can also support CSRD-compliant companies in strengthening their sustainability efforts. That said, these companies should be aware that simply following the flowchart does not ensure compliance with the CSRD requirements. To ensure compliance, they should also follow the steps outlined in Section 3.3 and consider these additional requirements early on in the flowchart process. Although the CSRD was discussed extensively in this thesis, it is thus not included in the flowchart because it does not currently function as an effective instrument for improving sustainability performance, as will be explained in Section 6.2. The flowchart focuses on strategies that actively strengthen internal sustainability practices, ultimately leading to a fully embedded sustainability approach.

The flowchart is built on the empirical insights gathered during the interviews in Chapter 5. These interviews revealed that while motivations to improve sustainability are often present and serving as the initial trigger, implementation is hindered by a range of barriers. Most steps in the flowchart correspond to one of the ten most effective strategies identified in Chapter 5, which were selected based on how many and which barriers they mitigated (directly or indirectly). These strategies include both foundational and operational interventions, such as a dedicated team to sustainability, formulation of a sustainability goal or vision, and organising events centred around sustainability. However, when including only these ten strategies, it becomes clear that some gaps appear. For instance, there are no clear suggestions on how to formulate a concrete sustainability goal or vision, nor on how to apply it effectively. Additionally, key performance indicators are not addressed, even though the interviews highlighted their importance. Moreover, the "program to ensure sustainability implementation" remains undefined, despite literature emphasising the critical role, and frequent absence, of operational implementation. Finally, no strategies have been identified that relate to continuous learning or the incorporation of feedback, even though the literature also highlights these as important components. To address these gaps, it is sensible to first revisit the strategies listed by respondents in Table 5.4, to assess whether some of them, despite receiving lower scores in Figure 5.1, may still be valuable to include.

Reviewing this table reveals that several of these strategies could indeed help address the identified gaps. First of all, the strategy "formulation of KPIs" is useful to include to ensure sustainability goals

are translated into measurable outcomes, as respondents highlighted it as a valuable step. Second, ”translating the sustainability vision or environmental policy into concrete themes” can support the development of a clear action plan to guide the implementation program. Third, a ”roadmap with specific measures for Paris Proof”, can help concretise actions, as it was widely used by respondents and proven effective in identifying the steps needed to reach the 2040 goal (DGBC, 2025). Therefore, this strategy can also be used to help develop a concrete action plan. Lastly, it is useful to include the stimulation of a ”sustainability positive culture” at the end of the flowchart. This can help stimulate continuous learning and support the long-term embedding of sustainability within the organisation. The importance of creating such a culture was emphasised in both the interviews and the literature (Matinaro & Liu, 2017). With the inclusion of these strategies, the flowchart is further refined. However, some steps still appear to be missing, making it necessary to revisit the dataset to explore whether new insights emerge now that a complete overview is available. In addition, it is useful to consider whether the literature offers any additional strategies to incorporate.

A renewed examination of the dataset revealed some additional insights. Several respondents noted that one of the first tasks of the (newly established) sustainability team was often to assess the organisation’s current sustainability performance before proceeding with other activities. As one of them mentioned: *”The introduction of a dedicated ESG team was a very important starting point for us. One of our first tasks was to map out how our organisation is currently engaging with sustainability, so we could build from there”*. Additionally, it was found that identifying concrete actions/measures before developing an action plan was considered an important part of practically implementing sustainability and that this was in fact common practice among most respondents. Two different respondents mentioned the following: *”We actually started this process to gain a better understanding of all the levers. That’s why we began by defining around 200 measures before moving forward with implementation.”* and *”We put together a set of measures for certain types of homes to clearly identify which actions are possible and necessary; eliminating the need to start from scratch for each new project.”*. Lastly, an additional insight that emerged from revisiting the dataset is that assigning responsibilities and setting a timeline for concrete actions (such as those outlined in Paris Proof roadmaps) helps ensure clarity and accountability, increasing the likelihood that implementation will occur in practice. As one respondent stated: *”We found that assigning responsibility for specific actions within such a roadmap was helpful. The roadmap itself also already served as a kind of timeline, which made things easier to really execute.”*. Several other respondents expressed a similar view. At the time of the initial analysis, the relevance of these quotes was not yet fully apparent, as their significance only became clear once the overall structure of the flowchart had taken shape and the connections between the strategies were better understood.

Revisiting the literature analysis may reveal a few final strategies that are still missing in the flowchart, but were highlighted as important in the literature. First, the literature underscores that the vision should be shaped by stakeholder input and aligned with the company’s core values (Baumgartner, 2014)(Kantabutra, 2020), positioning this as an important step in the process of formulating the overall vision or goal. Second, numerous scholars emphasised the importance of internally communicating the established vision to ensure that all employees understand the significance of sustainability and are motivated to act accordingly (Adelusola, 2024)(Machado et al., 2017). Lastly, Too and Weaver (2014) emphasised that operational sustainability success depends on continuous monitoring and feedback loops, making it important to include these in the flowchart as well. Together, these steps can form a flowchart that supports companies build internal structure, develop a shared understanding of sustainability, and create a foundation for continued action.

Importantly, the flowchart is not designed as a one-size-fits-all roadmap. Instead, it reflects the reality that companies operate at different stages of maturity when it comes to sustainability. In some organisations, a sustainability ambition has only recently emerged, while others have already integrated sustainability into their strategic operations. By accommodating these differences, the flowchart offers companies a way to take the “next best step” based on their current situation. The flowchart is demonstrated below.

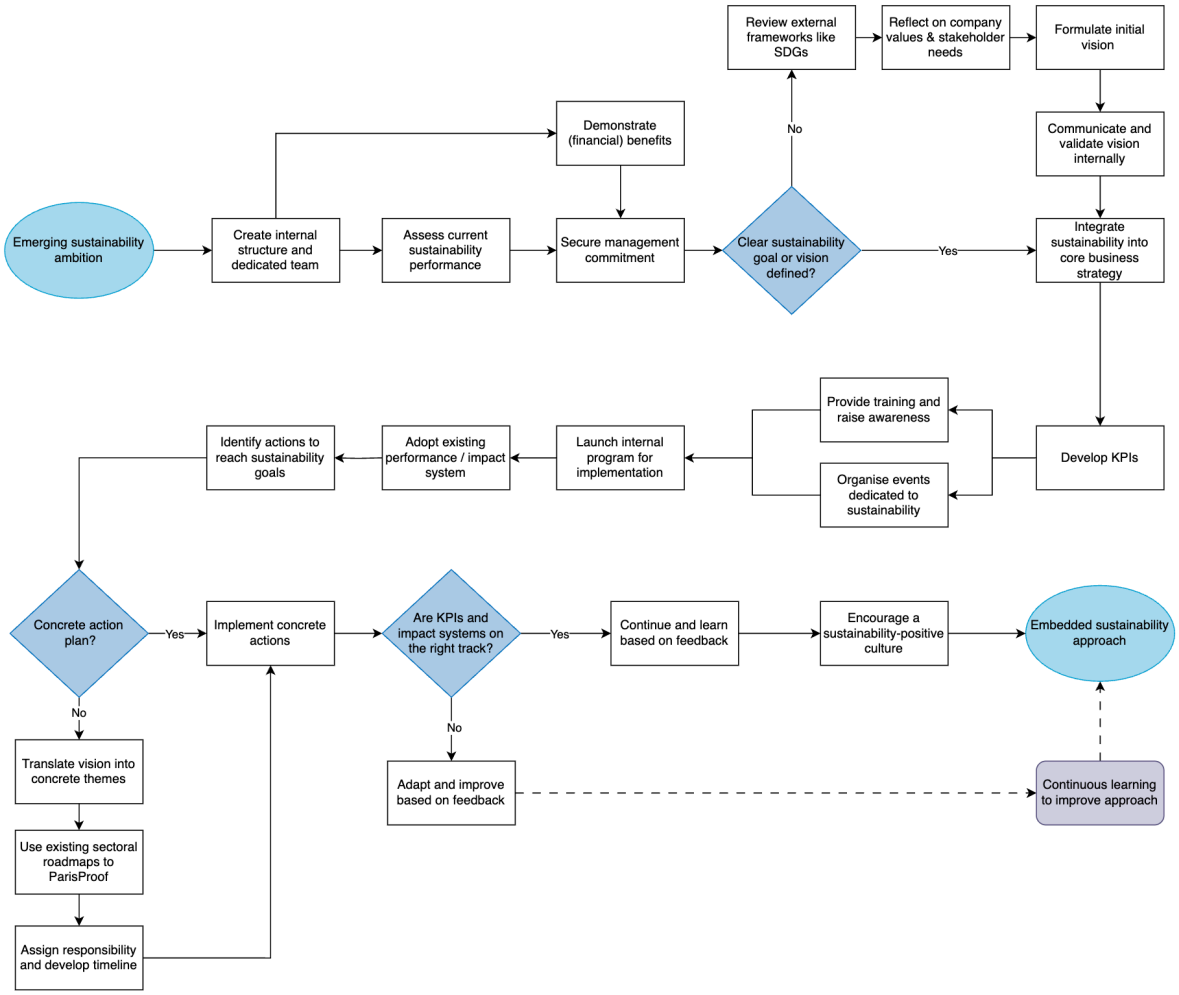

Figure 6.1: Flowchart to improve sustainability in property asset management companies (made by author)

The flowchart begins with an emerging sustainability ambition; the moment when sustainability starts to gain relevance in an organisation. As seen in Chapter 5, this ambition may arise in response to internal values, external pressure from investors or tenants, evolving regulations, or broader societal expectations. It marks the moment when sustainability becomes a topic that is starting to matter, but still needs structure, direction, and action. This ambition creates the need to structure sustainability efforts within the organisation effectively. The first step is therefore to establish a dedicated team responsible for sustainability, which ensures continuity, facilitates coordination, and acts as a central point for sustainability expertise within the organisation. Next, companies are encouraged to assess their current sustainability performance to understand their baseline. This helps them gain insight into their existing strengths and gaps, and forms the basis for setting meaningful goals and priorities. Understanding the current situation also helps to demonstrate progress later on, making the efforts more measurable and transparent. Based on this assessment, securing management commitment becomes essential, as leadership support is critical for allocating sufficient budget and personnel, embedding sustainability into strategic decision-making, and motivating employees to prioritise sustainability in their daily work. Only after these foundations are in place does the flowchart move to the development of a sustainability vision or goal. This order reflects that a strong and shared vision or goal can only be developed once there is ambition, internal commitment, a clear understanding of current performance, and support from leadership. A shared sustainability vision or goal provides strategic direction, helps align efforts, and sets a long-term ambition that goes beyond individual projects or departments. It also lays the groundwork for more concrete steps and initiatives further down the line. If no sustainability vision or goal is yet in place, the flowchart outlines a clear route for its development. Companies are encouraged to reflect on their internal values and stakeholder needs and to consult external reference points such as

the Sustainable Development Goals (SDGs). Together, these elements help shape a vision that is both meaningful and strategically relevant. After the initial vision is formulated, it must also be discussed, communicated, and validated internally. This process ensures that the vision is not just a management exercise but is widely supported throughout the organisation. Once validated, the vision can be integrated into the company's core business strategy, ensuring that sustainability becomes an embedded consideration in both daily operations and long-term planning.

From there, the flowchart helps companies translate vision into action. The starting point here is the development of clear Key Performance Indicators (KPIs), which translate high-level goals into measurable outcomes. This was consistently highlighted by interviewees as a critical step, both for tracking progress and for maintaining internal alignment and accountability. To enable broad organisational engagement, training and awareness-raising activities are essential. Many respondents emphasised that limited sustainability knowledge within the company posed a significant barrier to implementation. Organising events and offering targeted training helps to increase general awareness, bridge internal knowledge gaps, and enhance commitment across departments. Once internal commitment is strengthened, a dedicated implementation program can be launched. This step in the flowchart marks the shift from setting strategic goals to actually putting them into practice through a structured implementation plan. To support this, companies are encouraged to adopt an existing performance or impact system that consistently evaluates and categorises sustainability actions based on their environmental performance and alignment with defined standards. At this stage, companies should identify specific actions that support their sustainability objectives.

However, the flowchart recognises that not all organisations will already have a fully formed action plan. For companies still needing to translate their vision into practice, the flowchart provides a structured pathway as well. This begins with translating the overarching vision into actionable themes. Sector-specific roadmaps such as Paris Proof can serve as a reference here, offering guidance on what is needed to align with long-term climate goals. Assigning responsibility and setting a timeline ensures that the plan is not only concrete but also actionable and accountable. Once a clear plan is established, the company can move on to implementation; putting ideas into practice and turning goals into concrete actions. To support continuous improvement, the flowchart builds in regular monitoring and evaluation. By assessing whether the KPIs and performance systems are 'on the right track', organisations can identify early signs of success or deviation. If results are not satisfactory, the feedback loop drives companies to adapt and improve their approach. Lastly, organisations are encouraged to build a culture that values and promotes sustainability in everyday work. This cultural shift came up frequently in the interviews and is seen as essential for achieving lasting impact. Ultimately, all these efforts lead toward an embedded approach to sustainability; one where it becomes a core part of how the organisation operates, rather than a separate add-on. To maintain this progress and remain adaptable, the flowchart concludes with a feedback loop for continuous learning and improvement. Using a dotted line shows that it is about adjusting and adaptation over time, rather than being a fixed step in the core sequence. This final step highlights that embedding sustainability is not a single initiative, but a continuous process of growth and development.

6.1.1. Positioning the flowchart in relation to existing frameworks

As seen, the flowchart thus serves as a practical guide for initiating and structuring sustainability efforts within property asset management organisations. It addresses the internal process of turning sustainability ambition into concrete actions by guiding companies through vision development, internal alignment, and concrete implementation; all elements that come before formal assessment. In contrast, frameworks such as BREEAM, GRESB, and GRI mainly play a role in assessing and communicating sustainability performance. They primarily serve as tools for evaluating sustainability performance, and thus after concrete sustainability actions are already in place. These systems focus on measuring outcomes; such as energy use, material use, or ESG indicators, often at the end of a project.

This means that the flowchart does not compete with existing tools like BREEAM or GRESB, but rather complements them by supporting the conditions necessary to make such certifications meaningful and achievable. When organisations also want to use such existing frameworks, it can be beneficial to consider relevant criteria already during the vision-formulation stage of the flowchart. Since these

frameworks define what will eventually be assessed, aligning early-stage goals with their requirements can help ensure consistency and increase the chance of successful certification later in the process. This way, concrete actions can be implemented with the criteria of these frameworks in mind. Once a sustainability approach is embedded within the organisation, its performance can be assessed, and externally communicated, through the use of these frameworks. In this way, the flowchart provides a foundation for embedding sustainability within the organisation, before tools like BREEAM and GRESB offer external validation of performance.

6.2. Comparison with the CSRD

This section explores how the developed flowchart aligns with the structure and requirements of the Corporate Sustainability Reporting Directive (CSRD), as reviewed in Chapter 3. While the CSRD was initially considered as a potential tool to guide sustainability implementation, a closer comparison reveals a number of critical mismatches.

The flowchart was designed to support a step-by-step internal transition toward embedded sustainability, starting with ambition and team formation, followed by strategy development, KPI development, implementation, and cultural change. In contrast, the CSRD is a reporting framework, largely focused on disclosing externally observable sustainability performance. The directive assumes that many foundational internal processes are already in place. For instance, while the CSRD requires organisations to disclose who oversees sustainability and how it relates to their strategy, it does not provide guidance on how to build internal commitment or formulate a clear sustainability strategy. Similarly, the flowchart includes steps like translating the vision into action, organising training, and launching internal programs; none of which are covered or supported by the CSRD.

A key strength of the CSRD lies in its emphasis on transparency and materiality. It provides a structured way to report sustainability performance once priorities have been defined and systems are in place. Yet, this research suggests that many property asset management companies are still in the phase of building those foundations; precisely where the CSRD offers little practical support. The directive provides no help with initiating internal sustainability efforts, developing implementation roadmaps, or building capacity. However, it is questionable whether such detailed guidance should even be included in the directive itself. Given the diversity of sectors, organisational structures, and national contexts, it may be more effective to leave room for tailored support (”maatwerk” in Dutch) at the national or sectoral level. Rather than expanding the directive with prescriptive implementation pathways, the European Union could encourage member states or industry bodies to develop practical tools and guidance that align with the CSRD’s objectives but reflect more specific needs. Such support could take the form of practical tools, like the proposed flowchart, aimed at ensuring that essential groundwork for sustainability implementation is well established.

In the table below, each component of the flowchart has been compared to the CSRD/ESRS requirements, including a short explanation of why it does or does not fit. In this context, “match” refers to whether a step in the flowchart is reflected back in the CSRD/ESRS requirements. A “yes” indicates that the CSRD requires companies to address the topic; a “no” means it is not reflected in the directive. A “partial” response often suggests that while the CSRD does require reporting on the topic, it provides little to no guidance on how it should be implemented.

Table 6.1: Comparison between flowchart steps and CSRD requirements

Flowchart Step	CSRD/ESRS equivalent	Match?	Short explanation
Create internal structure and dedicated team	GOV-1 - GOV-5	Partial	CSRD assumes internal capacity exists; no guidance to build it
Assess current sustainability performance	E1–E5, S1-S4 (if material)	Partial	Only required if topic is material; no method for assessment
Secure management commitment	GOV-1, GOV-2	Partial	Requires disclosures on roles, not on how to gain commitment
Develop sustainability vision	SBM-1, SBM-2	Partial	Vision is reported if relevant, but no support to create it
Communicate and validate vision internally	Not addressed	No	No requirements to share or embed vision internally
Integrate sustainability into business strategy	SBM-1	Yes	Requires explanation of integration into business model
Develop KPIs and metrics	MDR-M, MDR-T	Yes	Requires disclosure of metrics, targets and methodologies
Raise awareness and organise events	Not addressed	No	Culture and engagement are not part of the CSRD
Launch internal implementation program	Not addressed	No	No practical guidance or requirement
Adopt performance/impact system	MDR-M	Partial	Metrics must be reported, but system design is not guided
Identify actions to reach sustainability goals	Not addressed	No	CSRD does not outline concrete sustainability actions
Translate vision into concrete themes	Not addressed	No	CSRD doesn't guide translation from vision to action themes
Use roadmaps like ParisProof	Not mentioned	No	CSRD doesn't reference or align with these sector-specific tools
Assign responsibilities and timeline	GOV-1, MDR-A	Partial	Mentions responsibilities but no focus on planning/timing
Implement concrete actions	Not addressed	No	CSRD focuses on disclosures, not implementation
Assess KPI progress and feedback	MDR-T, GOV-5	Partial	Requires progress reporting, but lacks feedback loop logic
Adapt and improve based on feedback	Not addressed	No	CSRD does not include adaptive mechanisms
Encourage a sustainability-positive culture	Not addressed	No	No mention of cultural transformation
Continuous learning	Not addressed	No	The CSRD is static; no role for learning over time

The table illustrates that only two of the strategies identified in this study are directly supported by the CSRD requirements. This suggests that while the CSRD may contribute to initial sustainability engagement, it does not offer the comprehensive internal guidance needed to drive implementation. Therefore, the CSRD alone is insufficient to support the full range of actions required to embed sustainability within property asset management companies.

6.3. Conclusion and next steps

This chapter provided a practical flowchart to guide property asset management companies in strengthening their sustainability practices. The flowchart again reflected the importance of having an emerging sustainability ambition or underlying motivation in place as an important starting point for meaningful and successful implementation. It also showed that the flowchart can complement existing frame-

works such as BREEAM and GRESB, by providing the foundational steps needed before those assessment tools become relevant. While those existing frameworks evaluate sustainability performance, the flowchart focuses on the internal processes required to implement sustainability in the first place.

The second part of this chapter shows that while the CSRD may serve as an incentive for companies to engage with sustainability, it is not designed to actively support the internal processes required for achieving genuine sustainability impact. This comparison revealed clear differences in focus: the CSRD is primarily focused on disclosure and transparency, providing limited support for building internal structures or translating strategic ambitions into concrete actions. Although it offers a structured reporting framework, it lacks the practical tools many organisations need to take meaningful steps forward. However, it is important to note that including all these steps in the Directive at the European level may not be the most effective approach. It could be more appropriate to leave room for member states to tailor their own interpretation and support.

The interviews suggested that the CSRD, in its current form, cannot support real sustainability improvement and can merely be used as a reporting tool. However, this view requires some nuance: while it has become clear that the CSRD does not provide guidance on how to implement sustainability, it can still act as an incentive for organisations to start engaging with it. In response to this shortcoming, the flowchart provides a practical implementation guide that helps organisations actively embed sustainability, starting with a clear understanding of their own ambitions and objectives.

Next, it should be discussed how the findings in the flowchart relate to the literature, the role of the CSRD in supporting this implementation, and the broader challenge of translating strategy into practice. This reflection will help to contextualise the results and identify key theoretical and practical contributions.

7
Discussion

This thesis set out to explore how property asset management companies can effectively improve and implement sustainability within their organisation, and whether the CSRD can support this process. The starting point was the assumption that sustainability implementation is a structured process that can be supported through clear reporting directives like the CSRD. However, through the empirical research and the development of the flowchart, this view evolved significantly. This chapter reflects on that evolution, placing the results of the empirical study and flowchart development within the broader research context, revisiting the literature study, and the document analysis, and highlighting the thesis' theoretical contributions.

7.1. Reflection on flowchart strategies

The strategies needed to improve sustainability in property asset management companies are outlined in the flowchart in Figure 6.1. The following section reflects on each of these strategies, examines how they address specific barriers (Figure 5.1), and compares them with insights from the literature.

Emerging sustainability ambition

The empirical findings revealed that some form of emerging ambition is a necessary precondition for sustainability efforts. This ambition can arise from different sources; such as financial incentives, stakeholder pressure, regulatory requirements, or intrinsic motivation. However, the findings also suggest a clear distinction between any emerging ambition and intrinsic motivation. While an emerging ambition is what gets the process started, intrinsic motivation appears to lead to more comprehensive and lasting sustainability implementation. Literature indicated that organisations that view sustainability as an ethical responsibility and acknowledge their social and environmental impact tend to integrate sustainability more quickly (Gelderman et al., 2017)(Engert & Baumgartner, 2016). Additionally, Bansal and Roth (2000) mentioned that intrinsic motivation can enhance a long-term vision that prioritises societal and environmental well-being. The literature thus highlights the importance of intrinsic motivation, often linking it to stronger sustainability performance. However, it does not explicitly distinguish between general ambition and intrinsic motivation as separate drivers of implementation. The findings of this study add nuance by showing that while any kind of ambition may initiate sustainability efforts, intrinsic motivation appears to enable a more embedded and lasting approach.

Create internal structure and dedicated team

The empirical analysis showed that nearly every company had established a clear structure and dedicated team for sustainability, which helped shape policy, clarify responsibilities, and lay the foundation for sustainability efforts within the organisation. The literature has already emphasised that a clear organisational structure helps define responsibilities, thereby positively influencing the implementation of sustainability initiatives (Engert & Baumgartner, 2016)(Hueske & Guenther, 2021). In contrast, the literature viewed a dedicated sustainability team as less of a foundational step than suggested by the interviews, framing it more as a strategy to drive knowledge-sharing and enthusiasm (Adelusola, 2024). This difference in perspective is also reflected in the barriers the strategy addresses, as the literature primarily sees it as an enabler for overcoming gaps in knowledge, skills, and awareness (Aboueid

et al., 2023). On the other hand, the empirical evidence revealed that it was among the most effective strategies and, in addition, helped to address several other barriers, such as the tension between sustainability and profitability, perceptions of increased workload, and the lack of clear performance indicators. This indicates that the strategy plays a more foundational role than previously acknowledged in the literature.

Assess current sustainability performance

This strategy was only found after a renewed examination of the dataset and is also not explicitly mentioned in the literature. Nevertheless, it was included in the flowchart because several respondents described it as one of the first tasks undertaken by sustainability teams. It enabled them to understand the organisation's current position and identify concrete areas for improvement. While the literature refers more generally to aligning strategy and structure (Baumgartner, 2014), it does not highlight the practical value of conducting a performance assessment early in the process. The empirical findings therefore extend the literature by showing that such assessments can provide direction and lay the groundwork for more targeted sustainability efforts.

Secure management commitment

This strategy was identified as one of the ten most effective for sustainability implementation in the empirical research, primarily because it can indirectly address a range of barriers, including internal business case thinking, lack of awareness, and gaps in knowledge and skills. The literature stated that visible and active support from management is important to embed overall commitment to sustainability within the organisation (Engert & Baumgartner, 2016)(Neri et al., 2018). The literature also emphasised that effective leadership is crucial for encouraging sustainable behaviour and consistently communicating the vision across the organisation (Chu & Cheung, 2018)(Machado et al., 2017). These insights were further reinforced by the empirical evidence and were viewed even more positively, as Figure 5.1 indicated that management commitment could also help indirectly overcome significant financial barriers.

Demonstrate (financial) benefits

This strategy is closely related to the previous one, as respondents indicated that demonstrating the (financial) benefits of sustainability initiatives was an effective way to gain management commitment. This strategy has a more limited scope than the previous one, primarily helping to address a lack of management commitment and mitigating two financial-related barriers. While the interviews mainly emphasised demonstrating financial benefits, particularly to management, the literature takes a broader perspective, highlighting the importance of communicating the overall benefits of sustainability across the entire organisation. The literature notes that explaining how sustainability initiatives align with the company's core values can help reduce organisational resistance to change, underscoring the importance of communicating a clear vision (Adelusola, 2024)(Gannon & Hieker, 2022). However, in the flowchart, this aspect is more closely associated with the step of formulating a clear vision or goal.

Define a clear sustainability goal or vision

Both the empirical research and the literature emphasised the importance of formulating a clear sustainability goal or vision. The interviews highlighted this as one of the most important strategies, as it represents the "dot on the horizon" that organisations aim to work towards. Additionally, it became clear that this strategy can help mitigate a wide range of barriers, from financial and social challenges to several others. The literature even viewed the formulation of a clear vision as the starting point for a sustainability transition within organisations (Kantabutra, 2020). Moreover, it was said that such a vision helps both employees and management to focus on what they want to achieve (Ireland & Hitt, 1992) and to bridge the gap between objectives and practices (Graafland & Smid, 2016). This shows that both the theoretical and empirical evidence understand the importance of formulating such a vision or goal and that it influences several barriers to successful implementation.

Review external frameworks like SDGs

When a company has not yet formulated a clear sustainability goal or vision, it is advisable to first consult external frameworks such as the SDGs to help define and clarify its initial objectives. Although only one respondent mentioned it, a commitment to the SDGs and using them as a foundation for developing

a sustainability vision can help address several barriers, both directly and indirectly. For instance, it can help with mitigating the lack of awareness, lack of management commitment, and with clarifying the term sustainability and its performance indicators. The literature did not specifically mention it as a strategy to implement sustainability, but rather as a universal set of targets that can guide sustainability efforts (Hák et al., 2016). Therefore, rather than viewing it as a separate strategy, it can be better understood as a source of inspiration for formulating an organisation's own sustainability goal or vision.

Reflect on company values & stakeholder needs
This strategy was only reflected in the literature and was not mentioned by any of the respondents. According to Baumgartner (2014), developing a vision should be guided by stakeholder input and aligned with the company's core values. Since this step is part of the broader process of formulating a vision, it may explain why respondents did not mention it explicitly. However, as it contributes to developing a meaningful and well-grounded vision, it is an important element to include in the flowchart.

Communicate and validate vision internally
This strategy was also only mentioned in the literature, likely for the same reason. However, the literature emphasised that in order to ensure all employees understand the importance of sustainability and are motivated to contribute, it is essential to communicate the vision internally (Adelusola, 2024)(Machado et al., 2017). Additionally, it is important to ensure alignment in strategy, culture, operations, and performance (Berson et al., 2015)(Kantabutra, 2020). Since this strategy was not mentioned by the respondents, it can be considered an important area for improvement, especially given the strong emphasis placed on it in the literature.

Integrate sustainability into core business strategy
This strategy was mainly recognised as highly important by the literature. Even though almost every respondent had formulated a goal or vision, just over half of them had also integrated this sustainability vision into the core business strategy. However, the companies that did apply this strategy appeared to be further along in implementing their sustainability initiatives than others. Moreover, this strategy helps to directly mitigate a wide range of barriers, including the tension between sustainability and profitability, internal business case thinking, lack of awareness, perceived increased workload, and limited management commitment. The literature supports this view and emphasises that for sustainability to be effective, it should not be treated as a standalone initiative but must be aligned with the company's mission, vision, and long-term goals (Epstein & Buhovac, 2014) (Kantabutra, 2020). However, the literature primarily focuses on addressing the absence of a sustainability-oriented structure and the lack of understanding of how sustainability connects to specific tasks, while the empirical study has shown that it can go much further; helping to mitigate financial barriers, raise awareness, clarify the concept of sustainability, and more. Ultimately, this strategy should be regarded as highly important and represents a key area for improvement for organisations aiming to achieve a truly embedded approach to sustainability.

Develop KPIs
The development of KPIs was identified as a key element by the respondents in creating structure, measurability, and accountability. Additionally, it helped address a major barrier: the lack of clear sustainability performance indicators. While the literature does not explicitly mention KPIs, it frequently refers to the importance of monitoring and evaluating sustainability performance as part of strategy execution and organisational alignment (Baumgartner, 2014)(Lozano, Nummert, & Ceulemans, 2016). The empirical findings therefore extend the literature by highlighting the practical relevance of KPIs as a concrete tool to translate sustainability goals into measurable outcomes and in overcoming important barriers.

Provide training and raise awareness
Both the literature and the empirical findings emphasised the importance of investing in training to raise awareness and support the implementation of sustainability initiatives. Additionally, the empirical findings showed that training is a valuable strategy for addressing much more barriers, including financial challenges, the vague understanding of sustainability, and gaps in knowledge and skills. The latter two are also acknowledged in the literature, which highlights that training can raise awareness, equip

employees with the necessary skills, and enhance their overall understanding of sustainability (Neri et al., 2018)(Adelusola, 2024). The findings therefore indicate that this strategy can be applied to address a broader range of barriers than previously recognised.

Organise events dedicated to sustainability

This strategy takes implementation a step further than the previous one and was therefore adopted by fewer respondents. Nonetheless, it appears to address many of the same barriers as the previous strategy. The literature did not specifically mention this as a separate strategy, but referred to it more as a way to frame the previous one (Engert & Baumgartner, 2016). However, the findings show that it can actually be seen as a separate and very effective strategy.

Launch internal program for implementation

Although few respondents mentioned this strategy, the findings revealed that it is actually one of the most effective for overcoming barriers. It can indirectly address financial challenges and directly help tackle a lack of awareness, perceived increased workload, limited commitment, and unclear definitions of sustainability and its performance indicators. While the literature does not refer to this strategy in those exact words, it does emphasise the importance of formalised implementation programs to operationalise sustainability. For instance, Baumgartner (2014) highlights the need for internal action plans and structures to embed sustainability in daily practice, while Lozano (2012) stresses that structured implementation processes are essential for ensuring long-term integration. Yet, it does not mention anything about mitigating specific barriers.

Adopt existing performance/impact system

Respondents originally referred to this strategy as developing their own performance system. However, to maintain comparability across organisations, it was reframed as adopting an existing system. The findings showed that this approach helps mitigate several barriers, including the unclear definition of sustainability, a lack of knowledge and skills, and, indirectly, financial barriers; by increasing awareness and encouraging employees to engage more actively with sustainability practices. Although the literature does not explicitly refer to adopting existing performance systems, it does underline the importance of aligning sustainability goals with performance measurement (Baumgartner, 2014).

Identify actions to reach sustainability goals

This strategy emerged only after revisiting the dataset. It was described as an important step in the concrete implementation of sustainability and appeared to be relatively common in practice. Although the literature does not explicitly mention identifying concrete actions as a separate strategy, it does underline the importance of translating sustainability goals into operational measures and actions (Baumgartner, 2014)(Lozano, 2012). Additionally, Nyoni et al. (2023) and Cruz et al. (2019) highlight a variety of operational and tactical actions, such as energy-saving measures and roadmap development. The empirical findings build on this by showing that clearly defining such actions is a common and essential step in making sustainability goals actionable within organisations.

Translate vision into concrete themes

When companies do not yet have a concrete action plan, one of the first steps can be to translate the vision into concrete themes. This strategy was mentioned by many respondents as valuable, primarily for clarifying the concept of sustainability and its associated performance indicators. Although the literature does not explicitly refer to translating a vision into concrete themes, it does emphasise the importance of breaking down sustainability goals into actionable elements (Engert & Baumgartner, 2016). Additionally, it highlights that this helps organisations develop a clearer understanding of the concept of sustainability. The findings therefore build on this by showing that translating abstract ambitions into clear themes helps organisations create a shared understanding and link the vision to measurable outcomes.

Use existing sectoral roadmap to Paris Proof

This strategy was already applied by many respondents and can be used to make actions more concrete by aligning them with a clear end goal. The literature did not present it as a strategy, but acknowledged it as a framework currently in use within the real estate sector (DGBC, 2025). The empirical findings found

that it can mainly address the lack of knowledge and skills and the unclarity of the term sustainability and its performance indicators. In contrast, the literature primarily views it as a tool for monitoring and reducing emissions throughout the building life cycle, and therefore considers it less broadly applicable.

Assign responsibility and develop timeline

The final step in developing a concrete action plan is to assign responsibilities for each action and establish a clear timeline. Respondents noted that the Paris Proof roadmap often already includes a timeline, but emphasised that assigning responsibility is key to ensuring accountability; helping to drive implementation and prevent procrastination. The literature suggests that having a clear organisational structure, especially one that defines who is responsible for sustainability initiatives, can positively influence successful implementation (Hueske & Guenther, 2021) (Jenkins, 2002). However, it does not explicitly address the development of a timeline, making this an addition emerging from the empirical findings.

Implement concrete actions

This step cannot really be considered a strategy aimed at mitigating specific barriers but rather a practical necessity that simply needs to be carried out to enable implementation. Therefore, it was also not categorised as a strategy and not explicitly mentioned by respondents. The literature supports this view, recognising it as a necessary step in the process, but not one that directly mitigates barriers or significantly enhances implementation on its own (Piller & Nyoni, 2022).

Continue and adapt based on feedback

This strategy was mentioned only in the literature and not by the respondents, and can therefore be seen as an important point of improvement for organisations to adopt. Especially considering that the literature strongly emphasised its importance; Too and Weaver (2014) emphasise that operational sustainability success depends on continuous monitoring and feedback loops to ensure alignment with strategic objectives. Additionally, according to Babatunde (2015), a feedback loop allows employees to ask questions and provide input for improvements. This highlights the value of including a feedback loop in the flowchart, allowing organisations to refine adopted strategies and learn from past mistakes.

Encourage a sustainability-positive culture

This last strategy was suggested both by the literature and the empirical findings. Many respondents also acknowledged its importance, noting that it can help mitigate a wide range of barriers both directly and indirectly, including financial challenges, lack of awareness, insufficient knowledge, and limited commitment. The literature emphasised that creating such a sustainability-positive culture is crucial for aligning structures, people, and processes to ensure achieving sustainability goals (Matinaro & Liu, 2017). Additionally, it is believed to positively influence the behaviour of both managers and employees, and thus in ensuring their commitment to achieving goals (Vieira & Amaral, 2016)(Engert & Baumgartner, 2016). Moreover, it can add to knowledge sharing between colleagues and encourage them to feel more involved (Hueske & Guenther, 2021). Furthermore, the empirical findings view this as a crucial final step toward achieving an embedded sustainability approach, as it supports long-term implementation and lasting success.

7.2. The role of the CSRD in supporting implementation

An important remaining question is what role the CSRD can play in supporting this process and to what extent it may help mitigate some of the identified barriers. As described in Chapter 3, the CSRD was introduced by the European Commission to enhance accountability, comparability, and transparency in how companies report on their sustainability impacts. Its broader ambition was to steer corporate behaviour by making sustainability-related information visible and comparable to investors and stakeholders, thereby indirectly stimulating sustainable decision-making. Looking at Table 6.1 and the barriers, it can only support a limited set of steps. First, the CSRD requires an explanation of the integration of sustainability goals into the business strategy. It was found that this is an important strategy capable of mitigating several barriers. Importantly, it can directly address financial barriers, as well as challenges related to lack of awareness, limited commitment, and the perception of an increased workload. Second, the CSRD requires disclosure of metrics, targets, and methodologies, making sure that KPIs are included. Although this strategy may not be as foundational as the previous one, it remains an important

step that also helps to mitigate several barriers. They primarily focus on clarifying the concept of sustainability and its performance indicators, which can in turn indirectly help address the lack of commitment, knowledge, and skills. Lastly, the CSRD requires organisations to specify responsibilities and roles; an aspect also emphasised by respondents, who noted that doing so helps ensure implementation and prevents procrastination. Since many of the necessary strategies are still lacking, this indicates that the CSRD in its current form is not sufficient to support the processes required to improve and implement sustainability within property asset management companies. The CSRD largely assumes that foundational steps are already in place, whereas the findings indicate that this is exactly where organisations still require the most support. As noted by several respondents, the CSRD can act as an incentive for companies to begin engaging with sustainability. However, as the findings show, additional steps are needed to achieve a truly embedded sustainability approach and to effectively mitigate key barriers.

Both the respondents and CSRD-experts have given suggestions on how to improve the implementation of the CSRD to ensure it supports actual impact. They emphasised the need for clearer language, the inclusion of performance requirements, better alignment with sector-specific realities, and the introduction of a limited set of EU-wide priority themes to reduce reporting complexity. Several respondents also noted that national governments and sector organisations should play a more active role in facilitating implementation and interpretation. Additionally, experts suggested that the CSRD could benefit from better integration with the EU Taxonomy and by drawing inspiration from the VSME format, which was seen as more accessible and user-friendly. When implementing these changes, it would indeed be easier for companies to comply with the CSRD. However, it would still fail to address the internal processes needed for achieving an improved and fully embedded sustainability approach. Additionally, incorporating all of these elements into the CSRD may not be the most effective solution, as the necessary steps vary greatly across sectors, making such standardisation nearly impossible. Therefore, it would be better to allow member states the flexibility to tailor implementation to their specific sectoral and organisational contexts. Moreover, it is relevant to remember that while this thesis focused specifically on the CSRD, it is important to place it within the broader policy context of the European Green Deal, which includes a range of legislative initiatives aimed at driving the sustainability transition. The CSRD represents only one part of this package, and it might be possible that other relevant EU policies that are not included in this study may play a more effective role in addressing certain aspects of sustainability implementation.

7.3. Translating strategy into practice

The strategies in the flowchart operate at different levels, including strategic, tactical, and operational. This study began by outlining the challenge of translating strategic sustainability ambitions into concrete operational practices (Falkenbach et al., 2010), highlighting the gap that property asset management companies often face between long-term visions and day-to-day implementation (Nyoni et al., 2023). Moreover, the literature emphasised that for sustainability to become embedded within a company, change needs to take place across all these three levels of business activity (Labuschagne & Brent, 2005)(Hernández-Chea et al., 2021). Epstein and Buhovac (2014) further argue that a sustainability strategy alone is insufficient if it is not effectively executed through tactical planning and operational activities. Yet, the empirical findings revealed that property asset management companies continue to struggle with implementing sustainability across all three levels, with the specific challenges varying from company to company. Additionally, the literature showed that to date limited focus has been given to the practical implementation of sustainability, particularly the concrete steps required to translate sustainability strategies into actionable measures (Engert & Baumgartner, 2016). Furthermore, due to the absence of structured frameworks for implementing sustainability, objectives often remain at the strategic level, leaving uncertainty about the steps required for operational execution (Epstein & Buhovac, 2014) (Wijethilake, 2017). Therefore, the flowchart in this study has been developed to both address the practical challenges faced by property asset management companies and to contribute to filling the theoretical gaps identified in the literature. Moreover, the comparison of the findings with the literature Section 7.1 revealed that existing studies primarily focus on strategies at the strategic level (being the first row in the flowchart); highlighting a noticeable gap concerning the tactical and operational levels. By offering a structured, multi-level approach, the flowchart provides both researchers and practitioners with a practical tool to guide the translation of sustainability strategy into meaningful action.

8

Conclusion

This chapter summarises the main findings of this research by answering each of the sub-questions introduced in Chapter 1. It concludes with an overall answer to the main research question.

8.1. Answering sub-questions

To arrive at an answer to the main research question, each of the sub-questions will first be addressed separately. These individual answers will then be combined to formulate a comprehensive answer to the main question at the end of this chapter.

8.1.1. SQ1: What are the current motivations, barriers and strategies of property asset management companies in translating their sustainability vision into operational practices?

This sub-question was first explored through a literature review in Chapter 2, which provided a general understanding of the motivations, barriers, and strategies involved in sustainability implementation. Here, it became clear that multiple factors motivate companies to embrace and implement sustainability, ranging from external pressures to internal values. Subsequently, the barriers that hinder sustainability implementation were examined, which revealed a stronger emphasis on intra-organisational compared to external ones. To address these challenges, organisations implement a range of strategies specifically aimed at overcoming internal barriers. While the findings from the literature study provided a strong foundation for understanding the key factors influencing sustainability implementation, it was essential to conduct interviews with Dutch property asset management companies to explore the context-specific motivations, barriers and strategies relevant to this sector.

The empirical findings, presented in Chapter 5, highlight these specific motivations, barriers, and strategies relevant to Dutch property asset management companies. Identifying the motivations was a crucial first step, as they not only influence the level of commitment to sustainability but also shape the types of barriers companies face and the strategies they choose to address them. The motivations were grouped into five main themes, which include the following:

- *Financial:* Attracting investors and buyers, bonuses for top management on KPIs, certification needed for funding, creation of a positive business case, governmental subsidy, long-term value creation per property, and stand out through sustainability.
- *Social and moral-based:* Contribution/responsibility to society, fulfilling a societal role, improvement of resident well-being, intrinsic motivation, serving pension beneficiaries, and social ”license to operate”.
- *Pressure from stakeholders:* Obligation/pressure from investors, pressure from the market, shareholder requirements, and tenant requirements.
- *Risk management:* Anticipate and lead, maintaining control, and risk mitigations measure.
- *Regulatory compliance:* Obligation to meet energy label C and regulatory obligations.

These findings showed that financial considerations and social or moral-based motivations were the most frequently mentioned reasons for pursuing sustainability. Additionally, a key insight is the signif-

icant role that motivation plays in shaping sustainability efforts and influencing the success of subsequent implementation steps. Subsequently, the barriers that hinder sustainability implementation were identified and categorised into the same five themes:

- *Financial:* Balance between sustainability and profitability, external business case thinking, internal business case thinking, lack of clear return on investment, and requires high investments costs.
- *Social and moral based:* Increased workload due to sustainability tasks, lack of 70% participation residents, lack of awareness, lack of commitment (top/middle) management, lack of commitment tenants, lack of knowledge and skills to create impactful change, short-term focus of employees, the term sustainability is too broad/unclear, and unclear sustainability performance indicators.
- *Pressure from stakeholders:* Split incentives and wrong incentives.
- *Risk management:* Lack of capacity suppliers, lack of data (quality), limited availability of sustainable innovations, and sustainability considered too late in the process.
- *Regulatory compliance:* Regulatory complexity and overload and regulatory costs limits improvement.

These findings revealed that organisations frequently encounter both internal and external barriers when implementing sustainability. Lastly, the respondents identified several strategies for implementing sustainability. Some were designed to address specific barriers, while others served as broader approaches to advance sustainability across the organisation. Therefore, they were not categorised under the same five themes as the motivations and barriers. The following strategies were identified:

- *Strategies through tools and performance systems:* ”Voluntary” certifications, creation of own performance/impact system, CSRD as mandatory mechanism, environmental policy translated into concrete themes, formulation of KPIs, quick-win sustainability measures, and roadmap with specific measures for Paris Proof.
- *Strategies to improve employee awareness and commitment:* Campaigns/trainings to educate employees, commitment management, forwarding work-related sustainability issues, learning from colleagues, organising events dedicated to sustainability, program to ensure sustainability implementation, sustainability positive culture, tracking/check of sustainability team, and tracking/check of (top)management.
- *Making sustainability part of the overall business strategy:* Clear structure and team for sustainability, clear sustainability goals or vision, clear targets per assignment, commitment to SDGs, and sustainability strategy same as core strategy.
- *Strategies to strengthen commitment at management level:* Bonusses for management on KPIs, mandatory reporting to shareholders, sessions with external expertise, and show financial benefits of sustainability.
- *Strategies to engage external stakeholders in sustainability efforts:* Negotiating with residents for sustainability initiatives.

8.1.2. SQ2: What is the current knowledge on the CSRD regarding its objectives, scope, reporting requirements, and the levels (strategic, tactical, operational) at which companies are expected to report?

The CSRD is a European Directive that requires companies to disclose standardised information about their environmental, social, and governance (ESG) impacts in a sustainability report. As outlined in the document analysis of Chapter 3, the CSRD was introduced by the European Commission to strengthen and standardise corporate sustainability reporting across the EU. The most important objectives identified by the European Commission are given below:

- Ensuring transparency, reliability, and comparability of sustainability information;
- Extending corporate accountability;
- Strengthening the European Green Deal and climate neutrality goals;
- Facilitating sustainable finance and redirecting capital flows.

The scope of the CSRD evolved during the course of this research, as the European Commission introduced Omnibus amendments aimed at simplifying EU regulatory requirements. If these approvals were to be approved, this would result in approximately 80% of the initial companies being excluded from the CSRD's scope. Although the proposals have not yet been formally adopted by the European Parliament and the Council, it is widely expected to be approved. As a result, the scope presented here reflects the assumptions based on the proposed changes:

- >1000 employees, and:
- >€50 million net turn over, or:
- >€25 million balance sheet total

As shown in Table 5.1, if the proposed changes are adopted, only two of the nine interviewed property asset management companies would still fall within the CSRD's scope. This marks a notable shift compared to the situation prior to the proposed amendments.

The requirements of the CSRD are set out in the European Sustainability Reporting Standards (ESRS), which define both the content and structure of the sustainability report. These standards serve as the technical framework that companies are required to follow. The ESRS consist of the general requirements (ESRS 1), the general disclosures (ESRS 2), and the topical standards (E1 to E5, S1 to S4, and G1) that address specific Environmental, Social, and Governance topics. These standards are discussed in detail in Section 3.2 and will be briefly summarised below:

- *ESRS 1: General requirements:* Outlines overarching principles for sustainability reporting, including double materiality, time horizons, and value chain considerations.
- *ESRS 2: General disclosures:* Specifies mandatory disclosures applicable to all companies, covering governance, strategy, impact, risk, and opportunity management, as well as metrics and targets.
- *ESRS E1: Climate change:* Covers both climate change mitigation and adaptation, including GHG emissions, energy consumption, and transition plans.
- *ESRS E2: Pollution:* Addresses pollution of air, water, and soil, including emissions of pollutants and measures to reduce them.
- *ESRS E3: Water and marine resources:* Focuses on water consumption, water discharge, and impacts on marine ecosystems.
- *ESRS E4: Biodiversity and ecosystems:* Deals with biodiversity loss, nature restoration efforts, and the company's impact on ecosystems.
- *ESRS E5: Resource and circular economy:* Relates to material use, resource efficiency, and circularity strategies.
- *ESRS S1: Own workforce:* Covers working conditions, equal treatment, diversity, and training for employees directly employed by the company.
- *ESRS S2: Workers in the value chain:* Addresses labour practices, human rights, and working conditions of workers not directly employed but part of the value chain.
- *ESRS S3: Affected communities:* Concerns the rights and well-being of communities affected by the company's operations, including social and economic impacts.
- *ESRS S4: Consumers and end-users:* Focuses on product safety, data protection, and fair marketing practices affecting consumers.
- *ESRS G1: Business conduct:* Covers ethical business practices, anti-corruption policies, lobbying, and political engagement.

All companies within the CSRD's scope are required to report on the general disclosures (ESRS 2), regardless of their specific context. In contrast, the topical standards (E1–E5, S1–S4, and G1) are subject to a materiality assessment. This assessment is based on the principle of double materiality, which requires companies to report on topics that are material from both a financial and an impact perspective. This involves covering both the effects of sustainability issues on the company's performance and the company's own impact on people and the environment.

To answer the last part of this question, Chapter 2 first introduced the distinction between three levels of organisational activity: strategic, tactical, and operational. They can be described as follows:

- *Strategic:* Defines the long-term vision, objectives, and priorities, including sustainability policies and business models.
- *Tactical:* Translates strategic objectives into structured processes, resource allocation, and partnerships to integrate sustainability into operations.
- *Operational:* Involves the practical implementation of sustainability initiatives through concrete actions and daily workflows.

These levels were then used to analyse the CSRD's reporting approach, as explored in Chapter 3. Therefore, it is important to analyse the structure and main components of the ESRS topical standards:

- *Environmental disclosures (E1-E5):* These include policies and transition plans how companies identify, assess, and manage environmental impacts, risks, and opportunities. Additionally, concrete actions and resource allocation are needed, detailing specific initiatives and investments. Moreover, measurable targets to track sustainability progress and financial effects of environmental risks and opportunities should be reported. Thus, policies and transition plans reflect a strategic commitment, while resource allocation and concrete actions relate to operational implementation. In turn, measurable targets may serve as tactical planning tools.
- *Social disclosures (S1-S4):* These include policies that outline commitments to protecting and improving conditions for different stakeholder groups. Moreover, engagement processes with an explanation on how to interact to assess material social impacts should be included. Grievance mechanisms are present as well. Additionally, detailed actions/initiatives should be reported on how to mitigate risks and enhance positive outcomes. Lastly, measurable targets to track progress should be addressed. Similarly, these disclosures cover the strategic level through policies and commitments, the tactical level via engagement processes and grievance mechanisms, and the operational level through specific initiatives and targets.
- *Governance disclosures (G1):* These include policies that outline commitments to ethical business practices and responsible corporate behaviour. Additionally, they cover disclosures on management processes and the practical application of governance frameworks. It also again includes the presence of grievance mechanisms. Moreover, the standards include concrete actions taken to mitigate risks and uphold integrity. Lastly, performance metrics to track progress should be reported on. This disclosure primarily reflects the strategic level of the organisation, focused on oversight and accountability structures, though they also include tactical elements related to internal governance processes and mechanisms.

Thus, it seems that the CSRD tries to cover all three organisational levels, though with varying degrees of depth and guidance. At the strategic level, the directive requires companies to define their overarching sustainability policies, long-term commitments, and ambitions. This includes disclosing how sustainability is embedded in the business model and corporate strategy. At the tactical level, the CSRD introduces planning-related elements such as stakeholder engagement processes, risk and opportunity assessments, and internal governance structures, including grievance mechanisms and resource allocation. At the operational level, companies must report on the concrete actions they are taking, the initiatives implemented, and the specific, measurable targets used to monitor performance. However, it is important to note that while the directive specifies what types of information must be disclosed, it leaves considerable room for interpretation regarding the substance of the strategies, goals, and actions.

8.1.3. SQ3: How can property asset management companies translate their sustainability ambitions across strategic, tactical, and operational levels?

The previous sub-question already clarified what is meant by the strategic, tactical, and operational levels. Additionally, the literature emphasised that for sustainability to become embedded within a company, change needs to take place across all these three levels of business activity. Moreover, it showed that a sustainability strategy alone is insufficient if it is not supported by tactical and operational activities. Yet, the empirical findings revealed that property asset management companies continue to struggle with implementing sustainability across all three levels. The strategies appeared to be highly fragmented across the companies, requiring a renewed examination of both the dataset and the literature to identify all strategies necessary for embedding sustainability across the strategic, tactical,

and operational levels. This was necessary to ensure that the flowchart captured the strategies truly required for embedding sustainability, rather than merely reflecting those currently in use. Therefore, the ten most effective strategies identified in Figure 5.1 were included, along with additional strategies that emerged from the renewed examination of the dataset and the literature review. Together, these revealed how property asset management companies can translate their sustainability ambitions across strategic, tactical, and operational levels:

- *At the strategic level,* companies must define a clear sustainability goal or vision, communicate this vision internally, and integrate it into the core business strategy. Additionally, companies should encourage a sustainability-positive culture. These foundational steps establish long-term direction and internal alignment.
- *At the tactical level,* companies operationalise the strategy through steps such as creating internal structures, secure management commitment, develop KPIs, provide training, organise events, and launch an internal program for implementation. These steps translate strategic intentions into organisational processes and structures, enabling coordination, measurability, and internal alignment.
- *At the operational level,* sustainability is embedded in day-to-day activities by identifying specific actions, using sectoral roadmaps (like the Paris Proof roadmap), assigning responsibilities, implementing concrete actions, and adapting based on feedback. These practices bridge the gap between strategic goals and concrete execution.

Together, these strategies ensure that sustainability is embedded across all organisational levels and that ambitions are effectively translated into coordinated action. By aligning long-term vision with supportive structures and daily practices, companies can overcome common barriers and build a more integrated approach to sustainability implementation.

8.1.4. SQ4: To what extent do the tools provided by the CSRD meet the practical needs of property asset management companies in pursuing their sustainability goals?

To answer this sub-question, Chapter 6 examined whether the tools and requirements of the CSRD align with the practical needs of property asset management companies. These needs were derived from the empirical findings and were visualised in a step-by-step flowchart presented in Figure 6.1. They represent the internal steps that property asset management companies typically need to take to improve sustainability implementation in practice. The steps are based on the strategies identified in the empirical study, which directly or indirectly address the barriers to sustainability implementation. These include (among others) creating and internal structure and dedicated team for sustainability, formulating a clear sustainability goal or vision, developing KPIs, organising events dedicated to sustainability, implementing concrete actions, and encouraging a sustainability-positive culture. The starting point here is an emerging sustainability ambition, reflecting the important role of motivation identified in Chapter 5. At the other end, the process leads to an embedded sustainability approach; reflected in day-to-day practices, internal processes, and strategic choices. This represents the end point of the flowchart, as it reflects the ultimate goal of turning sustainability from ambition into a consistent and lasting organisational practice.

Subsequently, these needs or steps were compared to the extent to which they are reflected in the CSRD requirements, as shown in Table 6.1. This comparison showed that only two out of the nineteen identified needs were clearly addressed in the CSRD: the integration of sustainability into the business strategy and the development of KPIs and metrics. However, this also highlights that the majority of the other important aspects are either insufficiently addressed or completely missing from the directive. Instead, the CSRD primarily requires organisations to report on the outcomes of sustainability efforts (such as targets and results), with less attention to the internal processes and change mechanisms that lead to those outcomes. As a result, the directive remains largely compliance-oriented and focused on external accountability, rather than functioning as a tool that actively supports companies in the internal implementation of sustainability. In conclusion, while the CSRD may serve as an incentive to start engaging with sustainability, it does not sufficiently meet the practical needs of property asset management companies striving to embed sustainability more deeply across their strategies, internal

processes, and day-to-day operations. That said, it may be more effective to leave room for member states, and ultimately the companies themselves, to shape this implementation, rather than prescribing detailed guidance at the European level.

8.2. Answering main research question

The previous section addressed each of the four sub-questions. Together, they provide the basis for answering the main research question, which was formulated as follows:

MRQ: "How can property asset management companies improve and implement sustainability within their operations, and what role does the CSRD play in this process?"

To answer the second part of this question in short, the CSRD cannot be used to improve and implement sustainability within property asset management companies as it does not provide the internal guidance needed to drive organisational change. However, it does provide a structured reporting framework and can serve as an incentive for companies to begin engaging with sustainability. Its primary function remains disclosure rather than transformation, and it may be more effective to leave room for member states to tailor implementation and support to their specific national contexts. This raises a more fundamental question: if the CSRD falls short in this regard, how can these companies effectively implement and improve sustainability in practice?

The research revealed that implementation requires much more than simply complying with reporting obligations. It involves changes across all levels of an organisation; from strategic planning to tactical structuring and day-to-day operations. However, organisations often face barriers in moving from intention to execution, particularly when key conditions for implementation are missing. This research has shown that sustainability implementation is not a linear process but rather an iterative one, requiring coordination across all three levels. It was found that the challenge lies in bridging the gap between long-term vision and everyday practice, and in ensuring that sustainability is not treated as an isolated objective but embedded throughout the organisation. To address this gap, the study developed a flowchart in Figure 6.1 that captures the internal steps needed to improve sustainability in practice. The framework enables the translation of strategy into action via step-by-step methods. This model reflects the strategies used by property asset managers to overcome identified barriers and underscores the need for structured internal guidance to support effective implementation. Additionally, the flowchart incorporates strategies identified in the literature that were not yet adopted by the interviewed companies. In essence, by following the steps in the flowchart, the main research question can be answered. The flowchart helps companies identify where in the process they may be falling short and what actions are required to move forward. In doing so, it shifts the focus from external compliance to internal improvement and organisational learning. This approach is essential for moving from fragmented efforts toward a coordinated, embedded, and future-oriented sustainability strategy. Property asset management companies need this internal guidance to make sustainability a meaningful and lasting part of their operations, culture, and strategic direction.

9 Recommendations

This chapter begins with identifying the research limitations, after which recommendations for future research are made. Subsequently, recommendations for the European Union are presented, followed by recommendations specifically for property asset management companies.

9.1. Research limitations

Like any study, this research has certain limitations that should be acknowledged. The following section outlines the main constraints encountered during the course of this thesis.

- Due to the qualitative nature of this research, the study does not quantify sustainability performance or outcomes. As a result, it was not possible to determine which companies were most effective in their sustainability practices, making it difficult at times to objectively assess which strategies were truly the most effective. Additionally, this made it difficult to assess the measurable impact of the strategies discussed.
- Another limitation that occurs is due to the gathering of qualitative data through semi-structured interviews. While this approach allows for rich and nuanced insights, the analysis is shaped by the researcher's interpretation. Despite careful and systematic coding, the process remains partially subjective. Including multiple viewpoints in the coding process could have led to a more balanced interpretation of the data.
- As (almost) all interviewees held positions related to sustainability or ESG within their organisations, there was a limited range of perspectives. Although they offered in-depth knowledge, the study did not capture perspectives from non-sustainability staff, tenants, policymakers, or other external stakeholders. This may have led to an overemphasis on strategic and tactical viewpoints and an underrepresentation of operational or external concerns.
- The interviewed organisations differed in aspects such as structure, scale, and stakeholder focus, with especially a notable distinction between those managing assets on behalf of institutional investors and those owning the assets themselves. While this diversity adds richness, it also reduces comparability and may have affected how uniformly certain strategies and barriers were perceived.
- The relationships between identified strategies and barriers were established through a logical matching process informed by interview data. However, these links are not always direct or empirically tested. Some strategies may influence barriers only under specific conditions, meaning that the presented connections should be seen as indicative rather than universally applicable.
- The flowchart developed in Chapter 6 presents a stepwise guide to support sustainability implementation. While grounded in empirical findings, it has not been tested in practice. Although informal feedback was gathered from sustainability experts from Sweco, full validation in real-world settings remains necessary to confirm its usability and impact.
- While the flowchart is designed to provide practical direction, its effectiveness depends on how it is interpreted and applied. For organisations in the early stages of sustainability, some steps may still feel abstract. Additional detail or supporting tools could enhance its usability.

- Although sustainability has environmental, social, and governance (ESG) dimensions, this study primarily focuses on the environmental aspect. Social and governance considerations were not systematically integrated into the analysis, which limits how fully the findings reflect a comprehensive approach to sustainability implementation.
- This study focused specifically on the CSRD, while it is in fact part of a broader legislative package under the European Green Deal. Other European policies or directives not covered in this research may also significantly influence corporate sustainability behaviour, which limits the scope of this research.

9.2. Recommendations for future research

Based on these limitations and the findings of the research, the following recommendations are made for future research:

- Future research could adopt a legal or policy-oriented perspective to analyse how the structure and language of the CSRD influence its implementability. This could involve a critical review of the directive's scope, terminology, and enforceability to assess how it can be better aligned with organisational needs for sustainability integration. Additionally, such research could include other European legislation with an influence on sustainability.
- As this research primarily relied on qualitative interviews, future studies could take a more quantitative approach to develop measurable indicators and test the effectiveness of the flowchart framework. This could include the creation of performance metrics or a checklist to assess how different strategies influence sustainability outcomes across organisations. Additionally, applying the framework in practice and validating it across multiple organisational contexts would help assess its reliability and generalisability.
- Although this thesis identified strategies that (in)directly address certain barriers, future research could further investigate the exact causal mechanisms linking them. This would help to assess the effectiveness of specific strategies and provide more concrete evidence for organisational decision-making. Additionally, such research could explore specific strategies to address the financial barriers found in this study.
- While this thesis recognised the importance of collaboration across strategic, tactical, and operational layers, future research could further investigate how these levels interact in different types of organisations. Such a study could offer better insight into how responsibilities are divided, how communication takes place, and how feedback is used to support sustainable practices.
- Since this study found that intrinsic motivation enables a more embedded and lasting sustainability approach, future research could explore specifically how such motivation can be developed or strengthened within organisations.
- As this study mainly focused on environmental sustainability, future research should include a broader ESG perspective. This would allow for a more integrated view of how companies manage social equity, governance practices, and environmental performance.

9.3. Recommendations for the European Union

As this research has shown, the CSRD in its current form does not provide the practical guidance needed to support implementation of sustainability within property asset management companies. While it strengthens comparability and transparency, it falls short in enabling the kind of organisational change required to achieve its intended impact. The following recommendations aim to support the European Union in enhancing the effectiveness and practical relevance of the CSRD.

- *Leave room for tailored implementation by member states:* Given the diversity of national contexts and sector-specific needs, the European Union should ensure that the CSRD allows sufficient flexibility for member states to support implementation in a way that aligns with their own context. Rather than prescribing detailed implementation pathways at the EU level, the directive should provide space for national governments to develop supporting frameworks, sector guidance, or tools that complement the CSRD requirements. Here, suggestions from Section 5.2.4 could also be included, such as the use of performance indicators and a clearly defined set of focus themes.

This ”extra room” makes it easier to put the CSRD into practice, especially in sectors like property asset management, where sustainability efforts depend heavily on the specific context.

- *Clarify the language:* To improve usability and impact, the CSRD should adopt clearer language. Several experts and companies indicated that the current formulation of the reporting standards is too vague or broad, leaving room for interpretation and reducing comparability. A useful example can be found in the VSME, which presents a more accessible and structured approach.
- *Invest in research to support effective implementation:* Finally, the EU should invest in further research on how to implement the CSRD in a way that balances standardisation with flexibility for member states. This study has shown that the internal implementation of sustainability requires more than reporting; it requires behavioural change, coordination, and sustained organisational effort. Research is needed to explore how the directive can better accommodate national and sectoral differences, for instance by identifying where flexibility is most useful and how member states can be supported in providing practical guidance. Such insights can help shape future revisions of the CSRD and ensure it does more than mandate disclosure.

9.4. Recommendations for member states

While the CSRD is an EU-level directive, national governments can play an important role in enabling its successful implementation. As this thesis has shown, additional support and guidance at the national level can help bridge the gap between reporting requirements and meaningful sustainability action. The following recommendations are aimed at helping member states better support companies in this process.

- *The national government should be more actively involved:* National governments should take a more active role in supporting the implementation of the CSRD by (for instance) working closely with sector organisations to translate the directive's requirements into practical tools, concrete examples, and relevant best practices. By tailoring support to the specific needs of industries, governments can ease the reporting burden for companies. This targeted guidance can help ensure that companies spend less time trying to navigate CSRD compliance and more time focusing on actions that truly support sustainability implementation.
- *Facilitate the adoption of a shared performance or impact system:* National governments should support the development of a widely accepted sustainability performance and impact system that companies can use to track and compare their progress. While the EU Taxonomy provides a useful starting point by defining which activities are environmentally sustainable, it does not offer a practical, company-level tool for assessing performance across ESG dimensions. A common performance system, ideally developed in collaboration with sector organisations, would help reduce fragmentation, improve comparability, and support more structured and effective sustainability efforts.

9.5. Recommendations for property asset management companies

Lastly, several recommendations can be offered to property asset management companies seeking to strengthen their sustainability efforts. These include the following:

- If a company is subject to the CSRD or chooses to use it voluntarily, it should be approached merely as a reporting framework. The CSRD offers structure for disclosure, but it does not provide the internal guidance needed to implement sustainability effectively. Companies should not rely on it to shape their sustainability strategy or internal processes. It is designed to show what is already in place, not to help create it.
- To guide their internal sustainability efforts, companies are encouraged to consult the flowchart developed in Chapter 6 of this thesis. This model brings together the practical steps identified through empirical research. Property asset management companies can use this flowchart as a self-assessment tool: by identifying which steps are already present and where gaps exist, they can develop targeted actions to improve their internal approach to sustainability.
- One of the most important early steps is to create internal structure around sustainability. This can include forming a dedicated team or assigning specific roles and responsibilities to individuals who can act as internal sustainability experts. These people play a key role in coordinating effort

and ensuring that sustainability does not remain a side topic but becomes embedded across departments.

- Equally important is the development of a clear sustainability vision or long-term goal. This ambition should not only be defined at a high level but also communicated widely within the organisation, so that it resonates with employees and builds collective understanding. When such a vision is integrated into the broader business strategy, it can help guide decision-making and keep efforts focused over time.
- In addition, it is essential to raise awareness and improve knowledge throughout the organisation. This can be done by organising internal events, workshops, or learning sessions that are repeated regularly and attended by both employees and management. Creating space for shared learning strengthens internal engagement and helps ensure that sustainability becomes a shared responsibility rather than the task of a single department.
- To measure progress, companies should develop meaningful and relevant KPIs. These indicators should not only be tracked over time, but also used to reflect on whether actions are effective. If outcomes fall short, the company should be willing to adapt its approach based on this feedback. Such feedback loops are essential for building a learning organisation and driving improvement over time.
- Implementation itself should be supported by a concrete internal program. This means having a defined action plan, supported by clear timelines, responsibilities, and a performance or impact monitoring system. If such a program is not yet in place, companies can begin by translating their vision into concrete themes or using sector-specific roadmaps as inspiration.
- Finally, sustainability should become a genuine part of the organisational culture. This means encouraging continuous learning, reflection, and openness to improvement. When sustainability becomes part of the mindset and language of the organisation, rather than a separate task or target, it is far more likely to lead to lasting and meaningful impact.

Together, these recommendations offer practical guidance for property asset management companies working to strengthen their internal sustainability efforts. Whether an organisation is just beginning or already well underway, focusing on motivation, structure, and continuous improvement can help further embed sustainability into daily operations, decision-making, and long-term strategy.

References

Aboueid, S., Beyene, M., & Nur, T. (2023, 6). Barriers and enablers to implementing environmentally sustainable practices in healthcare: A scoping review and proposed roadmap. *Healthcare Management Forum*, *36*(6), 405–413. Retrieved from https://doi.org/10.1177/08404704231183601 doi: 10.1177/08404704231183601

Achmea. (2024, 2). *De CSRD: "Zonder twijfel, we zullen er straks klaar voor zijn".* Retrieved from https://nieuws.achmea.nl/de-csrd-achmea-is-er-klaar-voor-in-2025-zonder-twijfel/

Adelusola, M. (2024, 11). Sustainable Business Practices: Overcoming Barriers and Leveraging Enablers for Organizational Adoption. *ResearchGate*. Retrieved from https://www.researchgate.net/publication/385652688_Sustainable_Business_Practices_Overcoming_Barriers_and_Leveraging_Enablers_for_Organizational_Adoption#:~:text=Education%20and%20Training%20Programs

Adeoye Olatunde, O. A., & Olenik, N. L. (2021, 5). Research and scholarly methods: Semi□structured interviews. *JACCP JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*, *4*(10), 1358–1367. Retrieved from https://doi.org/10.1002/jac5.1441 doi: 10.1002/jac5.1441

Alexis, G. (2010, 9). Global Sullivan Principles. *Green Business: An A-to-Z Guide. Sage Publications.*. Retrieved from http://www.sage-ereference.com/greenbusiness/Article_n78.html

Ametepey, O., Aigbavboa, C., & Ansah, K. (2015, 1). Barriers to successful implementation of sustainable construction in the Ghanaian construction industry. *Procedia Manufacturing*, *3*, 1682–1689. Retrieved from https://doi.org/10.1016/j.promfg.2015.07.988 doi: 10.1016/j.promfg.2015.07.988

Anderson, J. E., Wulfhorst, G., & Lang, W. (2015, 1). Energy analysis of the built environment—A review and outlook. *Renewable and Sustainable Energy Reviews*, *44*, 149–158. Retrieved from https://doi.org/10.1016/j.rser.2014.12.027 doi: 10.1016/j.rser.2014.12.027

Atlas.ti. (2024, 12). *ATLAS.TI | the 1 software for qualitative data analysis.* Retrieved from https://atlasti.com/#

Babatunde, O. (2015, 11). Importance of effective communication in public organisations. *Issues in Social Science*, *3*(2), 78. Retrieved from https://doi.org/10.5296/iss.v3i2.8596 doi: 10.5296/iss.v3i2.8596

BAM. (2025, 2). *BAM publiceert jaarverslag 2024.* Retrieved from https://www.bam.com/nl/pers/persberichten/2025/2/bam-publiceert-jaarverslag-2024

Bandeiras, F., Gomes, M., Coelho, P., & Fernandes, J. (2020, 3). Towards net zero energy in industrial and commercial buildings in Portugal. *Renewable and Sustainable Energy Reviews*. Retrieved from https://doi.org/10.1016/j.rser.2019.109580 doi: 10.1016/j.rser.2019.109580

Bansal, P., & Roth, K. (2000, 8). WHY COMPANIES GO GREEN: a MODEL OF ECOLOGICAL RESPONSIVENESS. *Academy of Management Journal*, *43*(4), 717–736. Retrieved from https://doi.org/10.2307/1556363 doi: 10.2307/1556363

Baum, J. R., Locke, E. A., & Kirkpatrick, S. A. (1998, 2). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, *83*(1), 43–54. Retrieved from https://doi.org/10.1037/0021-9010.83.1.43 doi: 10.1037/0021-9010.83.1.43

Baumgartner, R. J. (2014, 11). Managing Corporate Sustainability and CSR: a conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility and Environmental Management*, *21*(5), 258–271. Retrieved from https://doi.org/10.1002/csr.1336 doi: 10.1002/csr.1336

Berson, Y., Waldman, D. A., & Pearce, C. L. (2015, 5). Enhancing our understanding of vision in organizations. *Organizational Psychology Review*, *6*(2), 171–191. Retrieved from https://doi.org/10.1177/2041386615583736 doi: 10.1177/2041386615583736

Biermann, F., Kanie, N., & Kim, R. E. (2017, 3). Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, *26-27*, 26–31. Retrieved from https://doi.org/10.1016/j.cosust.2017.01.010 doi: 10.1016/j.cosust.2017.01.010

Bingham, A. J. (2023, 8). From Data Management to Actionable Findings: a Five-Phase process of qualitative data analysis. *International Journal of Qualitative Methods*, *22*. Retrieved from https://doi.org/10.1177/16094069231183620 doi: 10.1177/16094069231183620

Bovey, W. H., & Hede, A. (2001, 11). Resistance to organisational change: the role of defence mechanisms. *Journal of Managerial Psychology*, *16*(7), 534–548. Retrieved from https://doi.org/10.1108/eum0000000006166 doi: 10.1108/eum0000000006166

Boyatzis, R. (1998, 4). *Transforming qualitative information.* Retrieved from https://us.sagepub.com/en-us/nam/transforming-qualitative-information/book7714

Braun, V., & Clarke, V. (2006, 1). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. Retrieved from https://doi.org/10.1191/1478088706qp063oa doi: 10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2012). *Thematic analysis.* Retrieved from https://doi.org/10.1037/13620-004 doi: 10.1037/13620-004

BREEAM-NL. (2025). *Wat is BREEAM-NL.* Retrieved from https://www.breeam.nl/wat-is-breeam-nl-1

Bruijnes, G. (2023, 10). Retrieved from https://www.youtube.com/watch?time_continue=3274&v=8fKYUnTFGUA&embeds_referring_euri=https%3A%2F%2Fwww.dgbc.nl%2F&source_ve_path=MTM5MTE3LDEyNzI5OSwxMjcyOTksMTI3Mjk5LDEzOTExNywxMzkxMTcsMTM5MTE3LDEzOTExNywyODY2Ng

Brundtland, G. (1987). *Report of the World Commission on Environment and Development: Our Common Future* (Tech. Rep.). Retrieved from http://www.un-documents.net/our-common-future.pdf

Cagno, E., Trianni, A., Spallina, G., & Marchesani, F. (2016, 10). Drivers for energy efficiency and their effect on barriers: empirical evidence from Italian manufacturing enterprises. *Energy Efficiency*, *10*(4), 855–869. Retrieved from https://doi.org/10.1007/s12053-016-9488-x doi: 10.1007/s12053-016-9488-x

Caldera, H., Desha, C., & Dawes, L. (2019, 2). Evaluating the enablers and barriers for successful implementation of sustainable business practice in 'lean' SMEs. *Journal of Cleaner Production*, *218*, 575–590. Retrieved from https://doi.org/10.1016/j.jclepro.2019.01.239 doi: 10.1016/j.jclepro.2019.01.239

Casadesus-Masanell, R., & Ricart, J. E. (2010, 3). From Strategy to Business Models and onto Tactics. *Long Range Planning*, *43*(2-3), 195–215. Retrieved from https://doi.org/10.1016/j.lrp.2010.01.004 doi: 10.1016/j.lrp.2010.01.004

Catrini, P., Curto, D., Franzitta, V., & Cardona, F. (2020, 9). Improving energy efficiency of commercial buildings by Combined Heat Cooling and Power plants. *Sustainable Cities and Society*. Retrieved from https://doi.org/10.1016/j.scs.2020.102157 doi: 10.1016/j.scs.2020.102157

Chametzky, B. (2016, 1). Coding in classic grounded theory: I've done an interview; now what? *Sociology Mind*, *06*(04), 163–172. Retrieved from https://doi.org/10.4236/sm.2016.64014 doi: 10.4236/sm.2016.64014

Chofreh, A. G., & Goni, F. A. (2017, 2). Review of Frameworks for Sustainability Implementation. *Sustainable Development*, *25*(3), 180–188. Retrieved from https://doi.org/10.1002/sd.1658 doi: 10.1002/sd.1658

Christensen, P. H., Robinson, S., & Simons, R. (2022, 4). Institutional investor motivation, processes, and expectations for sustainable building investment. *Building Research Information*, *50*(3), 276–290. Retrieved from https://doi.org/10.1080/09613218.2021.1908878 doi: 10.1080/09613218.2021.1908878

Christos, C. (2017). *The effect of motivations for ecological responsiveness (ER) on intrapreneurship in South Africa.* Retrieved from http://hdl.handle.net/10539/23432

Chu, K. W. K., & Cheung, L. L. W. (2018, 4). Incorporating sustainability in small health-care facilities: an integrated model. *Leadership in health services*, *31*(4), 441–451. Retrieved from https://doi.org/10.1108/lhs-07-2017-0043 doi: 10.1108/lhs-07-2017-0043

Clarke, V., & Braun, V. (2014). Thematic Analysis, in Encyclopaedia of Quality of Life and Well-Being

Research. *ResearchGate*. Retrieved from https://www.researchgate.net/publication/269930512_Thematic_analysis

Council of the European Union, C. (2024, 12). *European Green Deal.* Retrieved from https://www.consilium.europa.eu/en/policies/green-deal/

Cruz, C. O., Gaspar, P., & De Brito, J. (2019, 6). On the concept of sustainable sustainability: An application to the Portuguese construction sector. *Journal of Building Engineering*, *25*, 100836. Retrieved from https://doi.org/10.1016/j.jobe.2019.100836 doi: 10.1016/j.jobe.2019.100836

Daft, R. L. (2017). *The leadership experience*. Cengage Learning.

de Waal, L. (2025, 1). *CSRD in bouw techniek: niet langer wachten.* Retrieved from https://www.abnamro.nl/nl/zakelijk/insights/sectoren-en-trends/bouw/csrd-in-bouw-en-techniek-niet-langer-wachten.html

DGBC. (2023, 10). *EU taxonomie - Dutch Green Building Council.* Retrieved from https://www.dgbc.nl/tools/eu-taxonomie-19

DGBC. (2025, 4). *Paris Proof - DGBC.* Retrieved from https://www.dgbc.nl/wat-wij-doen/paris-proof/

Dhingra, S. (2022, 10). The use of smart building solutions.

Diemer, A., Morales, M., & de Souza Coelho, P. (2017). *European Union and Sustainable Development*. Retrieved from https://www.researchgate.net/publication/320622904_European_Union_and_Sustainable_Development

Dietz, T., Shwom, R. L., & Whitley, C. T. (2020, 3). Climate change and society. *Annual Review of Sociology*, *46*(1), 135–158. Retrieved from https://doi.org/10.1146/annurev-soc-121919-054614 doi: 10.1146/annurev-soc-121919-054614

Durrani, N., Raziq, A., Mahmood, T., & Khan, M. R. (2024, 5). Barriers to adaptation of environmental sustainability in SMEs: A qualitative study. *PLoS ONE*, *19*(5), e0298580. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC11098482/#:~:text=environmentally%20sustainable%20practices,friendly doi: 10.1371/journal.pone.0298580

EFRAG. (2024, 5). *EFRAG IG 2: Value Chain Implementation Guidance* (Tech. Rep.). Retrieved from https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/EFRAG%20IG%202%20Value%20Chain_final.pdf

Engert, S., & Baumgartner, R. J. (2016, 12). Corporate sustainability strategy – bridging the gap between formulation and implementation. *Journal of Cleaner Production*, *113*, 822–834. Retrieved from https://doi.org/10.1016/j.jclepro.2015.11.094 doi: 10.1016/j.jclepro.2015.11.094

Engert, S., Rauter, R., & Baumgartner, R. J. (2016, 8). Exploring the integration of corporate sustainability into strategic management: a literature review. *Journal of Cleaner Production*, *112*, 2833–2850. Retrieved from https://doi.org/10.1016/j.jclepro.2015.08.031 doi: 10.1016/j.jclepro.2015.08.031

EPA. (2025, 3). *Lower building energy demands.*

Epstein, M. J., & Buhovac, A. (2014). *Making sustainability work* (Second Edition ed.). Berrett-Koehler Publishers. Retrieved from https://www.bkconnection.com/static/Making_Sustainability_Work_2nd_EXCERPT.pdf

Epstein, M. J., & Buhovac, A. R. (2010, 8). Solving the sustainability implementation challenge. *Organizational Dynamics*, *39*(4), 306–315. Retrieved from https://doi.org/10.1016/j.orgdyn.2010.07.003 doi: 10.1016/j.orgdyn.2010.07.003

Epstein, M. J., & Roy, M.-J. (2001, 10). Sustainability in Action: Identifying and measuring the key performance drivers. *Long Range Planning*, *34*(5), 585–604. Retrieved from https://doi.org/10.1016/s0024-6301(01)00084-x doi: 10.1016/s0024-6301(01)00084-x

Ershadi, M., Jefferies, M., Davis, P., & Mojtahedi, M. (2021, 5). Barriers to achieving sustainable construction project procurement in the private sector. *Cleaner Engineering and Technology*, *3*, 100125. Retrieved from https://doi.org/10.1016/j.clet.2021.100125 doi: 10.1016/j.clet.2021.100125

Estébanez, R. P., & Martín, F. J. S. (2025, 1). Business Sustainability and its Effect on Performance Measures: A Comprehensive analysis. *Sustainability*, *17*(1), 297. Retrieved from https://doi.org/10.3390/su17010297 doi: 10.3390/su17010297

European Commission, E. (n.d.-a). *Corporate sustainability reporting.* Retrieved from

https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

European Commission, E. (n.d.-b). *Sustainable development goals.* Retrieved from https://international-partnerships.ec.europa.eu/policies/sustainable-development-goals_en

European Commission, E. (2020, 8). *Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth.* Retrieved from https://finance.ec.europa.eu/publications/renewed-sustainable-finance-strategy-and-implementation-action-plan-financing-sustainable-growth_en

European Commission, E. (2021, 7). *The European Green Deal.* Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

European Commission, E. (2023, 7). *The Commission adopts the European Sustainability Reporting Standards.* Retrieved from https://finance.ec.europa.eu/news/commission-adopts-european-sustainability-reporting-standards-2023-07-31_en

European Commission, E. (2025, 2). *Commission simplifies rules on sustainability and EU investments, delivering over €6 billion in administrative relief.* Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/ip_25_614

European Environment Agency, E. (2024, 10). *Greenhouse gas emissions from energy use in buildings in Europe.* Retrieved from https://www.eea.europa.eu/en/analysis/indicators/greenhouse-gas-emissions-from-energy

Eurostat. (2023, 5). How has the EU progressed towards the SDGs? Retrieved from https://ec.europa.eu/eurostat/web/products-eurostat-news/w/wdn-20230524-1

Falkenbach, H., Lindholm, A.-L., & Schleich, H. (2010, 1). Review articles: Environmental Sustainability: Drivers for the Real Estate Investor. *Journal of Real Estate Literature*, *18*(2), 201–223. Retrieved from https://doi.org/10.1080/10835547.2010.12090273 doi: 10.1080/10835547.2010.12090273

Fathalizadeh, A., Hosseini, M. R., Vaezzadeh, S. S., Edwards, D. J., Martek, I., & Shooshtarian, S. (2021, 2). Barriers to sustainable construction project management: the case of Iran. *Smart and Sustainable Built Environment*, *11*(3), 717–739. Retrieved from https://doi.org/10.1108/sasbe-09-2020-0132 doi: 10.1108/sasbe-09-2020-0132

Folger, R., & Skarlicki, D. P. (1999, 2). Unfairness and resistance to change: hardship as mistreatment. *Journal of Organizational Change Management*, *12*(1), 35–50. Retrieved from https://doi.org/10.1108/09534819910255306 doi: 10.1108/09534819910255306

Forrester, B. (2020, 6). *Why Sustainability is important in the Asset Management Industry | Deloitte Ireland.* Retrieved from https://www.deloitte.com/ie/en/services/risk-advisory/research/sustainability-in-asset-management-industry.html

Gannon, N. G., & Hieker, N. C. (2022, 6). Employee engagement and a company's sustainability values: A case study of a FinTech SME. *Management Studies*, *10*(3). Retrieved from https://doi.org/10.17265/2328-2185/2022.03.006 doi: 10.17265/2328-2185/2022.03.006

Geertens, N. (2024, 12). Exploratory interview on property asset management companies and the CSRD. , 6214.

Gelderman, C. J., Semeijn, J., & Vluggen, R. (2017, 7). Development of sustainability in public sector procurement. *Public Money Management*, *37*(6), 435–442. Retrieved from https://doi.org/10.1080/09540962.2017.1344027 doi: 10.1080/09540962.2017.1344027

George, R. A., Siti-Nabiha, A., Jalaludin, D., & Abdalla, Y. A. (2016, 2). Barriers to and enablers of sustainability integration in the performance management systems of an oil and gas company. *Journal of Cleaner Production*, *136*, 197–212. Retrieved from https://doi.org/10.1016/j.jclepro.2016.01.097 doi: 10.1016/j.jclepro.2016.01.097

George, T. (2023, 11). *Exploratory Research | Definition, Guide, Examples.* Retrieved from https://www.scribbr.com/methodology/exploratory-research/

Ghadge, A., Kaklamanou, M., Choudhary, S., & Bourlakis, M. (2017, 10). Implementing environmental practices within the Greek dairy supply chain. *Industrial Management Data Systems*, *117*(9), 1995–2014. Retrieved from https://doi.org/10.1108/imds-07-2016-0270 doi: 10.1108/imds-07-2016-0270

Ghazilla, R. A. R., Sakundarini, N., Abdul-Rashid, S. H., Ayub, N. S., Olugu, E. U., & Musa, S. N. (2015, 1). Drivers and Barriers Analysis for Green Manufacturing Practices in Malaysian SMEs:

A preliminary findings. *Procedia CIRP*, *26*, 658–663. Retrieved from https://doi.org/10.1016/j.procir.2015.02.085 doi: 10.1016/j.procir.2015.02.085

Graafland, J., & Smid, H. (2016, 5). Decoupling among CSR Policies, Programs, and Impacts: An Empirical study. *Business Society*, *58*(2), 231–267. Retrieved from https://doi.org/10.1177/0007650316647951 doi: 10.1177/0007650316647951

Grainger-Brown, J., & Malekpour, S. (2019, 3). Implementing the Sustainable Development Goals: A review of strategic tools and frameworks available to organisations. *Sustainability*, *11*(5), 1381. Retrieved from https://doi.org/10.3390/su11051381 doi: 10.3390/su11051381

GRESB. (2025, 4). *Welcome.* Retrieved from https://www.gresb.com/nl-en/

GRI. (n.d.). *GRI - Home.* Retrieved from https://www.globalreporting.org/

Gu, D., Andreev, K., & Dupre, M. E. (2021, 1). Major trends in population growth around the world. *China CDC Weekly*, *3*(28), 604–613. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC8393076/ doi: 10.46234/ccdcw2021.160

Hahnkamper-Vandenbulcke, N. (2021, 1). *Non-financial reporting directive* (Tech. Rep. No. PE 654.213). Retrieved from https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/654213/EPRS_BRI(2021)654213_EN.pdf

Haitherali, H., & Anjali, G. (2023, 11). Circular Economy in Construction Sector—a Guideline for Policy Makers from Global Perspective. *Circular Economy and Sustainability*, *4*(2), 1285–1313. Retrieved from https://doi.org/10.1007/s43615-023-00321-x doi: 10.1007/s43615-023-00321-x

Haleem, F., Farooq, S., Cheng, Y., & Waehrens, B. V. (2022, 2). Sustainable Management Practices and Stakeholder Pressure: A Systematic Literature review. *Sustainability*, *14*(4), 1967. Retrieved from https://doi.org/10.3390/su14041967 doi: 10.3390/su14041967

Halper, J., Bussiere, S., & Shriver, T. (2022, 2). *Asset management industry confronts the challenges presented by climate change transition.* Retrieved from https://corpgov.law.harvard.edu/2022/02/28/asset-management-industry-confronts-the-challenges-presented-by-climate-change-transition/#:~:text=responses%20to%20these%20calls%20for,for%20the%20asset%20management%20industry

Hernández-Chea, R., Jain, A., Bocken, N. M. P., & Gurtoo, A. (2021, 5). The Business Model in Sustainability Transitions: A Conceptualization. *Sustainability*, *13*(11), 5763. Retrieved from https://doi.org/10.3390/su13115763 doi: 10.3390/su13115763

Hoepner, A., Oikonomou, I., Scholtens, B., & Schröder, M. (2016, 1). The effects of corporate and country sustainability characteristics on the cost of debt: an international investigation. *Journal of Business Finance amp Accounting*, *43*(1-2), 158–190. Retrieved from https://doi.org/10.1111/jbfa.12183 doi: 10.1111/jbfa.12183

Hoessle, U. (2014, 3). The Contribution of the UN Global Compact towards the Compliance of International Regimes: A Comparative Study of Businesses from the USA, Mozambique, United Arab Emirates and Germany. *The Journal of Corporate Citizenship*. Retrieved from https://www.jstor.org/stable/jcorpciti.53.27

Huebner, M., Vach, W., & Cessie, S. L. (2015, 9). A systematic approach to initial data analysis is good research practice. *Journal of Thoracic and Cardiovascular Surgery*, *151*(1), 25–27. Retrieved from https://doi.org/10.1016/j.jtcvs.2015.09.085 doi: 10.1016/j.jtcvs.2015.09.085

Hueske, A.-K., & Guenther, E. (2021, 1). Multilevel barrier and driver analysis to improve sustainability implementation strategies: Towards sustainable operations in institutions of higher education. *Journal of Cleaner Production*, *291*, 125899. Retrieved from https://doi.org/10.1016/j.jclepro.2021.125899 doi: 10.1016/j.jclepro.2021.125899

Hueskes, M., Verhoest, K., & Block, T. (2017, 3). Governing public–private partnerships for sustainability. *International Journal of Project Management*, *35*(6), 1184–1195. Retrieved from https://doi.org/10.1016/j.ijproman.2017.02.020 doi: 10.1016/j.ijproman.2017.02.020

Hák, T., Janoušková, S., & Moldan, B. (2016, 1). Sustainable Development Goals: A need for relevant indicators. *Ecological Indicators*, *60*, 565–573. Retrieved from https://doi.org/10.1016/j.ecolind.2015.08.003 doi: 10.1016/j.ecolind.2015.08.003

Ionascu, E., Mironiuc, M., Anghel, I., & Huian, M. C. (2020, 1). The Involvement of Real Estate Companies in Sustainable Development—An Analysis from the SDGs Reporting Perspective. *Sustainability*, *12*(3), 798. Retrieved from https://doi.org/10.3390/su12030798 doi: 10.3390/su12030798

Ireland, R. D., & Hitt, M. A. (1992, 5). *Mission Statements: importance, challenge, and recommendations for development* (Vol. 35; Tech. Rep.). Retrieved from https://d1wqtxts1xzle7.cloudfront.net/92073845/0007-6813_2892_2990067-j20221006-1-1ob8p1m-libre.pdf?1665064884=&response-content-disposition=inline%3B+filename%3DMission_statements_Importance_challenge.pdf&Expires=1710195169&Signature=GwJk7K4FwRnlt2bnKiRAUbjKrkk2KPlEo2ED2F79EdUmIG227l4Kbga6aUNjG4upg8DLi0R4hfs-09-LXRTySJqRklqUFVLm1TqExQpLBF-iDfiQXJRa9W0cjXIr2WEEcS-NgvHRuNfAC6xgW4qb-6~q3cS3R2iFNxxZeIILOdtr8gU--1ObUt4Ap8Jqu-7Wc8GgJPEtDRQ0rrUtvEA0rOp~7KrGqXch6sChtjsbBRI0jo6li65V__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Isaiu, R. (2019, 3). Why sustainability matters in property. Retrieved from https://ww3.rics.org/uk/en/journals/property-journal/why-sustainability-matters-in-property.html#:~:text=In%202018%2C%20the%20benchmark%20covered,to%20shape%20future%20investment%20strategies

Ispiryan, A., Pakeltiene, R., Ispiryan, O., & Giedraitis, A. (2024, 11). Fostering organizational sustainability through employee collaboration: an integrative approach to environmental, social, and economic dimensions. *Encyclopedia*, *4*(4), 1806–1826. Retrieved from https://doi.org/10.3390/encyclopedia4040119 doi: 10.3390/encyclopedia4040119

Jenkins, B. (2002, 1). Organisation for Sustainability. *Australasian Journal of Environmental Management*, *9*(4), 243–251. Retrieved from https://doi.org/10.1080/14486563.2002.10648564 doi: 10.1080/14486563.2002.10648564

Jurgens-Boot, A., & van Wijk, J. (2024, 11). *Bedrijfsjuridische berichten, CSRD: here to stay | InView.* Retrieved from https://www.inview.nl/document/id7315dd274a5b4148a7fcfb59332da07c/bedrijfsjuridische-berichten-csrd-here-to-stay?ctx=WKNL_CSL_15&tab=tekst&searchid=992667366

Kansky, J. P. (2016). *Managing the business of health information exchange*. Retrieved from https://doi.org/10.1016/b978-0-12-803135-3.00005-0 doi: 10.1016/b978-0-12-803135-3.00005-0

Kantabutra, S. (2009, 5). Toward a behavioral theory of vision in organizational settings. *Leadership Organization Development Journal*, *30*(4), 319–337. Retrieved from https://doi.org/10.1108/01437730910961667 doi: 10.1108/01437730910961667

Kantabutra, S. (2020, 2). Toward an organizational theory of sustainability vision. *Sustainability*, *12*(3), 1125. Retrieved from https://doi.org/10.3390/su12031125 doi: 10.3390/su12031125

Kauko, T. (2018, 9). Innovation in urban real estate: the role of sustainability. *Property Management*, *37*(2), 197–214. Retrieved from https://doi.org/10.1108/pm-10-2017-0056 doi: 10.1108/pm-10-2017-0056

Kaźmierczak, M. (2022). A literature review on the difference between csr and esg. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*(162).

Kiger, M. E., & Varpio, L. (2020, 5). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846–854. Retrieved from https://doi.org/10.1080/0142159x.2020.1755030 doi: 10.1080/0142159x.2020.1755030

King, N. (2004). *Using templates in the thematic analysis of text*. Retrieved from https://doi.org/10.4135/9781446280119.n21 doi: 10.4135/9781446280119.n21

Klettner, A., Clarke, T., & Boersma, M. (2014, 5). The Governance of Corporate Sustainability: Empirical Insights into the Development, Leadership and Implementation of Responsible Business Strategy. *Journal of Business Ethics*, *122*(1), 145–165. Retrieved from https://doi.org/10.1007/s10551-013-1750-y doi: 10.1007/s10551-013-1750-y

Kontturi, K. (2023). *Barriers to implementing environmentally focused sustainability change in organizations* (Tech. Rep.). Retrieved from https://www.theseus.fi/bitstream/handle/10024/800471/Kontturi_Krista.pdf?sequence=2&isAllowed=y

Kotter, J. P., & Schlesinger, L. A. (2008). Choosing Strategies for Change. *Link Springer*, 294–306. Retrieved from https://doi.org/10.1007/978-1-349-20317-8_21 doi: 10.1007/978-1-349-20317-8\{_}21

Kucharska, W. (2020, 1). Employee commitment matters for CSR practice, reputation and Corporate Brand Performance—European model. *Sustainability*, *12*(3), 940. Retrieved from https://doi.org/10.3390/su12030940 doi: 10.3390/su12030940

Kørnøv, L., Lyhne, I., & Davila, J. G. (2020, 8). Linking the UN SDGs and environmental assessment: Towards a conceptual framework. *Environmental Impact Assessment Review*, *85*,

106463. Retrieved from https://doi.org/10.1016/j.eiar.2020.106463 doi: 10.1016/j.eiar.2020.106463

Laan, A. (2024, 7). *Implementatie Europese duurzaamheidsrapportering (CSRD) in Nederlandse wet*. Retrieved from https://www.ey.com/nl_nl/technical/assurance/assurance-updates/implementatie-europese-duuzaamheidrapportering-csrd-in-nederlandse-wet

Labuschagne, C., & Brent, A. C. (2005, 8). Sustainable Project Life Cycle Management: the need to integrate life cycles in the manufacturing sector. *International Journal of Project Management*, *23*(2), 159–168. Retrieved from https://doi.org/10.1016/j.ijproman.2004.06.003 doi: 10.1016/j.ijproman.2004.06.003

Loorbach, D. (2010, 12). Transition Management for Sustainable Development: A Prescriptive, Complexity□Based Governance Framework. *Governance*, *23*(1), 161–183. Retrieved from https://doi.org/10.1111/j.1468-0491.2009.01471.x doi: 10.1111/j.1468-0491.2009.01471.x

Lozano, R. (2012, 5). Are Companies Planning their Organisational Changes for Corporate Sustainability? An Analysis of Three Case Studies on Resistance to Change and their Strategies to Overcome it. *Corporate Social Responsibility and Environmental Management*, *20*(5), 275–295. Retrieved from https://doi.org/10.1002/csr.1290 doi: 10.1002/csr.1290

Lozano, R., Nummert, B., & Ceulemans, K. (2016, 3). Elucidating the relationship between Sustainability Reporting and Organisational Change Management for Sustainability. *Journal of Cleaner Production*, *125*, 168–188. Retrieved from https://doi.org/10.1016/j.jclepro.2016.03.021 doi: 10.1016/j.jclepro.2016.03.021

Lykkesfeldt, P., & Kjaergaard, L. L. (2022). *The origin of ESG*. Retrieved from https://doi.org/10.1007/978-3-031-05800-4_30 doi: 10.1007/978-3-031-05800-4\{_}30

Machado, C. G., De Lima, E. P., Da Costa, S. E. G., Angelis, J. J., & Mattioda, R. A. (2017, 3). Framing maturity based on sustainable operations management principles. *International Journal of Production Economics*, *190*, 3–21. Retrieved from https://doi.org/10.1016/j.ijpe.2017.01.020 doi: 10.1016/j.ijpe.2017.01.020

Manninen, K., & Huiskonen, J. (2022, 2). Factors influencing the implementation of an integrated corporate sustainability and business strategy. *Journal of Cleaner Production*, *343*, 131036. Retrieved from https://doi.org/10.1016/j.jclepro.2022.131036 doi: 10.1016/j.jclepro.2022.131036

Matinaro, V., & Liu, Y. (2017, 10). Towards increased innovativeness and sustainability through organizational culture: A case study of a Finnish construction business. *Journal of Cleaner Production*, *142*, 3184–3193. Retrieved from https://doi.org/10.1016/j.jclepro.2016.10.151 doi: 10.1016/j.jclepro.2016.10.151

McGrady, P., & Golicic, S. (2023, 10). Barriers to corporate sustainability in the U.S. *Journal of Management and Sustainability*, *13*(2), 112. Retrieved from https://doi.org/10.5539/jms.v13n2p112 doi: 10.5539/jms.v13n2p112

McIntosh, M. J., & Morse, J. M. (2015, 1). Situating and constructing diversity in Semi-Structured interviews. *Global Qualitative Nursing Research*, *2*. Retrieved from https://doi.org/10.1177/2333393615597674 doi: 10.1177/2333393615597674

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). *The limits to growth*. Retrieved from https://doi.org/10.4324/9780429493744-3 doi: 10.4324/9780429493744-3

Meijer, I. (2025, 2). Exploratory interview on property asset management companies and the CSRD. , 6214.

Muyiwa-Ajayi, T. P., Sobowale, A., & Augoye, O. (2024, 1). The financial impact of sustainable investments on corporate profitability. *International Journal of Multidisciplinary Research and Growth Evaluation*, *5*(1), 1372–1377. Retrieved from https://doi.org/10.54660/.ijmrge.2024.5.1.1372-1377 doi: 10.54660/.ijmrge.2024.5.1.1372-1377

NBA. (2025, 2). *Corporate Sustainability Reporting Directive (CSRD)*. Retrieved from https://www.nba.nl/tools-en-ondersteuning/achtergrond/duurzaamheid/csrd/

Neri, A., Cagno, E., Di Sebastiano, G., & Trianni, A. (2018, 5). Industrial sustainability: Modelling drivers and mechanisms with barriers. *Journal of Cleaner Production*, *194*, 452–472. Retrieved from https://doi.org/10.1016/j.jclepro.2018.05.140 doi: 10.1016/j.jclepro.2018.05.140

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017, 10). Thematic analysis. *International Journal of Qualitative Methods*, *16*(1). Retrieved from https://doi.org/10.1177/1609406917733847 doi: 10.1177/1609406917733847

Nyoni, V., Piller, W. B., & Vigren, O. (2023, 11). Sustainability action in the real estate sector — An

organizational and institutional perspective. *Cleaner Production Letters*, *5*, 100049. Retrieved from https://doi.org/10.1016/j.clpl.2023.100049 doi: 10.1016/j.clpl.2023.100049

Orji, I. J. (2019, 9). Examining barriers to organizational change for sustainability and drivers of sustainable performance in the metal manufacturing industry. *Resources Conservation and Recycling*, *140*, 102–114. Retrieved from https://doi.org/10.1016/j.resconrec.2018.08.005 doi: 10.1016/j.resconrec.2018.08.005

Overheid.nl, O. (2024a, 7). *Implementatiebesluit richtlijn duurzaamheidsrapportage.* Retrieved from https://wetgevingskalender.overheid.nl/Regeling/WGK025515

Overheid.nl, O. (2024b, 10). *Wet tot implementatie richtlijn duurzaamheidsrapportage door ondernemingen.* Retrieved from https://wetgevingskalender.overheid.nl/regeling/WGK014704/documenten/Raad%20van%20State/Adviesaanvraag%20aanhangig%20bij%20Raad%20van%20State/1

O'Connor, J. T., Torres, N., & Woo, J. (2016, 2). Sustainability Actions during the Construction Phase. *Journal of Construction Engineering and Management*, *142*(7). Retrieved from https://doi.org/10.1061/(asce)co.1943-7862.0001128 doi: 10.1061/(asce)co.1943-7862.0001128

Patuelli, A., & Saracco, F. (2022, 1). Sustainable Development Goals as unifying narratives in large UK firms' Twitter discussions. *arXiv (Cornell University)*. Retrieved from https://arxiv.org/abs/2207.14664 doi: 10.48550/arxiv.2207.14664

Piller, W. B., & Nyoni, V. E. (2022). *Sustainability in Property Asset Management: An overview of perceptions, important aspects and implementation of sustainability in Swedish commercial real estate companies.* Retrieved from https://www.diva-portal.org/smash/get/diva2:1672114/FULLTEXT01.pdf

Polman, P., & Bhattacharya, C. (2016). *Engaging employees to Create a Sustainable Business (SSIR).* Retrieved from https://ssir.org/articles/entry/engaging_employees_to_create_a_sustainable_business

PRI. (n.d.). *Environmental, social and governance (ESG) issues.* Retrieved from https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues

Purvis, B., Mao, Y., & Robinson, D. (2018, 9). Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, *14*(3), 681–695. Retrieved from https://doi.org/10.1007/s11625-018-0627-5 doi: 10.1007/s11625-018-0627-5

Pyke, C. (2016, 5). *The value of an integrated sustainability strategy for real estate companies and funds.* Retrieved from https://www.gresb.com/nl-en/the-value-of-an-integrated-sustainability-strategy-for-real-estate-companies-and-funds/#:~:text=The%20GRESB%20Real%20Estate%20Assessment,far%20beyond%20utility%20cost%20savings

Rai, S. (2014, 12). An Analysis of Corporate Social Responsibility Expenditure in India. *ResearchGate*. Retrieved from https://www.researchgate.net/publication/352408805_An_Analysis_of_Corporate_Social_Responsibility_Expenditure_in_India

Rising. (2023, 5). *ESG in Commercial Real Estate — Rising Realty Partners.* Retrieved from https://risingrp.com/insight/esg-in-commercial-real-estate/#:~:text=Institutional%20and%20commercial%20property%20owners,to%20area%20streets%20and%20communities

Rogmans, T., & Ghunaim, M. (2016, 2). A framework for evaluating sustainability indicators in the real estate industry. *Ecological Indicators*, *66*, 603–611. Retrieved from https://doi.org/10.1016/j.ecolind.2016.01.058 doi: 10.1016/j.ecolind.2016.01.058

Ross, S. (2024, 1). *Asset Managers in the Real Estate Market: Reading into the role.* Retrieved from https://www.investopedia.com/ask/answers/040815/what-does-asset-management-mean-regards-real-estate.asp

Sachs, J. (2012, 6). From Millennium Development Goals to Sustainable Development Goals. *The Lancent*, *379*(9832). Retrieved from https://www.thelancet.com/journals/a/article/PIIS0140-6736(12)60685-0/fulltext

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., … Jinks, C. (2017, 9). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality Quantity*, *52*(4), 1893–1907. Retrieved from https://doi.org/10.1007/s11135-017-0574-8 doi: 10.1007/s11135-017-0574-8

Sayce, S., Sundberg, A., & Clements, B. (2010, 1). *Is sustainability reflected in commercial property prices: a review of existing evidence* (Tech. Rep.).

Scarrett, D. (2010). *Property Asset Management*. Retrieved from https://doi.org/10.4324/

9780203839461 doi: 10.4324/9780203839461

Schneider, A. (2014, 1). Reflexivity in Sustainability Accounting and Management: Transcending the economic focus of corporate sustainability. *Journal of Business Ethics*, *127*(3), 525–536. Retrieved from https://doi.org/10.1007/s10551-014-2058-2 doi: 10.1007/s10551-014-2058-2

SDSN. (2024, 1). *Europe Sustainable Development Report* (Tech. Rep.). Retrieved from https://sdgtransformationcenter.org/reports/europe-sustainable-development-report-2023-24

SER. (n.d.). *Vragen en antwoorden CSRD en ESRS.* Retrieved from https://www.ser.nl/nl/thema/duurzaamheid/faq

Sethi, S. P., & Schepers, D. H. (2013, 2). United Nations Global Compact: The Promise–Performance Gap. *Journal of Business Ethics*, *122*(2), 193–208. Retrieved from https://doi.org/10.1007/s10551-013-1629-y doi: 10.1007/s10551-013-1629-y

Shabaya, R. (2014). *Factors that influence entrepreneurs to seek external expertise - ProQuest.* Walden University. Retrieved from https://www.proquest.com/openview/770a53da4a7848f464f9093df010af73/1?cbl=18750&pq-origsite=gscholar

Shahee, A., Abdoos, M., Aslani, A., & Zahedi, R. (2024, 3). Reducing the energy consumption of buildings by implementing insulation scenarios and using renewable energies. *Energy Informatics*, *7*(1). Retrieved from https://doi.org/10.1186/s42162-024-00311-9 doi: 10.1186/s42162-024-00311-9

Shove, E., Chappells, H., & Van Vliet, B. (2012). *Infrastructures of consumption*. Retrieved from https://doi.org/10.4324/9781849771726 doi: 10.4324/9781849771726

Siddiqui, F. (2011). *Impact of employee's willingness on organizational change* (Vol. Vol.2; Tech. Rep. No. No.4). Retrieved from https://core.ac.uk/download/pdf/234645454.pdf

Silvius, A., Schipper, R. P. J., & Aetsveld, V. (2014). *Sustainability in project management: A literature review and impact analysis* (Vol. 4; Tech. Rep. No. 1). Retrieved from https://pmworldlibrary.net/wp-content/uploads/2018/06/2014-Silvius-Schipper-Sustainability-in-project-management.pdf

Silvius, A. G., Kampinga, M., Paniagua, S., & Mooi, H. (2017, 2). Considering sustainability in project management decision making; An investigation using Q-methodology. *International Journal of Project Management*, *35*(6), 1133–1150. Retrieved from https://doi.org/10.1016/j.ijproman.2017.01.011 doi: 10.1016/j.ijproman.2017.01.011

Simões-Coelho, M. F., & Figueira, A. R. (2021, 1). Why do companies engage in sustainability? propositions and a framework of motivations. *BAR - Brazilian Administration Review*, *18*(2). Retrieved from https://doi.org/10.1590/1807-7692bar2021190042 doi: 10.1590/1807-7692bar2021190042

Sizirici, B., Fseha, Y., Cho, C.-S., Yildiz, I., & Byon, Y.-J. (2021, 10). A Review of Carbon Footprint Reduction in Construction Industry, from Design to Operation. *Materials*, *14*(20), 6094. Retrieved from https://doi.org/10.3390/ma14206094 doi: 10.3390/ma14206094

Sourani, A., & Sohail, M. (2011, 12). Barriers to addressing sustainable construction in public procurement strategies. *Proceedings of the Institution of Civil Engineers - Engineering Sustainability*, *164*(4), 229–237. Retrieved from https://doi.org/10.1680/ensu.2011.164.4.229 doi: 10.1680/ensu.2011.164.4.229

SPRYG. (2025, 3). *Programma van ESG amp; Vastgoed NL 2025 | SPRYG Real Estate Academy.* Retrieved from https://spryg.com/nl/events/esg/programma

Starik, M., & Collins, D. (2014, 9). Our professions, organizations, and societies are addressing sustainability management. *Organization Environment*, *27*(3), 207–214. Retrieved from https://doi.org/10.1177/1086026614547309 doi: 10.1177/1086026614547309

Stewart, R., Bey, N., & Boks, C. (2016, 1). Exploration of the barriers to implementing different types of sustainability approaches. *Procedia CIRP*, *48*, 22–27. Retrieved from https://doi.org/10.1016/j.procir.2016.04.063 doi: 10.1016/j.procir.2016.04.063

Székely, N., & Brocke, J. V. (2017, 4). What can we learn from corporate sustainability reporting? Deriving propositions for research and practice from over 9,500 corporate sustainability reports published between 1999 and 2015 using topic modelling technique. *PLoS ONE*, *12*(4), e0174807. Retrieved from https://doi.org/10.1371/journal.pone.0174807 doi: 10.1371/journal.pone.0174807

Tebaldi, C., Ranasinghe, R., Vousdoukas, M., Rasmussen, D. J., Vega-Westhoff, B., Kirezci, E., … Mentaschi, L. (2021, 8). Extreme sea levels at different global warming levels. *Nature Climate Change*, *11*(9), 746–751. Retrieved from https://www.nature.com/articles/s41558-021-01127-1 doi: 10.1038/s41558-021-01127-1

ter Hoeven, R. (2023, 3). Waarom de CSRD zoveel meer is dan een 'disclosure' standaard. *Maandblad Voor Accountancy en Bedrijfseconomie*, *97*(1/2), 1–3. Retrieved from https://mab-online.nl/article/102991/ doi: 10.5117/mab.97.102991

Tokbolat, S., Karaca, F., Durdyev, S., & Calay, R. K. (2020, 6). Construction professionals' perspectives on drivers and barriers of sustainable construction. *Environment Development and Sustainability*, *22*(5), 4361–4378. Retrieved from https://doi.org/10.1007/s10668-019-00388-3 doi: 10.1007/s10668-019-00388-3

Too, E. G., & Weaver, P. (2014, 8). The management of project management: A conceptual framework for project governance. *International Journal of Project Management*, *32*(8), 1382–1394. Retrieved from https://doi.org/10.1016/j.ijproman.2013.07.006 doi: 10.1016/j.ijproman.2013.07.006

Translating an ambitious vision into global transformation: the 2030 agenda for sustainable development (Tech. Rep. No. No. 7/2015). (2015). Retrieved from https://www.econstor.eu/bitstream/10419/199457/1/die-dp-2015-07.pdf

Trianni, A., Cagno, E., & Neri, A. (2017, 8). Modelling barriers to the adoption of industrial sustainability measures. *Journal of Cleaner Production*, *168*, 1482–1504. Retrieved from https://doi.org/10.1016/j.jclepro.2017.07.244 doi: 10.1016/j.jclepro.2017.07.244

UNEP. (2024, 6). *Why making buildings greener is crucial to countering climate change.* Retrieved from https://www.unep.org/news-and-stories/story/why-making-buildings-greener-crucial-countering-climate-change

UN Global Impact, U. (2004, 12). *Who cares wins* (Tech. Rep.). Retrieved from https://documents1.worldbank.org/curated/en/280911488968799581/pdf/113237-WP-WhoCaresWins-2004.pdf

Union, E. (n.d.). *Environment and green economy – EU action | European Union.* Retrieved from https://european-union.europa.eu/priorities-and-actions/actions-topic/environment_en

United Nations, U. (n.d.). *THE 17 GOALS | Sustainable Development.* Retrieved from https://sdgs.un.org/goals

United Nations, U. (2024, 8). *The Sustainable Development Agenda - United Nations Sustainable Development.* Retrieved from https://www.un.org/sustainabledevelopment/development-agenda/

Van Dijk, L. (2024, 12). *Ondernemingsrecht, Implementatie van de CSRD: waarom makkelijk doen als het ook moeilijk kan? | InView.* Retrieved from https://www.inview.nl/document/id841004a765124ced847d9ecf5e48412b/ondernemingsrecht-implementatie-van-de-csrd-waarom-makkelijk-doen-als-het-ook-moeilijk-kan?ctx=WKNL_CSL_104&tab=tekst

van Dijk, L., M Cremers, M., Rietveld, S., & Bier, B. (2024, 7). *Duurzaamheidsverslaggeving: nationale implementatie van de CSRD en mondiale ontwikkelingen (juli 2024).* Retrieved from https://www.stibbe.com/nl/publications-and-insights/duurzaamheidsverslaggeving-nationale-implementatie-van-de-csrd-en

Van Zanten, J. A., & Van Tulder, R. (2021, 5). Improving companies' impacts on sustainable development: A nexus approach to the SDGS. *Business Strategy and the Environment*, *30*(8), 3703–3720. Retrieved from https://doi.org/10.1002/bse.2835 doi: 10.1002/bse.2835

Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017, 12). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical Education*, *51*(1), 40–50. Retrieved from https://doi.org/10.1111/medu.13124 doi: 10.1111/medu.13124

Vieira, L. C., & Amaral, F. G. (2016, 11). Barriers and strategies applying Cleaner Production: a systematic review. *Journal of Cleaner Production*, *113*, 5–16. Retrieved from https://doi.org/10.1016/j.jclepro.2015.11.034 doi: 10.1016/j.jclepro.2015.11.034

Warren Myers, G. (2012, 3). The value of sustainability in real estate: a review from a valuation perspective. *Journal of Property Investment and Finance*, *30*(2), 115–144. Retrieved from https://doi.org/10.1108/14635781211206887 doi: 10.1108/14635781211206887

WBCSD. (2021, 11). *Reporting matters 2021 | WBCSD.* Retrieved from https://www.wbcsd.org/resources/reporting-matters-2021/

Welford, R. (2013). *Corporate Environmental Management 3: Towards sustainable development*. Routlegde New York. Retrieved from https://www.routledge.com/Corporate-Environmental-Management-3-Towards-sustainable-development/Welford/p/book/9781853836602?srsltid=AfmBOoqovLQAuUaRIVH8QJzIt8bv1rGKEuLM2j7WKtURjBo_lsElMlYZ

Wijethilake, C. (2017, 3). Proactive sustainability strategy and corporate sustainability performance: The mediating effect of sustainability control systems. *Journal of Environmental Management*, *196*, 569–582. Retrieved from https://doi.org/10.1016/j.jenvman.2017.03.057 doi: 10.1016/j.jenvman.2017.03.057

Wijethilake, C., & Lama, T. (2019, 10). Sustainability core values and sustainability risk management: Moderating effects of top management commitment and stakeholder pressure. *Business Strategy and the Environment*, *28*(1), 143–154. Retrieved from https://doi.org/10.1002/bse.2245 doi: 10.1002/bse.2245

Willems, S. (2024, 2). *7 antwoorden op de meest gestelde vragen rond CSRD.* Retrieved from https://www.arcadis.com/nl-nl/inzichten/blog/belgium/sofie-willems/2023/7-antwoorden-op-de-meest-gestelde-vragen-rond-csrd

Wood, D. J. (1991, 10). Corporate social performance revisited. *Academy of Management Review*, *16*(4), 691. Retrieved from https://doi.org/10.2307/258977 doi: 10.2307/258977

Yilmaz, M., & Bakış, A. (2015, 7). Sustainability in construction sector. *Procedia - Social and Behavioral Sciences*, *195*, 2253–2262. Retrieved from https://doi.org/10.1016/j.sbspro.2015.06.312 doi: 10.1016/j.sbspro.2015.06.312

Zhang, J., Zhang, S., Liu, F., & Chen, W. (2022, 7). Make time for employees to be sustainable: the roles of temporal leadership, employee procrastination, and organizational time norms. *Sustainability*, *14*(14), 8778. Retrieved from https://doi.org/10.3390/su14148778 doi: 10.3390/su14148778

Álvarez Jaramillo, J., Sossa, J. W. Z., & Mendoza, G. L. O. (2018, 12). Barriers to sustainability for small and medium enterprises in the framework of sustainable development—Literature review. *Business Strategy and the Environment*, *28*(4), 512–524. Retrieved from https://doi.org/10.1002/bse.2261 doi: 10.1002/bse.2261

A

Appendices of the document review

A.1. All objectives CSRD:

1. **Ensuring transparency, reliability, and comparability of sustainability information:**

    - The Green Deal (Recital 1) and the Action Plan on Financing Sustainable Growth (Recital 2) highlight the need for reliable, comparable, and relevant sustainability information to guide investments and policy decisions.
    - The CSRD also aims to close the information gap between companies, investors, and stakeholders, ensuring that ESG data is complete, standardized, and trustworthy (Recitals 13&14).
    - The Commission's review of Directive 2014/95/EU (NFRD) found that many companies did not disclose important material sustainability information, including honesty on all greenhouse gas emissions and biodiversity impacts (Recital 13).
    - Recital 4 emphasizes that the Council of the EU called for the development of a European non-financial reporting standard to improve comparability.
    - Recital 37 highlights that previous voluntary sustainability reporting guidelines failed to ensure consistent and comparable disclosures, as companies were not required to follow a common framework. The CSRD is therefore needed to introduce mandatory standards to ensure comparability and alignment.

2. **Combating greenwashing and improving/extending corporate accountability:**

    - Recital 2 states that Regulation (EU) 2020/852 (EU Taxonomy) was created to prevent greenwashing, but it requires consistent ESG disclosures from companies to be effective.
    - Recital 13 identifies the lack of material sustainability disclosures as a major issue and stresses the need for effective auditing to prevent greenwashing and double counting.
    - Recital 14 warns that, without clear reporting rules, stakeholders (NGOs, social partners, local communities) cannot hold companies accountable for their social and environmental impacts.
    - The CSRD aims to extend sustainability reporting requirements to all large undertakings, including non-listed ones, to ensure accountability for their environmental and social impacts, including within their value chains (Recital 18).

3. **Strengthening the European Green Deal and climate neutrality goals:**

    - Recital 1 links the CSRD to the Green Deal's goal of making the EU climate neutral by 2050 (Regulation (EU) 2021/1119).
    - Recital 1 also connects the CSRD to the EU Biodiversity Strategy for 2030, ensuring that companies report on biodiversity restoration, resource conservation, and pollution reduction.
    - Recital 3 highlights the importance of climate-related reporting, enabling companies to identify risks and opportunities, diversify their investor base, and reduce capital costs.
    - Recital 30 requires companies to disclose climate transition plans that align with the Paris Agreement's 1.5°C target and the EU's 2050 climate neutrality goal, integrating the latest science from the IPCC and the European Scientific Advisory Board.

4. **Facilitating sustainable finance and redirecting capital flows:**

- Recital 2 states that the CSRD is crucial to achieving the Action Plan on Financing Sustainable Growth, which aims to redirect capital flows towards sustainable investments and manage financial risks from climate change.
- Recital 5 explains that the European Parliament called for mandatory non-financial reporting standards to expand the scope of reporting and introduce audit requirements to enhance investor knowledge.
- Recital 11 highlights the increasing demand for corporate sustainability information, especially from investors, due to climate risks, biodiversity loss, and social issues.

5. **Ensuring a fair and socially just transition:**

   - Recital 1 emphasizes that the Green Deal should ensure a just transition where no one is left behind, meaning that sustainability reporting should also cover social and labor rights issues.
   - Recital 9 states that workers, trade unions, and civil society should benefit from sustainability disclosures to engage in social dialogue and hold companies accountable for their labor practices.
   - Recital 12 highlights that companies themselves benefit from high-quality sustainability reporting as well, as it improves reputation, investor trust, and access to finance.

6. **Reducing administrative burdens and ensuring harmonized EU-wide standards:**

   - Recital 16 warns that, without common EU-wide reporting standards, member states would introduce diverging national rules, leading to higher costs and complexity for cross-border companies.
   - Recital 15 explains that multiple ESG reporting frameworks create unnecessary burdens for companies, which the CSRD addresses by harmonizing reporting requirements.

7. **Strengthening the Capital Markets Union and investor protection:**

   - Recital 4 states that the Council of the EU recognized the importance of ESG transparency for deepening the Capital Markets Union, ensuring that investors have access to comparable sustainability data.
   - Recital 9 states that investors, including asset managers, need sustainability information to assess risks and opportunities and to ensure that their investments align with ESG objectives.
   - Recital 10 highlights that the market for sustainability information is growing, and harmonized data will improve data quality, reduce costs, and create jobs.

8. **Alignment with international and EU sustainability frameworks:**

   - Recital 6 links the CSRD to the UN Sustainable Development Goals, ensuring that EU policies align with global sustainability objectives.
   - Recital 2 highlights the alignment with other EU regulations, such as Regulation (EU) 2019/2088 (SFDR) on financial market disclosure rules, Regulation (EU) 2020/852 (EU Taxonomy) on the classification of environmentally sustainable activities, and Regulation (EU) 2019/2089 on ESG disclosure requirements for benchmark administrators.

A.2. Overview recitals CSRD:

1. **Recitals 1-14: The Need for the CSRD**

   - These recitals focus on the necessity and rationale behind the EU Commission's implementation of the CSRD.
   - They outline the policy background, objectives, and regulatory gaps that necessitated the new directive.

2. **Recitals 15-27: Expansion and Harmonisation of Reporting Requirements**

   - These recitals discuss the expansion and harmonisation of reporting requirements under the CSRD.

- They address information gaps, regulatory fragmentation, and the inclusion of a broader range of companies.
- They emphasize the need for a unified EU framework to prevent divergent national reporting rules.
- The CSRD expands its scope to cover large undertakings, non-listed companies, third-country companies with significant EU operations, and SMEs on regulated markets.

3. **Recitals 28-37: Alignment with EU Regulations and Double Materiality**

   - These recitals ensure alignment of sustainability reporting requirements with existing EU regulations, such as the SFDR and EU Taxonomy.
   - Recital 29 introduces the concept of double materiality, requiring companies to report on:
     - Financial materiality (outside-in perspective) – how sustainability issues create financial risks for the company.
     - Impact materiality (inside-out perspective) – how the company affects people and the environment.
   - Recital 33 emphasizes that sustainability disclosures must cover short-, medium-, and long-term horizons and the entire value chain.
   - These recitals also highlight the importance of harmonised, digitalised, and auditable reporting standards, replacing voluntary guidelines with mandatory reporting.

4. **Recitals 39-54: Development and Governance of the ESRS**

   - These recitals focus on the creation, governance, and alignment of the European Sustainability Reporting Standards (ESRS).
   - The ESRS define the content and format of CSRD sustainability reports.
   - Recital 39 assigns EFRAG (European Financial Reporting Advisory Group) as the technical body responsible for drafting the standards.
   - The recitals reinforce alignment with global frameworks, such as the Global Reporting Initiative (GRI).
   - They introduce sector-specific standards, acknowledging different sustainability risks across industries.
   - The first ESRS set was adopted in June 2023, with sector-specific standards originally planned for June 2024, though these have not yet been developed.

5. **Recitals 55-59: Digitalisation and Accessibility of Reporting**

   - These recitals stress the need for machine-readable, accessible, and centralised ESG data.
   - Recitals 55-56 require sustainability reports to be standardised in an electronic format and integrated into the European Single Access Point (ESAP) for transparency.
   - Recital 57 mandates that the CSRD report must be included in the annual board report.

6. **Recitals 60-78: Assurance, Governance, and Oversight**

   - These recitals focus on ensuring credibility and independent verification of sustainability disclosures.
   - Recital 60 introduces a phased approach to assurance, bringing sustainability reporting to the same level of credibility as financial reporting.
   - Member states must accredit independent assurance providers to maintain audit independence and market competition.
   - Recital 65 requires auditors to have sustainability expertise, enforced through training and education.
   - Recital 78 mandates that auditors report irregularities, strengthening their role in detecting misstatements and preventing greenwashing.

7. **Recitals 79-84: Supervision and Periodic Review**

   - These recitals ensure consistent implementation across the EU through periodic supervision and enforcement.
   - The Commission is empowered to update reporting standards to align with market needs, regulatory developments, and best practices.

B

Appendices of the literature review

B.1. Literature overview on identified barriers:

Author	Barriers to sustainability implementation in organisations												
Author + year	Lack of knowledge, skills, and awareness	Time constraints	Financial constraints	Organisational culture	Lack of commitment of (top) management	Lack of sharing the objectives / motivation employees	Lack of communication	Lack of incentives	Difficulty to define sustainability metrics	Organisational structure	Sustainability regulations not effective enough	Resistance to change	Inadequate proactive plans
Ametepey et al., 2015	X		X		X						X		
Blok et al., 2015	X		X		X							X	
Cagno et al., 2013	X	X	X		X	X				X	X	X	
Caldera et al., 2019	X	X	X	X	X						X		
Duarte, 2015									X		X	X	
Durdyev et al., 2018	X		X								X		
Engert & Baumgartner, 2016					X		X	X		X			X
Epstein & Buhovac, 2014	X				X		X	X					X
Fathalizadeh et al., 2021	X						X						
Ershadi et al., 2021	X			X	X		X	X		X	X		
George et al., 2016									X	X	X		
Koistinen et al., 2022					X		X			X		X	
Kontturi, 2023	X									X		X	X
Loewe & Rippin, 2015	X		X						X		X		
Lozano et al., 2012				X						X		X	
Neri et al., 2018	X	X	X		X	X	X			X		X	
Olafsen et al., 2020				X	X	X						X	
Orji, 2019	X	X					X				X		X
Orji & Wei, 2016			X		X							X	X
Peenstra & Silvius, 2018	X		X						X				X
Sourani & Sohail, 2011	X	X	X		X								
Stewart et al., 2016	X			X	X	X			X	X	X		X
Tokbolat et al., 2020			X					X			X		
Trianni et al., 2017	X	X	X	X	X	X	X	X		X	X	X	
Vieira & Amaral, 2016	X		X				X			X	X	X	
Weijethilake, 2017	X							X					

Figure B.1: Literate analysis of the identified barriers

C

Protocol semi-structured interviews

C.1. Interview Protocol: Property Asset Management Companies

The following structure has been prepared for the interviews with property asset management companies:

Part 1: Introduction

1. Introducing myself
    - Master CME student at TU Delft, Bachelor in ”Technische Bestuurskunde” at TU Delft.
    - Currently graduating from my master’s at Sweco, focusing on improving sustainability in the operations of property asset management companies through the CSRD.
2. Introduction of the interviewee
    - Background and role within the company.
    - Years of experience.
    - Possibly: focus areas and responsibilities.
3. Confidentiality and data use
    - Discussion of the consent form sent via email, ensuring anonymity of the provided information.
    - Permission to record the interview (audio) and transcribe it for data analysis.
    - The interviewee will receive the transcript for review and confirmation.
4. Introduction to the research
    - The objective of this research is to explore how property asset management companies can use the CSRD to improve and implement sustainability in their operations.
    - Explanation of the Corporate Sustainability Reporting Directive (CSRD) if necessary.
    - Explanation of the interview: ”The main goal of this interview is to understand how your company translates its sustainability vision and strategy into concrete operational practices. I aim to explore the barriers you face and the strategies you use to overcome them. I also want to examine the motivations and drivers of your company for sustainability implementation. Additionally, we will briefly discuss the role of the CSRD in your organization.”

Part 2: Sustainability Implementation

1. General Questions
    - Could you tell me something about the core activities of your organisation?
    - How would you describe the overall strategy of your organisation? And to what extent does sustainability play a role in it? (or is there a separate sustainability vision?)
2. Sustainability Vision and Motivation
    - Does your organisation have a clear sustainability vision or strategy? What are your ambitions in this regard?

- What does sustainability mean to your organisation? (For example: is it part of the organisational culture or management/employee commitment?)
- Why do you think sustainability is important for your organisation? What are your motivations for implementing sustainability?

3. Sustainability Implementation

- Could you guide me through how sustainability is concretely implemented within your property portfolio or day-to-day operations? What strategies are used for this?
- Which environmentally related types of sustainability measures or initiatives does your organisation consider most important? (For example: reducing energy consumption)
- Are there certain drivers you apply to stimulate sustainability? (Such as management commitment, sustainability culture, training, etc.)
- What examples can you give of sustainable choices or projects within your operations?
- Who is mainly involved in these efforts within the organisation?
- How is it ensured that the sustainability vision is actually implemented?
- Do you mainly focus on the E, S, or G aspects?

4. Barriers to Implementation

- What practical challenges do you encounter when it comes to implementing sustainability in your operations/buildings portfolio?
- How have you addressed these challenges; are there any strategies that have proven effective?

Part 3: CSRD

1. Is your company CSRD-compliant?

(a) If no:

- What is your opinion on the CSRD as a tool? Would you consider working with it (even without being legally required to)? Why or why not?
- Do you think that having to formally record ambitions influences the level of goals that organisations set? Why or why not?

(b) If yes:

- How has the CSRD preparation process been going within your organisation so far?
- What motivates you to already be actively working on it? Are there any benefits beyond simply meeting the legal requirements?
- Are there any challenges you face in interpreting or applying the directive?
- Do you feel that the CSRD contributes to improving sustainability within your organisation? What would be needed to make it more effective?
- Do you feel that the obligation to set formal targets might sometimes also limit ambition?

Part 4: Closing

- Would you like to discuss any other aspects related to this topic?
- Thank you for your participation. This was an interesting conversation with new insights for my research.

C.2. Interview Protocol: independent CSRD experts

The following structure has been prepared for the interviews with the independent CSRD experts:

Part 1: Introduction

1. Introducing myself

- Master CME student at TU Delft, Bachelor in ”Technische Bestuurskunde” at TU Delft.
- Currently graduating from my master’s at Sweco, focusing on improving sustainability in the operations of property asset management companies through the CSRD.

2. Introduction of the interviewee

- Background and role within the company.
- Years of experience.
- Possibly: focus areas and responsibilities.

3. Confidentiality and data use

- Discussion of the consent form sent via email, ensuring anonymity of the provided information.
- Permission to record the interview (audio) and transcribe it for data analysis.
- The interviewee will receive the transcript for review and confirmation.

4. Introduction to the research

- The objective of this research is to explore how property asset management companies can use the CSRD to improve and implement sustainability in their operations.
- Explanation of the interview: ”The aim of this interview is to assess to what extent the tools of the CSRD can contribute in practice to implementing and improving sustainability within property asset management companies.”

Part 2: Practical use of the CSRD

1. Advantages and value

- How do you view the CSRD compared to earlier or other sustainability frameworks, such as the GRI or NFRD? What stands out to you in that regard?
- What do you think the CSRD could mean for companies that are (currently) not required to comply with it? Do you think it could also offer added value for them?

2. Practical use beyond compliance

- Do you see ways in which companies can use the CSRD to truly make progress in the area of sustainability, beyond the reporting obligation?
- When looking at the tools and mechanisms within the CSRD – which elements do you find most practical or valuable for companies seeking to strengthen their sustainability?
- In your view, how can companies move from mere “compliance” to using the CSRD as a way to structurally embed sustainability into their core strategy? What is needed for that in practice?
- Which parts of the CSRD and the ESRS do you consider most relevant for companies aiming to improve their sustainability performance?
- Do you think the CSRD mainly operates at the strategic level, or also at the operational level? Do you have any examples of this?
- In general, what do you think the CSRD can help companies with? (e.g., making performance measurable, translating sustainability into concrete actions, shaping strategy or vision, etc.)

3. Reflections on the future

- Do you think there are companies that will want to apply the CSRD voluntarily? What might motivate them to do so, or on the other hand, what could hold them back?
- Can you imagine that the obligation to publicly disclose sustainability goals might lead companies to set less ambitious targets? Why or why not?
- The Omnibus amendments may result in adjustments to the CSRD requirements. What is your view on this? Do you expect this will have practical implications for companies?
- If you could refine or adjust one or two aspects of the CSRD to make it more effective for companies, what would you change or add?

4. Summary

- To summarise, how do you think companies can use the CSRD in practice to improve their environmental sustainability? (Possibly with a specific focus on real estate companies?)

Part 3: Closing

- Would you like to discuss any other aspects related to this topic?
- Thank you for your participation. This was an interesting conversation with new insights for my research.

C.3. Interview Protocol: CSRD expert from the EU

This interview protocol only slightly differs from the protocol of the independent CSRD experts. Most questions that were asked to the independent CSRD experts, were also asked to the EU CSRD experts. Therefore, only the questions that were asked additionally are shown below:

Part 2: Practical use of the CSRD

1. Advantages and value

    - How was it decided which information companies are required to report? What was the main guiding principle in this decision?
    - Why was the principle of double materiality chosen as the foundation? Don't you think companies might be able to too easily declare certain aspects as non-material?
    - To what extent do you expect the CSRD to contribute to achieving broader policy goals such as the European Green Deal?

2. Specific questions

    - Why was it decided that the CSRD would only include reporting obligations, without any assessment system? Was this a deliberate choice?
    - What is your view on the pace of the CSRD implementation? Do you think companies have received sufficient support?

D

Data Management Plan

This Appendix presents the Data Management Plan (DMP) in the first section, and the consent form in the second section. Both are used for the conduction of the interviews.

D.1. Data Management Plan

The complete Data Management Plan can be found on the following pages and has been approved by Dr. C. Shelley-Egan, Chair of the Human Research Ethics Committee.

Plan Overview

A Data Management Plan created using DMPonline

Title: Improve sustainability in property asset management companies through the CSRD

Creator: Mila Benschop

Principal Investigator: Mila Benschop

Data Manager: Mila Benschop

Affiliation: Delft University of Technology

Template: TU Delft Data Management Plan template (2025)

Project abstract:

The Corporate Sustainability Reporting Directive (CSRD) aims to enhance transparency and accountability in corporate sustainability practices. However, a key challenge remains: How can property asset management companies use the Corporate Sustainability Reporting Directive (CSRD) to improve and implement sustainability into their operations? This research explores the intersection between strategic sustainability ambitions and their practical implementation, examining the barriers and opportunities for integrating (CSRD-driven) sustainability goals into day-to-day business activities. Through a combination of document analysis, literature review, and qualitative interviews, this study investigates how property asset managers can move beyond compliance and use the CSRD as a tool for meaningful change. The findings contribute to a better understanding of how sustainability reporting can drive real-world impact, providing actionable insights for companies aiming to bridge the gap between high-level sustainability visions and operational execution.

ID: 171386

Start date: 03-02-2025

End date: 21-07-2025

Last modified: 04-03-2025

Improve sustainability in property asset management companies through the CSRD

0. Adminstrative questions

1. Provide the name of the data management support staff consulted during the preparation of this plan and the date of consultation. Please also mention if you consulted any other support staff.

My faculty data steward, Xinyan Fan, has reviewed this DMP on the 27th of February, 2025.

2. Is TU Delft the lead institution for this project?

- Yes, leading the collaboration – please provide details of the type of collaboration and the involved parties below

TU Delft is leading the consortium. But Sweco Netherlands is the involved thesis company and are thus members of the consortium. A UNL Graduation Agreement has been signed by the TU Delft and Sweco. The signed contract will be added.

I. Data/code description and collection or re-use

3. Provide a general description of the types of data/code you will be working with, including any re-used data/code.

Type of data/code	**File format(s)**	**How will data/code be collected/generated?** *For re-used data/code: what are the sources and terms of use?*	**Purpose of processing**	**Storage location**	**Who will have access to the data/code?**
Informed consent form for interviewees.	.docx & pdf.	E-mail / interviews	Ask permission to use data	TUD OneDrive	Me
Voice recordings of interviewees.	.mp3	Interviews (Both Microsoft Teams or on-site recordings using phones will be used)	Used to transcribe interviews	TUD OneDrive	Me
Interview transcripts.	.docx & pdf.	Interviews	Analysis practical insights	TUD OneDrive	Me, interview participants
Anonymised interview transcipts.	.docx & pdf.	Interviews	Analysis practical insights	TUD OneDrive	Me, supervisors from TU Delft and Sweco
Personally Identifiable Research Data (Job title and company)	.docx & pdf.	E-mail / interviews	To ensure profession in the analysed practical insights	TUD OneDrive	Me, supervisors from TU Delft and Sweco
Contact information interviewees (Full name and E-mail).	.docx & pdf.	E-mail / interviews	To contact them for interviews	TUD OneDrive	Me
Analysed data supporting thesis results.	.docx & pdf.	Qualitative analysis	Analysis barriers to operational and CSRD implementation	TUD OneDrive	Me, supervisors from TU Delft and Sweco
Observational notes, no personal information is noted.	.docx & .pdf	Observations of meetings	Analysis CSRD practices	TUD OneDrive	Me, supervisors from TU Delft and Sweco

II. Storage and backup during the research process

4. How much data/code storage will you require during the project lifetime?

- < 250 GB

5. Where will the data/code be stored and backed-up during the project lifetime? (Select all that apply.)

- TU Delft OneDrive

III. Data/code documentation

6. What documentation will accompany data/code? (Select all that apply.)

- Data – Methodology of data collection
- Data – README file or other documentation explaining how data are organised

IV. Legal and ethical requirements, code of conducts

7. Does your research involve human subjects or third-party datasets collected from human participants?

If you are working with a human subject(s), you will need to obtain the HREC approval for your research project.

- Yes – please provide details in the additional information box below

I intend to apply for ethical approval from the Human Research Ethics Committee, but have not yet done so.

8. Will you work with personal data? (This is information about an identified or identifiable natural person, either for research or project administration purposes.)

- Yes

I will conduct interviews, working field and experiences of the interviewees will be noted.

9. Will you work with any other types of confidential or classified data or code as listed below? (Select all that apply and provide additional details below.)

If you are not sure which option to select, ask your Faculty Data Steward for advice.

- No, I will not work with any other types of confidential or classified data/code

10. How will ownership of the data and intellectual property rights to the data be managed?

For projects involving commercially-sensitive research or research involving third parties, seek advice of your Faculty Contract Manager when answering this question

Data is included in the thesis, accessible through the TU Delft repository. As principle researcher, I will oversee access right to the gathered data throughout the research. This is an internal TUD MSc thesis project.

11. Which personal data or data from human participants do you work with? (Select all that apply.)

- Proof of consent (such as signed consent materials which contain name and signature)
- Other types of personal data or other data from human participants – please provide details below
- Gender
- Telephone number, email addresses and/or other addresses as contact details for administrative purposes
- Names as contact details for administrative purposes
- Audio recordings

Job title, professional experience

12. Please list the categories of data subjects and their geographical location.

- Someone from EFRAG and perhaps the European Commission / Parliament / Union (EU)
- ESG managers (Achmea, NLV, Amvest, DGBC, Altera, BouwInvest)
- CSRD experts (same companies as above)
- Employees of Sweco

All from the Netherlands

13. Will you be receiving personal data from or transferring personal data to third parties (groups of individuals or organisations)?

- No

16. What are the legal grounds for personal data processing?

- Informed consent

17. Please describe the informed consent procedure you will follow below.

Beforehand I will send the consent form, and I will collect them digitally. Then ask permission to record the interview. Each interview will be transcribed as soon as possible. After the transcription is agreed upon, the recording will be deleted. The transcript of the interview is checked with the respondent. The transcript is sent to the respondent and the respondent provides comments on the written text. In this way the respondent has the opportunity to check if the transcript is a correct representation of the interview or if the transcript contains any inaccuracies or unwanted sensitive statements.

18. Where will you store the physical/digital signed consent forms or other types of proof of consent (such as recording of verbal consent)?

Same answer as question 3/5.

19. Does the processing of the personal data result in a high risk to the data subjects? (Select all that apply.)

If the processing of the personal data results in a high risk to the data subjects, it is required to perform a Data Protection Impact Assessment (DPIA). In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data in your research project.

If any category applies, please provide additional information in the box below. Likewise, if you collect other type of potentially sensitive data, or if you have any additional comments, include these in the box below.

If one or more options listed below apply, your project might need a DPIA. Please get in touch with the Privacy team (privacy-tud@tudelft.nl) to get advice as to whether DPIA is necessary.

- None of the above apply

23. What will happen with the personal data used in the research after the end of the research project?

- Other – please explain below

Personal research data will be destroyed after the end of the research project.

24. For how long will personal research data (including pseudonymised data) be stored?

- Personal data will be deleted at the end of the research project

25. How will your study participants be asked for their consent for data sharing?

- In the informed consent form: participants are asked to give their explicit consent for sharing their (pseudonymised) personal data with restricted access with specific recipients for specific purpose(s)

V. Data sharing and long term preservation

27. Apart from personal data mentioned in question 23, will any other data be publicly shared?

Please provide a list of data/code you are going to share under 'Additional Information'.

- No other data/code can be publicly shared – please explain below why data/code cannot be publicly shared

Only anonymised data will be included in the appendix.

VI. Data management responsibilities and resources

33. If you leave TU Delft (or are unavailable), who is going to be responsible for the data/code resulting from this project?

My first supervisor Erik-Jan Houwingnl

34. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

Not relevant.

35. Which faculty do you belong to?

- Faculty of Civil Engineering and Geosciences (CEG)

D.2. Consent form

The following pages contain the consent form sent to the participants of the interviews. This has also been approved by the Ethics Committee.

TEMPLATE 2: Explicit Consent points (in Dutch)

GELIEVE DE JUISTE VAKJES AAN TE KRUISEN	JA	NEE
A: ALGEMENE OVEREENSTEMMING - ONDERZOEKSDOELEN, TAKEN VAN DEELNEMERS EN VRIJWILLIGE DEELNAME		
1. Ik heb de informatie over het onderzoek gedateerd …./…./….. gelezen en begrepen, of deze is aan mij voorgelezen. Ik heb de mogelijkheid gehad om vragen te stellen over het onderzoek en mijn vragen zijn naar tevredenheid beantwoord.	☐	☐
2. Ik doe vrijwillig mee aan dit onderzoek, en ik begrijp dat ik kan weigeren vragen te beantwoorden en mij op elk moment kan terugtrekken uit de studie, zonder een reden op te hoeven geven.	☐	☐
3. Ik begrijp dat mijn deelname aan het onderzoek de volgende punten betekent: • Interviews worden opgenomen ende opgenomen interviews worden opgeslagen op de TU Delft OneDrive • De opgenomen interviews worden getranscribeerd en geanonimiseerd, waarna de audiobestanden verwijderd zullen worden.	☐	☐
4. Ik begrijp dat de studie op uiterlijk 1 augustus 2025 eindigt en dat geanonimiseerde onderdelen van het interview gepubliceerd kunnen worden als onderdeel van het onderzoek.	☐	☐
B: POTENTIELE RISICOS VAN DEELNAME (INCL. DATA BESCHERMING)		
5. Ik begrijp dat mijn deelname de volgende risico's met zich meebrengt: databreuk en verlies van opgenomen bestanden/transcrip1es. Ik begrijp dat deze risico's worden geminimaliseerd door gebruik te maken van TU Delft officiële OneDrive en de verwerkte bestanden direct te verwijderen.	☐	☐
6. Ik begrijp dat mijn deelname betekent dat er persoonlijke identificeerbare informatie en onderzoeksdata worden verzameld, met het risico dat ik hieruit geïdentificeerd kan worden.	☐	☐
7. Ik begrijp dat binnen de Algemene verordening gegevensbescherming (AVG) een deel van deze persoonlijk identificeerbare onderzoeksdata als gevoelig wordt beschouwd.	☐	☐
8. Ik begrijp dat de volgende stappen worden ondernomen om het risico van een databreuk te minimaliseren, en dat mijn identiteit op de volgende manieren wordt beschermd in het geval van een databreuk: • Data wordt alleen opgeslagen op de TU Delft OneDrive • Opgenomen interviews worden getranscribeerd en geanonimiseerd, begeleiding van de TU Delft en Sweco heeft alleen toegang tot de geanonimiseerde data. • Na transcriptie worden opnames verwijderd.	☐	☐
9. Ik begrijp dat de persoonlijke informatie die over mij verzameld wordt en mij kan identificeren, zoals naam, werkplaats en contactgegevens, niet gedeeld worden buiten het studieteam.		
10. Ik begrijp dat de persoonlijke data die over mij verzameld wordt, vernietigd wordt op uiterlijk 01-08-2025.	☐	☐
C: PUBLICATIE, VERSPREIDING EN TOEPASSING VAN ONDERZOEK		

GELIEVE DE JUISTE VAKJES AAN TE KRUISEN	JA	NEE
11. Ik begrijp dat na het onderzoek de geanonimiseerde informatie gebruikt zal worden voor het analyseren van de gevolgen van de omgevingswet op publieke participatie. Deze analyse kan gepubliceerd worden in de master scriptie en academische rapporten.	☐	☐
12. Ik geef toestemming om mijn antwoorden, ideeën of andere bijdrages anoniem te quoten in resulterende producten.	☐	☐
D: (LONGTERM) DATA STORAGE, ACCESS AND REUSE		
13. Ik geef toestemming om de geanonimiseerde data (verwerkte transcripties) die over mij verzameld worden, gebruikt worden in dit onderzoek, dat vervolgens gepubliceerd wordt in de TU Delft Repository.	☐	☐
14. Ik begrijp dat de toegang tot deze Repository open is.	☐	☐

Handtekeningen

_____ _____ _____

Naam deelnemer Handtekening Datum

Ik, de onderzoeker, verklaar dat ik de informatie en het instemmingsformulier correct aan de potentiële deelnemer heb voorgelegd en, naar het beste van mijn vermogen, heb verzekerd dat de deelnemer begrijpt waar hij/zij vrijwillig mee instemt.

Mila Benschop _____

_____ Handtekening _____

Naam onderzoeker Datum

Contactgegevens van de onderzoeker voor verdere informatie:
Mila Benschop