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Beyond the Façade: Sustainability in Contemporary Business Practices

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Beyond the Façade:

Sustainability in Contemporary Business Practices:

An Introduction

Beyond the Façade: Sustainability in Contemporary Business Practices: An Introduction

The purpose and mission of corporations have been the subject of considerable debate over the past decades. Early scholars, such as Berle and Means (1932) and Friedman (1970), argued that a company's primary responsibility is to maximize shareholders wealth and safeguard their interests, often at the expense of other stakeholder groups. However, this paradigm has shifted significantly. Contemporary corporate mechanisms increasingly emphasize serving a broader group of stakeholders such as employees, customers, communities, and the environment, as a means of ensuring long-term survival and competitiveness within the market (Eccles et al., 2014). According to stakeholder theory (Freeman, 1984), the notion that a corporation's purpose should extend beyond maximizing shareholder value and encompass the interests of a wider array of stakeholders has gained considerable attention. Hence, this global increasing awareness of sustainability issues has led companies to disclose more about their sustainability related activities.

In response, companies have gradually sought to align their strategies with both national and international sustainability initiatives and policy frameworks that demonstrate a commitment to social and environmental responsibility (Kolk & Pinkse, 2005; Morrison et al. 2024). Notably, the Kyoto Protocol (1997)[1] represented a milestone in global environmental governance by establishing legally binding emission reduction targets for developed countries

[1] https://unfccc.int/process-and-meetings/the-kyoto-protocol

and introducing market-based mechanisms such as carbon trading and the Clean Development Mechanism (CDM). Subsequently, the United Nations Global Compact (UNGC)[2], launched in 2000, encouraged companies to adopt socially responsible policies grounded in ten core principles spanning the areas of human rights, labor standards, environmental protection, and anti-corruption. More recently, the Paris Agreement (2015)[3] reinforced global climate action by calling on signatory nations to limit global temperature rise to well below 2°C, with efforts to constrain it to 1.5°C above pre-industrial levels. In the same year, the United Nations 2030 Agenda[4] for Sustainable Development was adopted, introducing the 17 Sustainable Development Goals (SDGs) as a comprehensive framework for achieving economic, social, and environmental sustainability worldwide.

To signal their commitment to corporate social responsibility, companies have been adopting a diverse and expanding range of practices encompassing environmental, social, and governance dimensions. This spectrum of practices includes for example reduction in CO2 emissions (Deutsche Telekom remuneration report, 2023), health and safety measures (Michelin, document d´enregistrement universel, 2023), and promoting diversity and inclusion within the workforce (Pirelli & Co, remuneration report, 2023). One notable practice that companies use to signal their environmental commitment and gain legitimacy is joining international environmental initiatives. A recent and increasingly prevalent example is the Science Based Targets initiative (SBTi), through which companies worldwide publicly commit to setting scientifically grounded emission reduction targets. In October 2025, more than 11000

[2] https://unglobalcompact.org/take-action/20th-anniversary-campaign
[3] https://unfccc.int/process-and-meetings/the-paris-agreement
[4] https://sdgs.un.org/2030agenda

companies worldwide participated in the SBTi signaling to their stakeholders their willingness to be more environmentally responsible[5]. Hence, responding to the recent call for further research on corporate sustainability commitment by Dechow (2023), this form of commitment will be examined in detail in the second chapter of this dissertation. Another common approach to addressing corporate social responsibility (hereafter CSR) is the integration of sustainability criteria into executive compensation schemes. Incentivizing executives through sustainability-linked compensation was found to serve as a strategic signal to stakeholders of a company's dedication to sustainability issues (Ritz, 2022). Given the significant societal attention devoted to executive remuneration (e.g., Bebchuk and Fried, 2006; Melis, Gaia, & Carta, 2015; Edmans and Gabaix, 2016), the third chapter will provide an in-depth analysis of this corporate governance practice.

As sustainability practices become increasingly prevalent among corporations (Eccles, Ioannou et al., 2014; Flammer, 2018), there is a growing imperative for companies to adopt such practices to maintain competitiveness and satisfy stakeholder expectations. Although many companies have taken steps to demonstrate their commitment to sustainability, they remain significant contributors to environmental and societal challenges (De Bakker et al., 2020). To critically assess the effectiveness of these efforts, scholars are encouraged to move beyond merely examining corporate commitments to CSR activities and instead focus on evaluating the actual impact and material outcomes of such initiatives (e.g., Barnett et al., 2020; Wickert & Risi, 2019). This growing emphasis on sustainability has also intensified external scrutiny, particularly from investors and industry peers, prompting companies to not

[5] https://sciencebasedtargets.org/

only act but also appear committed to sustainability (Zhao et al.,2025). However, the growing pressure to appear socially and environmentally responsible has, in some cases, led companies to strategically manage their corporate social responsibility disclosures (Kaspereit and Lopatta, 2018). This can result in decoupling practices, whereby reported sustainability actions do not fully reflect actual performance. In fact, recently companies have increasingly made ambitious sustainability commitments such as adopting Science Based Targets initiative (SBTi) goals or integrating sustainability metrics into executive compensation schemes. Yet, emerging research suggests that such commitments can sometimes be more symbolic than substantive. Specifically, these practices may be adopted primarily for external reporting and impression-management purposes, without being accompanied by corresponding internal actions that materially affect sustainability performance, hence aiming at enhancing legitimacy rather than generating meaningful environmental or social impact (see for a review, Velte, 2023).

The motivation behind this study stems from the widespread existence of deceptive practices employed by corporations in their sustainability reporting. Volkswagen, British Petroleum (BP), Shell, Nestle, and Apple as examples, have been involved in CSR misreporting scandals (Talpur et al., 2024). These practices can lead to financial and reputational loss at the company level and failure to bring real impact to society and the environment at the national and international level (Talpur et al., 2024). These practices are referred to as CSR decoupling, in the literature synonymous with CSR washing (Pope & Wæraas, 2016), CSR hypocrisy (Jauernig & Valentinov, 2019), and CSR talk (Velte, 2023). Basically, it denotes the gap between corporate performance and disclosure (Shahab, 2022), CSR policy and CSR practice (Talpur et al., 2024), or symbolic communication and substantive changes (Bothello et al., 2023).

Under the umbrella of CSR decoupling there exists greenwashing which is covering poor environmental performance with positive communication about it (Bernini et al., 2023; Bernini & La Rosa, 2024; de Freitas et al., 2020). Brownwashing that entails "downplaying the disclosure of environmental achievements, as well as for social and governance-related outcome" (Kim and Lyon, 2015). In addition, woke washing that is characterized by companies attempting to market themselves as concerned with sensitive social issues when it is not the case (Sobande, 2020). The list also encompasses window dressing, governance façade (Cho et al., 2015), CSR disclosure management, etc. Each of these practices contributes to the broader understanding of CSR decoupling practices and their potential impact on organizational behavior and stakeholder perceptions. They raise concerns about the credibility of corporate sustainability efforts and underscore the need for more rigorous scrutiny of both disclosure quality and actual impact. In this regard, this dissertation tries to answer the following questions proposed by Dechow (2023): "Are these metrics useful for predicting future environmental actions? How does including various ESG metrics as factors in management compensation impact the actions taken by the firm, its disclosures, and its impact on the planet or society?"

This dissertation seeks to investigate contemporary business practices that fall under the veil of CSR. It aims to detect potential CSR misleading practices by shedding light on the determinants of such behavior, considering factors like governance, industry, and country levels. The contextual framework of these sustainability practices will be examined employing theoretical perspective derived from agency theory (Ghitti et al., 2023; Gull et al.,2023).

In his review, Velte (2023) claims that CSR decoupling, as an example of misleading practice, has emerged as a prominent subject of interest among both researchers and practitioners. He illustrates that quantitative CSR decoupling research is a relatively novel discipline, presently experiencing its peak. Existing literature reveals a growing trend of companies engaging in CSR activities presenting a façade of compliance with societal norms while making minimal internal changes (Marquis et al., 2016). However, the present literature has paid relatively little attention to how these practices vary across countries and what are determinants of such phenomena. Talpur et al. (2024) suggest examining country-level policymaking and implications of corporate social responsibility variance. Also, Velte (2023) states as limitation for his literature review on CSR decoupling; firm- and country-related determinants. Consequently, this dissertation employs a multi-country study including quantitative analysis of CSR-related disclosure and content analysis of remuneration reports.

Specifically, this thesis explores the phenomenon of symbolic sustainability commitments by examining it in two distinct contexts. In Chapter two, the focus will be on companies that publicly commit to set net zero targets but subsequently fail to implement meaningful actions, thus treating their engagement with the Science Based Targets initiative (SBTi) as a form of ESG window dressing aimed primarily at enhancing legitimacy rather than driving real environmental change. Edmans (2024) discusses the concept of rational sustainability, emphasizing that herd mentality can drive executives to adopt sustainability practices without sufficient understanding or justification, simply because such actions have become widespread in the corporate world. He illustrates this phenomenon through the example of net-zero commitments, noting that “many companies have signed up for net zero

without even understanding what 'net' or 'zero' is." (Edmans, 2024, p. 14). Further he questions the conceptual soundness of these commitments, observing that "it is not obvious whether it is appropriate to net off negative emissions, thus treating them as equivalent to emission reductions." (Edmans, 2024, p. 14). In Chapter three, the study will investigate whether sustainability-linked executive compensation, particularly sustainability targets embedded in CEO annual bonus schemes, serves as a governance façade. Specifically, the empirical analysis aims to assess whether sustainability targets are systematically easier to achieve than financial targets, thereby creating the illusion of sustainability accountability without generating substantial outcomes. Taken together, these chapters aim to understand how corporate governance mechanisms such as sustainability linked executive compensation may be strategically used to signal alignment with sustainability norms, while lacking genuine intent to enact transformative or impactful changes.

The second chapter will take into account the unique setting of the Science Based Targets initiative (SBTi). In recent years, companies have come under increasing pressure from stakeholders to demonstrate credible commitments to net-zero climate targets. In response, many companies have issued ambitious public pledges (SBTi, 2024; Edmans, 2024; Kolk, Levy, & Pinkse, 2008). However, the gap between stated intentions and actual implementation has raised concerns about climate decommitment; that is the withdrawal or inaction regarding previously announced environmental goals (NewClimate Institute & Carbon Market Watch, 2023). This thesis examines this phenomenon in the context of the SBTi. The SBTi is a prominent global environmental framework designed to support companies in aligning their climate actions with the objectives of the 2015 Paris Agreement (Carrión et al., 2025; Freiberg

et al., 2021). It provides guidance for setting emissions reduction targets aimed at limiting global warming to 1.5°C by the year 2030. Under this initiative, companies are expected to make measurable progress toward achieving their near-term emission reduction targets (typically within 5–10 years) or long-term net-zero targets (to be achieved by 2050). The status of these commitments is publicly displayed on the SBTi dashboard. When a company initially commits to setting a target, it is labeled as "committed." A pivotal policy change occurred on 31 January 2023, when the SBTi implemented a new compliance mechanism requiring companies to submit their targets within 24 months of making a commitment. Failure to do so results in the status being changed to "commitment removed" on the public dashboard (SBTi, 2024). The first group of net-zero commitments was publicly marked as "commitment removed" in March 2024. This shift represents a significant departure from past practice, where companies could quietly withdraw without scrutiny. The newly adopted "name-and-shame" policy is aimed to increase transparency and accountability, effectively deterring silent disengagement. Drawing on data from companies that joined the SBTi Business Ambition for 1.5°C Campaign between June 2019 and October 2021, the empirical analysis will investigate which corporate governance mechanisms lead to decommitment. Such findings can contribute to the broader understanding of how sustainability-related governance structures can reinforce organizational accountability and support the realization of science-based net-zero commitments.

The third chapter will examine the same issue of CSR decoupling but from a different angle. Companies have faced growing pressure from a wide range of stakeholders, including civil society, investors, and international organizations, to disclose their social and environmental impacts (e.g., Bebchuk & Tallarita, 2022; Dechow, 2023). In response to this

demand, many companies have begun linking executive compensation to sustainability performance metrics as a means of incentivizing managerial commitment to environmental, social, and governance objectives (e.g., Flammer et al., 2019; Aresu et al., 2023). Although the adoption of sustainability-linked compensation has become increasingly common, particularly among large corporations, academic research continues to question whether such mechanisms effectively align executive behavior with substantive sustainability outcomes (e.g., Bebchuk & Tallarita, 2022; Cohen et al., 2023). In parallel with academic concerns, investors have shown increasing skepticism about the integration of sustainability metrics into executive pay packages (Dell'Erba & Gomtsyan , 2024). Specifically, questions have emerged as to whether these incentives genuinely reward meaningful sustainability performance or simply function as tools for rent extraction by executives (e.g., Bebchuk & Tallarita, 2022; Keddie & Magnan, 2023). These critical perspectives highlight ongoing debates around the credibility, rigor, and effectiveness of sustainability-linked executive compensation and underscore the need for more empirical investigation. This study will critically examine whether such practices genuinely reflect a shift toward sustainability performance or whether they serve primarily as symbolic mechanisms aimed at maintaining legitimacy and satisfying stakeholders' expectations. Focusing on the largest publicly listed companies in France, Germany, and Italy during the 2023 financial year. I will investigate whether sustainability-linked targets embedded in CEO annual incentive plans are structurally easier to achieve than traditional financial targets. Using hand-collected data, I will analyze the characteristics of both financial and sustainability performance criteria. Specifically, I will assess whether CEOs miss, meet, or exceed these targets and will

investigate whether sustainability targets are easier to achieve than financial ones and, if so, what are the determinants of this performance.

Overall, this thesis aims to bridge existing gaps in literature by offering a novel perspective on potentially misleading CSR practices, particularly by examining the discrepancy between external CSR communication and internal CSR implementation. It contributes to the scholarly discourse on symbolic CSR, sustainability-linked executive compensation, and corporate governance, by analyzing the increasing use of sustainability-related practices as symbolic mechanisms designed to preserve legitimacy rather than as substantive performance-enhancing tools.

The implications of this study extend beyond academia and can inform policymaking. Policymakers may, for instance, interpret CSR decoupling as a form of information misreporting comparable to accounting fraud, especially in light of the growing number of CSR-related scandals (Talpur et al., 2024). Edmans (2024) further highlights the precarious state of CSR, noting that while some stakeholders seek to preserve existing practices, others argue that environmental, social, and governance initiatives have lost their instrumental value in attracting investors or customers. He proposes an alternative approach “Rational Sustainability “which emphasizes the creation of long-term value rather than the superficial pursuit of ESG compliance. This thesis seeks to advance understanding of CSR by investigating its symbolic and substantive dimensions across different countries, thereby contributing to both theoretical development and practical application of sustainability and corporate governance studies.

The remainder of this thesis is structured as follows: Chapter two investigates the phenomenon of climate decommitment by analyzing companies that have withdrawn from

their SBTi commitments. Chapter three explores sustainability-linked executive compensation and evaluates whether sustainability targets are systematically easier to achieve than financial ones.

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Chapter 2
Climate Decommitment:
Evidence from the Science Based Targets Initiative

Climate Decommitment:
Evidence from the Science Based Targets Initiative

ABSTRACT:

Companies face increasing pressure from stakeholders to signal their commitment to net-zero targets. This pressure may drive companies to make public pledges that are difficult to fulfill, potentially leading to climate decommitment—the inaction that results in the removal of previously made environmental pledges. This study examines the Science Based Targets initiative (SBTi) and examines the role of financial and reputational incentives at the board-level in preventing climate decommitment within this initiative. Using data from companies participating in SBTi's Business Ambition for 1.5°C Campaign that was conducted between June 2019 and October 2021, I find that companies are less likely to experience climate decommitment—which became prominent in March 2024 following a policy change by SBTi—when they integrate sustainability criteria into their executive remuneration and/or when board independence is greater. These insights contribute to understanding the role of ESG-related factors in ensuring adherence to net-zero science-based targets.

KEYWORDS: Science Based Targets initiative (SBTi); Net Zero Target; Removal; Climate Decommitment; Sustainability; Corporate Governance.

INTRODUCTION

The Science-Based Targets initiative (hereafter SBTi) is an important international environmental initiative that helps companies contribute to combating climate change and achieving the goals of the 2015 Paris Agreement (Carrión et al., 2025; Freiberg et al., 2021). It guides companies in setting targets to limit global temperature rise to 1.5°C by 2030. Currently, over 8,000 companies have joined the SBTi, pledging to reduce their corporate greenhouse gas emissions. In this context, Bolton (2024) draws an analogy between corporate climate pledges and New Year's resolutions: both begin with optimism and good intentions, yet as time passes, commitment fades, and by the end of the year, the gym is once again empty. However, in the business world, the consequences of inaction are far more severe. In fact, the planet—the primary and most fundamental stakeholder of any company (Driscoll and Starik, 2004; Jones, 2014)—is at stake (Romito et al., 2024).

Given the global relevance of climate change and the role of companies in reducing emissions and safeguarding the planet, an emerging stream of literature has focused on corporate climate commitments. Prior studies investigated the underlying motivations behind corporate climate pledges (Boiral et al., 2012), their determinants (Giannarakis et al., 2018), and their consequences. However, studies examining the progress of corporate environmental commitments remain scarce. Notably, it remains unclear which organizational contexts are more conducive to a company's withdrawal from its public pledges to protect the natural environment. Do financial and reputational incentives at the board-level influence a company's withdrawal from its public pledges to protect the natural environment?

To address this research question, this paper examines companies that have experienced climate decommitments, using a novel dataset of 321 listed companies headquartered in 33 countries. This choice leverages the unique setting created by the enforcement of the new SBTi compliance policy, which, starting in March 2024, mandates publicly naming and shaming ("commitment removed") companies that failed to set their net-zero targets in due time. Empirically, I focus on the companies participating in the Business Ambition for 1.5°C campaign because these are pioneer companies in terms of committing to setting net-zero, science-based targets and were also immediately added to the official United Nations High-Level Champions Race to Zero campaign (SBTi, 2024a).

The remainder of the paper is organized as follows. Section II presents the characteristics of the study's context. Section III reviews the existing literature. Section IV develops the theoretical framework and formulates the hypotheses. Section V outlines the research design. Section VI presents the findings, followed by additional tests in Section VII. Finally, Section VIII concludes the paper with a discussion of the implications and an outlook on future research.

TARGET SETTING AND REMOVAL

The SBTi is a global organization based in the United Kingdom that helps companies set science-based targets for reducing their greenhouse gas emissions. These targets are considered science-based because they align with the Paris Agreement's goal of limiting global temperature increases to 1.5°C above pre-industrial levels. The SBTi works in partnership with the Carbon Disclosure Project (CDP), the World Wide Fund for Nature (WWF), the World

Resources Institute (WRI), and the UN Global Compact.[6] Li et al. (2025) suggest that SBTs are long-term climate investments that do not result in instant but long-term and more sustainable results. The SBTi commitment process begins with a company's public pledge to set a target for reducing emissions within a 24-month period. The target-setting process consists of five key phases: commit, develop, submit, communicate, and disclose. Companies must actively work toward achieving their near-term emissions reduction targets (5–10 years) or net-zero reduction targets (to be reached by 2050). The target status is publicly available on the SBTi dashboard. When a company commits to setting any of these targets, it is displayed as "committed" to the respective target. Stakeholders can also view the final stage, either confirming target approval or indicating removal if no targets are set. However, the SBTi dashboard does not provide interim updates, i.e., whether a company ultimately submits its targets or if the submitted targets are in the approval process (SBTi, 2022, 2024a).

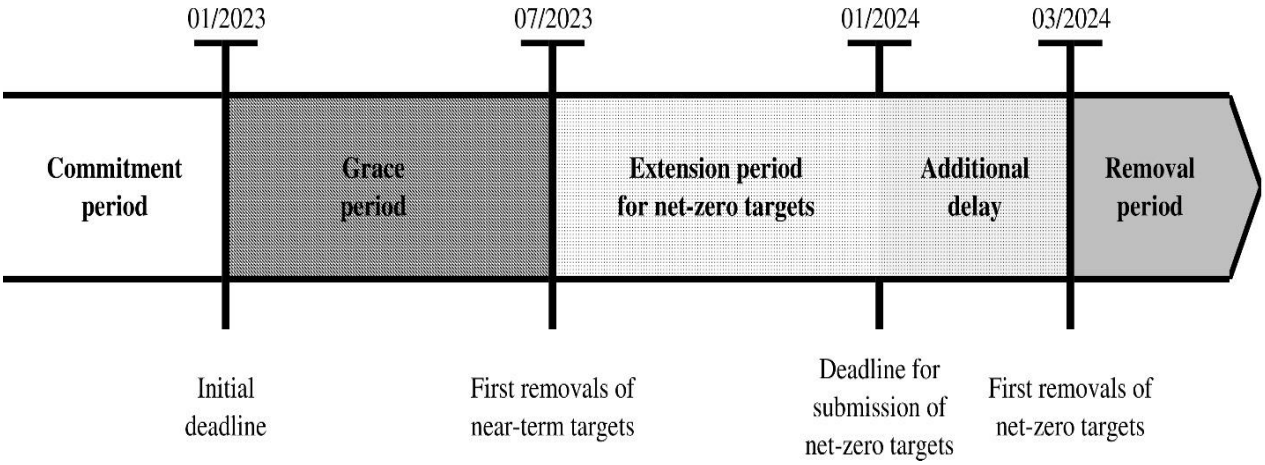
Notably for this study, on 31 January 2023, the SBTi introduced a new commitment compliance policy, under which companies that fail to submit their targets within 24 months are labeled as "commitment removed" on the dashboard (SBTi, 2022). Companies were granted a six-month grace period until July 2023, followed by an additional extension until January 2024, to meet the submission deadlines.[7] The first wave of net-zero targets was flagged as "commitment removed" two months later, in March 2024. This marked a significant change, as companies could previously withdraw from the SBTi unnoticed. However, the new "name-and-shame" policy now prevents silent exits.

[6] https://www.wri.org/initiatives/science-based-target

[7] https://sciencebasedtargets.org/news/statement-on-the-end-of-the-commitment-compliance-policy-grace-period.

This study focuses on the events of March 2024, when companies were first flagged as having their "commitment removed" on the SBTi dashboard due to non-submission of a net-zero target (hereafter 'company removed'). These companies participated in the Business Ambition for 1.5°C campaign, conducted between June 2019 and October 2021, which introduced the option to commit to a net-zero target in addition to a near-term target. See Figure 1.

Figure 1 Timetable



LITERATURE REVIEW

The literature on corporate climate pledges, such as those under the SBTi, is still in its early stages. Most existing research on science-based targets adopts an engineering perspective, primarily focusing on energy production (e.g., Kuo and Chang, 2021; Moshrefi et al., 2022). These studies typically employ a technical approach, emphasizing the nature, feasibility, and impact of the targets on corporate emissions. In contrast, business and management literature is only beginning to examine why companies participate in climate

change initiatives like the SBTi and how such participation impacts their emissions performance.

Specifically, an emerging stream of literature has begun to explore the relationship between corporate climate commitments and actual emissions performance. Bolton and Kacperczyk (2024) examined the consequences of participating in the SBTi, documenting that companies making commitments ultimately reduce their emissions. Additionally, companies that commit to setting SBTi targets tend to have lower initial emissions. By analyzing the context of international companies participating in the CDP (formerly Carbon Disclosure Project), Ioannou et al. (2016) highlighted the importance of target difficulty and the use of incentives, finding that companies that set more ambitious targets or offer monetary rewards achieve a higher completion rate of their targets. This suggests that the design of internal targets can significantly influence a company's ability to meet its climate goals. Similarly, Dahlmann et al. (2019) argued that companies that set particularly ambitious emission reduction targets are more likely to achieve future reductions in emissions intensity. These findings underscore the importance for companies to adopt stringent targets through initiatives like the CDP or SBTi to achieve measurable changes in their environmental impact. Freiberg et al. (2021) extended this argument by suggesting that companies with stringent internal targets are more likely to commit to external science-based targets. This relationship between internal climate strategy and public commitments highlights the importance of aligning corporate ambition with external validation frameworks, such as the SBTi. On the other hand, Berg et al. (2024) found that after controlling for external assurance of corporate emissions, there is no longer evidence that companies with approved science-based targets effectively reduce their

future emissions. Furthermore, Ramadorai and Zeni (2024) developed a structural model linking companies' carbon reduction decisions to their expectations about future emission regulations and competitive pressures. Their work suggests that regulatory foresight affects companies' climate commitments. Comello et al. (2021) pointed out that emission reduction strategies (including net-zero pledges) among large corporations are influenced by the company's carbon footprint and its ability to offset emissions. In a similar vein, Potoski and Prakash (2013) examine the impact of ISO 14001 certification on corporate environmental compliance, finding that company commitments can strengthen environmental performance. In addition, Privato et al. (2024) explore the factors that affect the climate target ambition levels based on companies participating in the SBTi, noting that leadership engagement leads to more ambitious target setting.

Making a public climate-related commitment may provide benefits to companies and positively influence their valuation, access to capital, and market performance. Kacperczyk and Peydró (2024) documented that banks that commit to science-based targets tend to reduce credit to companies with high levels of Scope 1 emissions, while Krueger et al. (2020) found that institutional investors view carbon emissions as a material risk. In this context, Guerrero Escobar et al. (2023) revealed that companies that set science-based targets often experience positive stock market reactions, reflecting the perceived value of strong climate action in the marketplace. Bendig et al. (2023) documented a positive correlation between companies engaging in the SBTi and their corporate financial performance. Lemma et al. (2021) found that S&P 500 companies with stronger climate commitments tend to take on more long-term debt, suggesting that companies view climate commitments as long-term strategic decisions that may

require significant financial investment. In Ko and Prakash (2024)'s empirical analyses, none of the results indicate that any type of SBTi membership leads to significantly higher abnormal stock returns of S&P 500 companies. Importantly, the literature highlights the need for further research into the accountability dimension of science-based targets (Bolton and Kacperczyk, 2024). Despite this increasing attention to SBTi targets and their impact in the management field, the understanding of the role of SBTi in carbon accounting and corporate decarbonization remains limited (Carrión et al., 2025; Li et al., 2025). This study aims to address this gap focusing on a largely unexplored area of research, which concerns why companies fail to follow through on their public pledges to protect the natural environment.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The withdrawal from a public pledge on the adoption of science-based targets to reduce emissions, as any organizational practices, does not develop in vacuum; as companies are embedded within a network of formal and informal rules and relationships as shaped by the prevailing institutions (e.g., DiMaggio and Powell, 1983, 1991, 2012). Institutions, as defined by North (1990: 3–4), are 'the rules of the game in a society' that define 'the set of choices of individuals' and 'structure incentives'. A company's ability to operate often depends on maintaining an implicit contract with society, and these 'rules of the game' - which include formal constraints such as rules and regulations (North, 1990) - create significant pressure on corporate behavior (e.g., DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Oliver, 1991). Nevertheless, complete institutionalization is unlikely to occur. Institutional pressures that companies face do not necessarily lead to uniformity in practices. The degree to which

companies comply with societal expectations also involves considerations that concern internal interests, which play a crucial role in shaping how companies adapt to their institutional environments. (e.g., Aguilera and Jackson, 2010; Chizema, 2008; Desai, 2016; Aresu et al., 2023).

Recent developments of agency theory recognize the importance of the institutional environment where the company (and the agency relationship) is embedded in (e.g., Wiseman et al., 2012); Melis and Rombi, 2021). Accordingly, agency theory offers a useful conceptual lens to examine why companies might decommit from the SBTi.

CEOs, as agents, may realize that achieving their climate change targets is challenging, especially if pursuing these targets, like other environmental initiatives, come at the expense of a company's short-term financial performance metrics, which drive shareholder value (e.g, Cox et al., 2004; Faller and Knyphausen-Aufseß, 2018). In such situations, CEOs may choose to withdraw from the target-setting process, even though these targets might align with long-term shareholder interests. Information asymmetry may also play a role as CEOs might exaggerate their ability to meet sustainability goals to gain legitimacy, as making public climate-related commitments can positively influence a company's access to capital and market performance (Li et al., 2025; Bolton and Kacperczyk, 2024; Bendig et al., 2023; Guerrero Escobar et al., 2023), despite knowing that they lack the internal resources or competencies to achieve them. This information asymmetry can lead companies to initially commit to the SBTi as a signal of environmental responsibility, only to later withdraw.

Agency theory predicts principals can use a mix of monitoring and incentives mechanisms to ensure that agents act in their interest (e.g., Jensen and Meckling, 1976). In this study I focus

on an internal monitoring mechanism, i.e., independent directors (e.g., Fama and Jensen, 1983), and an incentive mechanism, i.e., executive remuneration (e.g.,Jensen and Meckling, 1976). Both are widely recognized as key components of corporate governance best practices, which are grounded in agency theory (e.g., Cuomo et al., 2016).

According to agency theory, executives are assumed to be opportunistic and prioritize their interests over those of the shareholders (Jensen and Meckling, 1976). Ott and Endrikat (2023) documented that the agency theory-based premise of the effectiveness of incentives may be transferred to the organizational context of a company's carbon-related performance. I, therefore, argue that in cases where boards of directors decide to incorporate sustainability-related targets into executive remuneration contracts, thereby rewarding CEOs for achieving predetermined non-financial targets (e.g., carbon emissions reduction), CEOs are likely to be more committed to pursuing climate change goals, despite the potential crowding-out effect that monetary incentives may induce (Ioannou et al., 2016). This incentive mechanism is aimed at serving as an effective tool to take environmental commitment more seriously (Aresu et al., 2023; Derchi et al., 2021; Flammer et al., 2019; Ott and Endrikat, 2023). Hence, incorporating sustainability-related targets into executive remuneration could help prevent a company's withdrawal from prior environmental pledges. As corporate executives oversee capital allocation and define business strategy, they have a direct influence on the environmental initiatives the company pursues and on monitoring the progress of corporate environmental commitments, including efforts to reduce the corporate carbon emissions. Following this reasoning, I develop the first hypothesis:

H1: Companies that integrate sustainability criteria into their executive remuneration are less likely to have their net-zero targets to be marked as 'commitment removed.'

Agency theory has also recognized the importance of reputation in discipling independent directors (Fama, 1980; Fama and Jensen, 1983; Jiang et al., 2015; Masulis and Mobbs, 2014; Melis and Rombi, 2021). Independent directors are expected to offer a more neutral perspective compared to executives. Their expected role is to critically assess, monitor, and, when necessary, challenge executives (Fama and Jensen, 1983). This may include holding CEOs accountable for their public pledges.

Specifically, if a company fails to uphold its public pledges, independent directors may face external criticism from the media and other stakeholder groups. For instance, in the aftermath of the 2010 BP oil spill scandal in the Gulf of Mexico, major financial media outlets (e.g., Colvin, 2010) explicitly attributed responsibility for the incident to BP's board of directors, despite the absence of evidence demonstrating the board's direct involvement. Beyond anecdotal evidence, prior literature has documented that reputational incentives of independent directors have a positive influence on CSR performance (Khoo et al., 2022) and, importantly, that a company's ESG-related reputational risk represents a potential threat to the independent director's personal reputation (e.g., Dowling, 2006; Melis and Rombi, 2021). This may provide a reputational incentive for independent directors to hold executives accountable to the climate-related public pledge.

At the same time, CSR initiatives, such as the commitment to science-based emission targets, typically entail short-term costs with outcomes that are uncertain (Cox et al., 2004;

Faller and Knyphausen-Aufseß, 2018). These costs can reduce short-term financial performance, a reduction that does not directly affect independent directors, who have no material financial relationship with the company they serve, and are, therefore, less likely to be driven by the primacy of shareholder value, compared to other directors (e.g., De Villiers et al., 2011; Aresu et al., 2023).

In addition, the need to safeguard their professional reputation incentivizes independent directors to cultivate relationships with a company's stakeholders. These relationships, in turn, encourage directors to consider the expectations and interests of a broader range of constituencies, thereby supporting the development and implementation of CSR strategies and policies. (De Villiers et al., 2011; Johnson and Greening, 1999; Soltani et al., 2015). Indeed, prior literature (e.g., De Villiers et al., 2011; Shaukat et al., 2016 ; Aresu et al., 2023) documented that boards with a greater degree of independence, i.e. those comprised of a higher proportion of independent directors, tend to have stronger stakeholder orientations and greater attention to pursuing financial performance in a socially and environmentally responsible way. Hence, I expect that:

H2: Companies with a board of directors composed of a larger proportion of independent directors are less likely to have their net zero targets to be marked as 'commitment removed.'

RESEARCH DESIGN

Sample

The initial sample consists of all companies that participated in the SBTi's Business Ambition for 1.5°C Campaign between June 2019 and October 2021. This campaign is designed

to encourage corporate commitments to climate action aligned with the 1.5°C target. i focus on these companies for two reasons. First, they experienced the most pronounced wave of net-zero target removals in March 2024. Second, for these companies, I know they reached the deadline to set their targets in January 2024, while for other companies the date of the commitment and, consequently, the deadline for target setting cannot be inferred.

Companies participating in the SBTi can commit to setting near-term targets, net-zero targets, or both. This study focuses on net-zero targets because, despite their long-term horizon, they represent the most ambitious commitments and are critical for effective climate change mitigation (Carrión et al., 2025; IPCC, 2023). Net-zero targets are intended to encourage companies to integrate climate considerations into their future strategies and long-term emission reduction plans. Unlike other climate or emissions targets that focus solely on reducing carbon footprints, net-zero targets require companies to account for their entire carbon impact across all scopes. (SBTi, 2024b)

Table 1 illustrates the sample selection steps from the initial sample to the 321 companies that comprise the final sample.

Table 1 Sample reduction

Initial sample: All companies participating in the BA compaign within deadline	1,045
Companies withdrawing before the new compliance policy	66
Private companies	514
Companies that did not commit to set Net zero targets	130
Companies missing ESG data from Refinitiv	12
Companies with missing Analyst coverage	1
Duplicates	1
Final sample	321

Table 2 Panel A illustrates that most of the companies are headquartered in Europe, followed by North America. Countries with most companies committing to set net-zero targets are United Kingdom, United States, Japan, Germany, and France. On the other hand, countries with less companies are Philippines, Portugal, and Saudi Arabia.

Table 2 Panel B shows the distribution of the sample based on industry. Companies operating in industrials sectors, consumer discretionary, followed by consumer staples, are the most represented.

Table 2 Country and industry composition

Panel A: Country composition			
Country of domicile		Country of domicile	
Australia	4	Mexico	3
Belgium	3	Netherlands	6
Brazil	8	Norway	3
Canada	7	Philippines	1
China	2	Portugal	1
Czech Republic	1	Saudi Arabia	1
Denmark	7	Singapore	1
Finland	4	South Africa	1
France	21	South Korea	2
Germany	22	Spain	7
Hong Kong	2	Sweden	18
India	9	Switzerland	12
Ireland	3	Taiwan	6
Italy	4	Turkey	2
Japan	26	United Kingdom	66
Luxembourg	1	United States	65
Total number			321
Panel B: Industry composition			
ICB industry name			
Basic Materials			18
Consumer Discretionary			73
Consumer Staples			41
Financials			14
Health Care			22
Industrials			71

Real Estate	17
Technology	33
Telecommunications	19
Utilities	13
Total number	321

Data Collection and variable definitions

To construct our database, I gathered data from several sources. First, I gather data about companies' climate commitments from the SBTi dashboard [8]. The SBTi website provides data in two formats: a dynamic online dashboard and a downloadable Excel file. The dashboard includes structured data such as company name, organization type, country, region, and target status, while the Excel file provides additional information like ISIN, sector, and participation in the Business Ambition campaign. To ensure data comprehensiveness, both sources were merged.

In addition, data on company's characteristics and financials (property, plant & equipment, industry, return on assets, leverage, and free float), corporate governance data (board size, board gender diversity, CEO duality, independent board members, sustainability-related remuneration policy, ESG score), and environmental related information (carbon intensity), are sourced from Refinitiv Eikon/Datastream. Analyst Coverage is gathered from FactSet. Industry is sourced from Refinitiv Eikon/Datastream and then classified based on its sensitivity according to Brammer and Millington (2005). I also collect country-level data from the Environmental Performance Index (EPI). In addition, I classified the countries in our sample

[8] https://sciencebasedtargets.org/

based on their legal origin into common law, German law, Latin law, and Scandinavian law, according to La Porta et al. (2008).

Model and definition of variables

I used the following logistic regression model to estimate the relationship between our dependent variable, *REMOVED*, and the independent variables:

$$\begin{aligned}\text{Logit}(REMOVED_{i,t}) = \; & \beta_0 + \beta_1 CSR\_CONTRACT_{i,t-1} + \beta_2 BD\_IND_{i,t-1} \\ & + \sum_{m=3}^{13} (\beta_m \text{ Company level variables}_{i,t-1}) + SENS\_INDUS_i \\ & + \sum_{c=15}^{18} (\beta_c \text{ Country level variables}_i) + \varepsilon_{i,t} \end{aligned} \quad (1)$$

Dependent variable

The dependent variable, *REMOVED*, is a dichotomous, which equals 1 if the net zero target has been publicly marked as "commitment removed" by the SBTi, and zero otherwise.

Independent variables of interest

CSR_CONTRACT is a dichotomous variable, which takes the value 1 if the company has a remuneration policy that integrates sustainability criteria into executive remuneration design, at the end of the previous financial year, and 0 otherwise (e.g., Aresu et al., 2023). *BD_IND* is the proportion of independent directors in the board as reported by the company, at the end of the previous financial year (e.g., Villalba-Ríos et al., 2023).

Control variables

I include a set of control variables, commonly used in corporate sustainability literature (Adu et al., 2022; Al-Shaer, 2020; Eliwa et al., 2023). I control for a company's characteristics that may affect the likelihood of a company having their commitment removed. I consider corporate governance and ESG related characteristics by controlling board gender diversity (*BD_GEND_DIV)*, board size (*BD_SIZE)*, carbon intensity (*CRBN_INT)*, CEO duality (*CEO_DUAL)*, ownership *FREE_FLOAT*, ESG performance (*ESG_SCORE)* and the near-term target being removed *(NEAR_REMOVED)*. I also control for analyst coverage (*ANLYST_COV)*, leverage (*LEV*), financial performance (*ROA*), company size (*SIZE)* and sensitive industries dummy, *SEN_INDUS*. I also control for the country legal system (*CMN_LAW, FR_LAW, GR_LAW, and SC_LAW*). Finally, I add *EPI_CHANGE*, which is the change in EPI score over the last ten years. The EPI combines 58 indicators across 11 issue categories, ranging from climate change mitigation and air pollution to waste management, sustainability of fisheries and agriculture, deforestation, and biodiversity protection[9]. The list of variables, their description, time period, and source are provided in Table 3.

Table 3 Variables Definition

Variable	Variable Description	Time period	Source
Dependent variable:			
REMOVED	It is a dichotomous, which equals 1 if the net zero target has been publicly marked as "commitment removed" by the SBTi, and zero otherwise.	20-Mar-24	SBTi Dashboard
Independent variables of interest:			
CSR_CONTRACT	Dummy variable that equals 1 if the	End of the	DataStream

[9] https://epi.yale.edu/

	company adopts CSR contracting (Aresu et al., 2023).	previous financial year	Refinitiv
BD_IND	Proportion of independent board members as reported by the company.	End of the previous financial year	DataStream Refinitiv
ESG company level variables:			
BD_GEND_DIV	Percentage of women directors on the board.	End of the previous financial year	DataStream Refinitiv
BD_SIZE	Total number of board members at the end of the fiscal year.	End of the previous financial year	DataStream Refinitiv
CEO_DUAL	It is dichotomous, which equals 1 if the CEO of the company is also the chairperson, and zero otherwise.	End of the previous financial year	DataStream Refinitiv
CRBN_INTS	It is the ratio of the total carbon dioxide (CO2) and CO2 equivalents emission over total revenues.	End of the previous financial year	DataStream Refinitiv
ESG_SCORE	Refinitiv's ESG Score is an overall company score based on the self-reported information in the environmental, social and corporate governance pillars	End of the previous financial year	DataStream Refinitiv
FREE_FLOAT	The total amount of share capital freely available to ordinary investors, expressed as a percentage of total number of shares.	End of the previous financial year	DataStream Refinitiv
NEAR_REMOVED	It is a dichotomous, which equals 1 if the company has its near-term target removed, and zero otherwise.	20-Mar-24	SBTi Dashboard
Financial company level variables:			
ANLYST_COV	The number of financial analysts following the company measured at the end of the financial year.	31/01/2024	FactSet
LEV	Total liabilities/ Total assets	End of the previous financial year	DataStream Refinitiv
ROA	(Net Income – Bottom Line + ((Interest Expense on Debt-Interest Capitalized) * (1-Tax Rate))) / Average of Last Year's and Current Year's Total Assets * 100	End of the previous financial year	DataStream Refinitiv
SIZE	It is the Ln of Gross Property, Plant and Equipment less accumulated reserves for depreciation, depletion and amortization.	End of the previous financial year	DataStream Refinitiv
Industry level variable:			

SEN_INDUS	A dummy variable that equals one if the company belongs to a sensitive industry (e.g., alcoholic beverage, chemical, defense and pharmaceutical, resource extraction, tobacco, and utility sectors), and 0 otherwise (Brammer and Millington, 2005)	End of the previous financial year	DataStream Refinitiv
Country level variables:			
CMN_LAW	Following the classification of La Porta et al., (2008) Countries like the United States, Canada, and Australia	End of the previous financial year	La Porta et al., (2008)
FR_LAW	Following the classification of La Porta et al., (2008) countries like France, and Italy.	End of the previous financial year	La Porta et al., (2008)
GR_LAW	Following the classification of La Porta et al., (2008) countries like Germany, Austria, and Japan	End of the previous financial year	La Porta et al., (2008)
SC_LAW	Following the classification of La Porta et al., (2008) countries like Denmark, Norway, and Sweden.	End of the previous financial year	La Porta et al., (2008)
EPI_CHANGE	EPI change in score in the last ten years.	2022-2023	EPI 2024

FINDINGS

Descriptive Statistics and Correlations

Table 4 shows that approximately 24% of the companies in the sample had their net zero target removed by the SBTi. In other words, one quarter of the companies do not stand up to their promises to set net zero targets and are declared as 'commitment removed.' 78% of the sample disclose having a policy that links the executives' remuneration to the achievement of sustainability targets. The average proportion of independent directors on the board is 0.65.

Table 4 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
REMOVED	321	0.24	0.43	0.00	1.00
CSR_CONTRACT	321	0.79	0.41	0.00	1.00
BD_IND	321	0.66	0.21	0.00	1.00
BD_GEND DIV	321	33.97	12.53	0.00	72.73
BD_SIZE	321	11.09	3.01	5.00	22.00
CEO_DUAL	321	0.30	0.46	0.00	1.00
CRBN_INTS	321	0.03	0.04	0.00	0.14
ESG_SCORE	321	61.27	14.68	21.49	92.14
FREE_FLOAT	321	77.21	22.70	5.00	100.00
NEAR_REMOVED	321	0.04	0.21	0.00	1.00
ANLYST_COV	321	17.98	10.19	0.00	70.00
LEV	321	0.97	0.02	0.86	1.06
ROA	321	6.32	12.55	-35.92	196.57
SIZE	321	15.33	3.23	-4.61	23.12
SEN_INDUS	321	0.38	0.49	0.00	1.00
CMN_LAW	321	0.50	0.50	0.00	1.00
FR_LAW	321	0.18	0.38	0.00	1.00
GR_LAW	321	0.22	0.41	0.00	1.00
SC_LAW	321	0.10	0.30	0.00	1.00
EPI_CHANGE	321	2.53	1.97	-1.00	8.30

The correlation matrix for the variables used in our analysis is presented in Table 5. The variable *REMOVED* is negatively correlated with both the presence of a sustainability-linked remuneration policy *CSR_CONTRACT* and the proportion of independent board members *BD_IND*, providing some univariate support for Hypotheses 1 and 2.

Table 5 Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(1) *REMOVED*	1.00																			
(2) *CSR_CONTRACT*	-0.16	1.00																		
(3) *BD_IND*	-0.08	0.16	1.00																	
(4) *BD_GEND_DIV*	0.00	0.31	0.22	1.00																
(5) *BD_SIZE*	-0.10	0.15	-0.03	0.10	1.00															
(6) *CEO_DUAL*	-0.08	-0.07	0.11	0.03	0.11	1.00														
(7) *CRBN_INTS*	0.09	0.18	0.07	0.15	0.18	-0.06	1.00													
(8) *ESG_SCORE*	-0.18	0.13	-0.04	0.02	-0.05	-0.15	-0.09	1.00												
(9) *FREE_FLOAT*	0.01	0.15	0.43	0.11	-0.04	0.11	0.01	0.06	1.00											
(10) *NEAR_REMOVED*	0.31	-0.15	0.00	-0.14	-0.13	-0.04	0.04	-0.19	-0.12	1.00										
(11) *ANLYST_COV*	-0.09	0.03	0.33	0.08	0.27	0.25	-0.04	-0.21	0.18	-0.12	1.00									
(12) *LEV*	-0.07	0.10	0.12	0.04	0.17	0.08	0.01	-0.09	0.04	0.00	0.05	1.00								
(13) *ROA*	-0.05	0.07	0.08	0.09	-0.06	0.06	-0.04	-0.02	0.03	-0.05	0.14	-0.19	1.00							
(14) *SIZE*	-0.01	-0.11	-0.21	-0.31	0.18	0.02	0.07	0.03	-0.08	-0.01	0.21	0.09	-0.08	1.00						
(15) *SEN_INDUS*	-0.09	0.10	-0.10	0.00	0.08	-0.12	0.36	-0.02	-0.12	-0.01	-0.17	0.02	-0.05	0.03	1.00					
(16) *CMN_LAW*	0.16	0.02	0.43	0.17	-0.18	0.02	-0.02	-0.31	0.21	0.12	0.19	-0.09	0.12	-0.30	-0.13	1.00				
(17) *FR_LAW*	-0.03	0.10	-0.23	0.13	0.15	0.16	0.15	0.13	-0.20	-0.06	-0.08	0.13	-0.05	0.02	0.08	-0.47	1.00			
(18) *GR_LAW*	-0.15	-0.08	-0.26	-0.35	0.13	-0.05	-0.03	0.18	-0.03	-0.04	-0.12	-0.02	-0.06	0.28	-0.01	-0.53	-0.25	1.00		
(19) *SC_LAW*	-0.02	-0.05	-0.07	0.03	-0.07	-0.16	-0.10	0.10	-0.06	-0.07	-0.05	0.02	-0.05	0.10	0.12	-0.34	-0.16	-0.18	1.00	
(20) *EPI_CHANGE*	-0.10	-0.17	-0.26	-0.23	-0.07	-0.26	0.09	0.25	-0.25	0.03	-0.25	-0.14	-0.07	0.21	0.12	-0.39	0.13	0.31	0.05	1.00

Regression results

Table 6 presents the results of our multivariate analysis examining the determinants of a company having its net-zero target commitment removed by the SBTi. The coefficient for *CSR_CONTRACT* is negative and statistically significant, indicating that integrating sustainability criteria into executive remuneration is associated with a lower likelihood of removal. This finding supports Hypothesis 1. Companies that financially incentivize their executives based on sustainability targets are less likely to have their commitment to the SBTi withdrawn.

Similarly, the coefficient for *BD_IND* is also negative and significant, providing support for Hypothesis 2. Companies with a higher proportion of independent directors on their boards are less likely to have their net-zero commitments removed by the SBTi.

Table 6 The relationship between sustainability criteria in executive remuneration, board independence, and getting removed from the SBTi

REMOVED	
CSR_CONTRACT	-1.01***
BD_IND	-3.09***
BD_GEND_DIV	0.01
BD_SIZE	-0.04
CEO_DUAL	-0.69*
CRBN_INTS	9.12**
ESG_SCORE	-0.012
FREE_FLOAT	0.02**
NEAR_REMOVED	2.95***
ANLYST_COV	-0.04*
LEV	-6.16
ROA	-0.00
SIZE	0.16*
SEN_INDUS	-1.02***
CMN_LAW	1.99***
FR_LAW	1.60**
SC_LAW	1.43**
EPI_CHANGE	-0.24**

Intercept	4.63
N	321

*, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

ADDITIONAL TESTS

I conducted additional tests to further examine the robustness of our results (see Table 7). First, I challenge the estimates of our variables of interest. Specifically, I substitute the *CSR_CONTRACT* variable, which reflects the presence of a policy linking executive remuneration to sustainability targets, with *CSR_CONTRACT_Design*, which equals 1 if sustainability targets are integrated into executive remuneration design, and zero otherwise (source: Refinitiv). The results remain consistent (Model 1).

Table 7 Additional analysis

REMOVED	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**	**Model (5)**	**Model (6)**
CSR_CONTRACT		-1.35**	-0.99**	-1.01**	-0.84*	-1.10**
CSR_CONTRACT_Design	-0.90**					
BD_IND	-2.96***			-2.79**	-2.97**	-4.73***
BD_IND_STRICT_1		-4.28***				
BD_IND_STRICT_2			-2.35**			
BD_GEND_DIV	0.01	0.05**	0.02	0.00	0.02	0.00
BD_SIZE	-0.04	0.08	-0.03	-0.05	-0.05	-0.07
CEO_DUAL	-0.66*	-0.95*	-0.92**	-1.04**	-0.66	-0.97**
CRBN_INTS	8.30**	11.17**	8.35**	9.42*	5.73	10.20**
ESG_SCORE	-0.02*	-0.01	-0.02	-0.03**	-0.02	-0.01
FREE_FLOAT	0.02**	0.03*	0.01	0.02**	0.02**	0.02
NEAR_REMOVED	2.95***	0.00	2.88***	2.21**	2.62***	2.77***
ANLYST_COV	-0.04**	-0.02	-0.04**	-0.08**	-0.03	-0.03
LEV	-8.06	-4.27	-7.01	-7.95	-12.81	-11.75
ROA	-0.01	0.00	0.00	-0.01	0.00	0.00
SIZE	0.17*	0.07	0.16*	0.22**	0.11	0.14
SEN_INDUS	-1.03***	-0.70	-0.95**	-1.50***	-0.60	0.03
CMN_LAW	2.14***	0.60	1.64***	2.32***	1.95***	2.84*
FR_LAW	1.64**	-0.50	1.48**	2.12***	1.48**	-15.06
SC_LAW	1.58**	0.37	1.20*	1.69**	1.19*	2.73
EPI_CHANGE	-0.23**	-0.13	-0.21**	-0.30**	-0.22**	-0.14

Country fixed effects						YES
Industry fixed effects						YES
Intercept	6.31	1.34	5.315	7.05	11.50	11.51
N	321	199	321	257	253	321

*, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.

I also replaced the proportion of independent directors with the proportion of strictly independent directors. Due to missing observations for this variable, I conducted two alternative analyses. First, I used a subsample of 199 observations, which estimates the proportion of board members who are not employed by the company, have not served on the board for more than ten years, do not hold more than 5% of the company's shares, do not have cross-board membership, have no immediate family ties to the company, and receive no remuneration other than for board service (source: Refinitiv). This yields variable *BD_IND_STRICT_1*, which I employ in Model (2). Second, I substituted the missing data with the original values from the main variable *BD_IND* to construct *BD_IND_STRICT_2*, which I employ in Model (3). The results remain consistent with those reported in the main analysis.

To ensure that our findings are not unduly influenced by the most represented country in our sample, I repeated our analyses by alternatively removing observations from the two most prevalent countries in the sample, the US (20%) (Model 4) and the UK (21%) (Model 5) respectively. The results are consistent with those reported in the main analysis.

Additionally, I control for country-level and industry level heterogeneity by including country dummy variables and industry dummy variables in our regression model (Model 6).

CONCLUSION

This paper examined whether and how financial and reputational incentives at the board-level influence the likelihood of a company having its commitment to net-zero targets removed by the SBTi. Specifically, I focused on two key corporate governance mechanisms: the integration of sustainability criteria into executive remuneration and the presence of independent directors on the board. This study shows that, after controlling for country-level and company-level factors, the likelihood of getting removed from the SBTi is lower for companies that integrated sustainability criteria into their executive remuneration and for those with a higher level of board independence.

The findings of this study are consistent with prior literature emphasizing the role of corporate governance in shaping corporate sustainability outcomes, particularly environmental performance (e.g., Carrión et al., 2025; Romito et al., 2024). In line with existing research, the results indicate that both financial and reputational mechanisms contribute to the strengthening of corporate environmental commitments (e.g., Aresu et al., 2023; Khoo et al., 2022).

This study provides important contributions to the literature on environmental commitment and corporate governance. First, it adds to the growing body of research on corporate climate commitment (e.g., Ben-Amar et al., 2024; Carrión et al., 2025; Li et al., 2025; Romito et al., 2024) by investigating a previously unexplored opposite event, i.e. climate decommitment, and explaining its determinants from a corporate governance perspective. Specifically, this study contributes to the literature on integrating sustainability criteria into executive remuneration (e.g., Aresu et al., 2023; Derchi et al., 2023; Flammer et al., 2019;

García-Meca et al., 2025; Ott and Endrikat, 2023) as well as to the literature on the reputational incentives of independent directors (e.g., Khoo et al., 2022; Melis and Rombi, 2021; Ruiz-Castillo et al., 2024; Villalba-Ríos et al., 2023) by explaining how financial and reputational incentives at the board-level play a crucial role in fostering effective corporate environmental commitment, thereby reducing the risk of breaches in environmental pledges.

The findings also suggest that commitment is not necessarily the end goal; stakeholders, including shareholders interested in sustainability, should place great emphasis on how companies act after making such commitments, and should be aware that financial and reputational incentives at the board-level play an important role in the decision to keep a company's public environmental pledges.

This study has certain limitations that offer opportunities for future research. First, although the sample is international, a significant proportion of the companies in the sample—as in similar studies (e.g., Li et al., 2025)—are headquartered in the United States and the United Kingdom. Second, this study focused on a very specific initiative and targets (net zero targets) to enhance internal validity. While future research could also investigate other types of targets, such as near-term targets, or more generally explore the phenomenon of corporate decommitment from environmental pledges. Third, this study focused on financial and reputational incentives at the board level, with no attention to CEO-level individual characteristics (e.g., narcissism, hubris, regulatory focus). For instance, a CEO's regulatory focus (i.e., promotion or prevention-oriented) can influence whether a company undertakes actions in reducing carbon emissions (Wagner and Fischer-Kreer, 2024). Future research could explore the role of these individual traits in shaping corporate sustainability behavior.

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Chapter 3

Are Sustainability Targets Easier to Hit?

Evidence from Large Listed Companies in France, Germany, and Italy

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ABSTRACT

The integration of sustainability-related criteria into executive compensation packages has become increasingly a common practice among European companies. This study investigates the performance outcomes of such practices within the largest publicly listed companies in France, Germany, and Italy for the 2023 financial year. Grounded in agency theory, I examine whether sustainability-related targets are inherently easier for CEOs to achieve than traditional financial targets. I hand-collect data on CEO annual incentive plans from companies listed in the CAC 40, DAX 40, and FTSE MIB 40 indices, focusing on the weight, nature, type and achievement levels of both sustainability and financial targets. Specifically, I qualitatively explore the targets and whether CEOs miss, meet, or exceed those targets. The analysis reveals that CEOs fail to meet all of their financial targets in approximately 9% of cases, whereas the corresponding rate for sustainability targets is only 4%. Furthermore, on average 61% of CEOs meet or exceed all their financial targets compared to 74% for sustainability targets, indicating a potential disparity in performance thresholds. I further attempt to quantitatively investigate the determinants of this sustainability performance. I find that CEOs meeting all financial targets are more likely to meet all sustainability targets. Findings also indicate a significant association between meeting sustainability targets and company ESG score. However, this relationship loses statistical significance under additional tests. Lastly, the

explicit nature of targets and the multiplicity of ESG targets reduces the likelihood that the CEO achieve all his sustainability targets.

Keywords: ESG, Executive compensation, CEO annual bonus plan, governance, sustainability targets

INTRODUCTION

In recent years, companies have faced increasing pressure from stakeholders, including civil society, investors, and especially international organizations, to report their social and environmental impacts (e.g., Bebchuk & Tallarita, 2022; Dechow, 2023). In fact, beginning in 2024, the European Union's Corporate Sustainability Reporting Directive (CSRD) has introduced stricter disclosure requirements, mandating that companies meeting specific size, industry, and relevance thresholds report comprehensive information on the risks and opportunities arising from their environmental and social activities, as well as the extent and impact of their sustainability performance. Companies within the scope of the CSRD are required to prepare their disclosures in accordance with the European Sustainability Reporting Standards (ESRS), ensuring consistency and reliability of sustainability data across the European market.[10] Complementing the CSRD, the EU Taxonomy Regulation, introduced in 2020, has been providing a science-based and standardized classification system for identifying and defining sustainable economic activities. By offering clear and harmonized definitions, this Taxonomy seeks to enhance transparency and comparability in corporate sustainability reporting and to facilitate the redirection of capital flows toward activities aligned with the European Union's 2030 climate objectives.[11]

In response to these continuous regulatory developments and rising market expectations, many companies have begun adopting more structured approaches to manage and improve their sustainability performance (Schaltegger et al., 2022). One increasingly

[10] European Commission. (2025). *Corporate sustainability reporting*. In *Finance: Company reporting* (Capital Markets Union)

[11] https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en

prominent strategy involves aligning executive interests with sustainability goals to encourage sustainability-oriented managerial behavior. To achieve this, boards of directors have introduced governance mechanisms designed to motivate executives including CEOs to integrate sustainability considerations into strategic and operational decision-making. Among these mechanisms, the linkage of executive compensation to sustainability performance metrics has emerged as one of the widely adopted practices (e.g., Flammer et al., 2019; Aresu et al., 2023; Morrison et al. 2024). This approach is now common across companies worldwide (Cohen et al., 2023) and is even endorsed as a best practice in corporate governance codes, in France for instance under the Corporate Governance Code issued by AFEP (Association Française des Entreprises Privées) and MEDEF (Mouvement des Entreprises de France).

Despite the growing adoption of this governance mechanism, scholars remain uncertain whether integrating sustainability criteria into executive pay truly aligns managerial behavior with substantive sustainability outcomes (e.g., Bebchuk & Tallarita, 2022; Cohen et al., 2023). Beyond academic criticism, investors have also expressed growing skepticism regarding these remuneration practices (Financial Times, 2025). Concerns often focus on whether sustainability linked incentives genuinely reward meaningful sustainability performance or merely function as a mechanism for unjustified wealth transfer to executives (e.g., Bebchuk & Tallarita, 2022; Keddie & Magnan, 2023). For instance, the Financial Times (2025) reported increasing investors' concerns that many sustainability targets particularly qualitative ones are "too easy to reach" and "more open to gaming." In the same report, Tom Gosling, Director of the London School of Economics' Initiative on Sustainable Finance, cautioned: "There's this danger of hitting the target and missing the point… There's a real danger that you just end up with more pay, not

more ESG." Similarly, an earlier Financial Times article (2023) highlighted investor warnings that ESG-related targets are sometimes manipulated to inflate bonus payouts. In addition, recently several large corporations, including BP and UBS, have removed sustainability metrics from their executive compensation plans entirely, further fueling the debate over the credibility and effectiveness of such incentives (Financial Times, 2025).

Taking this further, a KPMG (2025) report highlights that over 80% of large European companies include sustainability criteria in their executive compensation packages, roughly double the rate observed among U.S. companies. Moreover, European companies are more likely to align these incentives with material sustainability issues, indicating a potentially more substantive implementation of ESG-linked pay structures. So, while much of the literature and the practice acknowledges Europe's relative advancement in the integration of sustainability metrics into executive pay, there remains a significant empirical gap in understanding the achievability, rigor, and impact of sustainability targets within European executive compensation schemes.

These public and academic concerns underscore the ongoing debate over transparency and substantive impact of sustainability linked executive compensation. They also highlight the need for empirical research examining the actual design and impact of such targets. This study aims to fill this gap by addressing the following research questions: Are sustainability targets easier to achieve compared to financial targets? Is the achievement of sustainability targets based upon a company's sustainability performance? Moreover, what company-level factors explain meeting sustainability targets?

The remainder of the paper is organized as follows. Section II reviews the existing literature. Section III presents the Institutional setting of the study. Section IV develops the theoretical framework and the hypotheses. Section V presents research design. Section VI illustrates the findings, followed by additional tests in Section VII. Finally, Section VIII concludes the study with a discussion of the implications and future research directions.

LITERATURE REVIEW

A substantial body of literature on incentives has examined variable-related compensation (e.g., Milgrom & Roberts, 1992; Melis et al., 2011). Recent literature focused on sustainability related compensation, its determinants (e.g., Hou et al. 2025; Yang, L. 2023) and its outcomes (e.g., Hou et al. 2025; Ikram et al., 2023; Ott & Endrikat, 2023; Tsang et al., 2021). Sustainability targets, which constitute the focus of this study, are recommended to be aligned with both the company's business model and its long-term strategic orientation (Principles for Responsible Investment, 2012). Furthermore, sustainability-related incentives should be coherently integrated across the company's overall strategy rather than concentrated narrowly on some specific targets (Principles for Responsible Investment, 2012). In addition, Hong et al. (2016) study the relationship between corporate governance and sustainability related compensation finding that this mechanism can align managers' behavior with broader stakeholder interests and reduce opportunism. On the other hand, focusing excessively on a single sustainability target may induce executives to prioritize that dimension disproportionately, thereby neglecting other relevant dimensions (Bebchuk & Tallarita, 2022). This narrow focus risks orienting managerial attention towards a limited group of stakeholders,

while overlooking the broader set of stakeholders affected by corporate decisions (Ritz, 2022). As Baker (1992) argues, the integration of targets into executive remuneration can achieve its intended purpose only if it is accompanied by effective performance measurement. This requires careful selection of appropriate targets to link to variable pay, as well as consideration of the number of targets adopted and the combination of them.

On the other hand, recent literature has begun to question the role of sustainability targets. Kolk and Perego (2014) argue that sustainability related bonuses can lead to either genuine corporate responsibility or serve as a tool for mere window dressing. A stream of research highlights that sustainability-related targets may be perceived as less demanding than traditional financial performance targets. Lenihan and Brennan (2023), examining companies in the S&P 500, find that sustainability targets are significantly easier to achieve than financial ones. Similarly, using a similar US-based sample, Badawi and Bartlett (2024) documented that executives fail to meet all their financial targets in 22% of cases, whereas complete failure to meet sustainability targets occurs in only 2% of cases. Another stream of literature investigates the nature and design of the targets themselves. Michaely et al., (2024) distinguish between explicit targets, such as measurable carbon emissions reductions, and implicit targets, such as general leadership or commitment to sustainability. Their findings suggest that explicit targets are more effective in driving meaningful performance improvements, whereas implicit targets are less impactful, particularly when applied to metrics that can otherwise be objectively quantified.

Building on these insights, recent research has explored the adoption of this practice in a European context, where regulatory frameworks and governance norms have increasingly

promoted the integration of sustainability criteria into executive pay. For instance, Dell'Erba and Ferrarini (2024) examine the relationship between executive compensation and sustainability in European companies, questioning whether linking pay to sustainability performance provides optimal incentives for sustainability compliance or whether it risks being a symbolic gesture. Moreover, Walker (2022) provides a critical perspective, arguing that many sustainability-linked compensation contracts are primarily symbolic, serving as "window dressing", or reflect a lack of alignment with established incentive design principles by boards of directors. Similarly, Ehmann et al. (2024) found that ESG has only a limited impact on executive compensation when investigating a sample of European companies. They state that most of the ESG metrics are discretionary and account for merely 2 to 5% of variable pay. They also warn of the risk of greenwashing, noting that sustainability-linked pay may represent a response to external pressures rather than a substantial attempt to improve sustainability performance. This aligns with the broader discussions around greenwashing and the heterogeneity of sustainability practices in Europe.

In terms of the determinants and practices of sustainability-linked pay, Ratti et al. (2023) provide evidence that companies developing forward-looking sustainability plans and committing to carbon-reduction goals are more likely to incorporate environmental targets into executive compensation and assign them higher weights. Conversely, companies that limit their sustainability engagement to mere disclosure of environmental performance without embedding these metrics into incentive structures tend to exhibit more symbolic behaviors, using reporting as a form of greenwashing. The role of governance mechanisms as moderators of the effectiveness of sustainability-linked pay is also well-documented. Almici (2023) finds

that integrating sustainability criteria into executive remuneration can enhance companies' sustainability performance, particularly when supported by robust corporate governance mechanisms such as independent boards and well-structured sustainability committees. These findings suggest that governance quality can significantly influence whether sustainability-linked pay translates into substantive sustainability outcomes.

This study addresses the gap in the sustainability related compensation literature by investigating whether sustainability targets in European companies are systematically less demanding than financial performance targets, and by exploring how target design and company characteristics contribute to corporate sustainability performance.

INSTITUTIONAL SETTINGS

Many countries have implemented national initiatives to encourage companies to adopt a stronger sustainability orientation (OECD, 2024). A prominent example is the Paris Agreement (2015), an international treaty signed by 197 parties, committing to limit global warming and promote climate-resilient development. Another mechanism adopted by governments to guide corporate behavior is the issuance of corporate governance codes, which constitute sets of "soft law" recommendations aimed at directing companies to operate in the best interests of its stakeholders. This section examines the guidance provided by the corporate governance codes of best practice in France, Germany, and Italy, with particular emphasis on sustainability-related executive compensation.

In France, companies choose between two board structures: a unitary Board of Directors or a two-tier system comprising a Supervisory Board and a Management Board. They

may also decide whether to separate the roles of Chairman and Chief Executive Officer (CEO) or to consolidate these positions in a single individual. Regarding board independence, independent directors are recommended to constitute at least half of the board in widely held corporations that do not have a controlling shareholder. The corporate governance code places strong emphasis on environmental and social responsibility (Responsabilité Sociétale des Entreprises) (Corporate governance Code of listed corporations, 2022, p.27). It recommends that the Board of Directors should develop a strategic plan addressing the company's social and environmental activities. Senior managers are required to submit this plan annually to the board, specifying the timeframe and resources necessary for its implementation. The Code further recommends that climate-related issues be clearly defined, including their relevant time horizons, and mandates the board to assess the adequacy and effectiveness of the plan. With regard to remuneration, the Code recommends the integration of environmental and social indicators into executive compensation schemes, including at least one metric explicitly linked to climate-related objectives. Moreover, it underscores the importance of setting material and measurable targets rather than relying on generic or symbolic indicators. (Corporate governance Code of listed corporations, 2022, p.27).

In Italy, companies are typically characterized by the adoption of the traditional or one-tier board of directors' model, in which a single board is responsible for both management and corporate strategy while being overseen by a Board of Statutory Auditors. The Italian Code of Best Practices recommends that the board of directors include at least two independent directors, excluding the chair. Within the Business Plan section, the corporate governance code emphasizes that the plan should define the company's objectives and the actions required to

achieve them, with the aim of fostering “sustainable success”. Sustainable success is defined as “the objective that guides the actions of the Board of Directors, consisting of creating long-term value for the benefit of shareholders while taking into account the interests of other stakeholders relevant to the company.” (Corporate Governance Code, 2020, p. 4). Regarding remuneration, the Code further proposes that executive variable pay should be measurable, predetermined, and linked to long-term objectives, encompassing both financial and non-financial performance indicators. (Corporate governance Code, 2020).

In Germany, companies adopt a two-tier board system consisting of a Supervisory Board and a Management Board. The Supervisory Board is composed of both shareholder representatives and employee representatives, with members required to act in the best interests of the company in equal measures. Furthermore, it is recommended that more than half of the shareholder representatives on the Supervisory Board be independent from the company. The management board is expected to identify and assess the risks and opportunities associated with social and environmental matters, as well as the environmental and social impacts generated by the company’s activities. In addition to financial objectives, the company should also take sustainable goals into account. The German Corporate Governance Code (DCGK) requires that executive remuneration be aligned with the company’s sustainable and long-term development. (German Corporate Governance Code, 2022, p. 4).

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Agency theory provides a valuable conceptual framework for examining the integration of sustainability criteria into executive compensation. It suggests that executives are inherently

self-interested and may prioritize their personal objectives over those of shareholders (Jensen & Meckling, 1976). Jensen and Murphy (1990) argue that CEO performance is not directly observable; therefore, company performance should be employed as a proxy for managerial performance. Consequently, CEO compensation should be linked to company performance, as pay-for-performance mechanisms can help align executives' interests with those of shareholders. Ott and Endrikat (2023) extend this theoretical framework by demonstrating that incentive-based mechanisms rooted in agency theory can also be applied to a company's carbon-related performance. Building on this perspective, I argue that when boards of directors incorporate sustainability-linked targets into executive compensation schemes, they create financial incentives that may enhance CEOs' commitment to sustainability objectives. On the other hand, such schemes may also incentivize superficial compliance, whereby executives strategically signal commitment or exceed sustainability benchmarks that are, in practice, relatively easy to achieve (Badawi and Bartlett, 2024).

Based on agency theory, variable compensation incentives CEOs to maximize their benefits within contractual constraints (Bell & Van Reenen, 2016). Sustainability related targets can be flexible, hard to quantify and less precise. Hence, they can be harder to monitor and easier to achieve than traditional financial targets. Consequently, CEOs that successfully meet the strictly measurable, more challenging and strongly weighted financial targets are also more likely to meet the relatively easier sustainability targets.

H1: CEOs meeting their financial targets are more likely to meet their sustainability targets.

Based on agency theory, variable sustainability-linked compensation's main goal is to align managerial behavior with the broader corporate social responsibility goal, hence enhancing the ESG performance of the company (Flammer et al., 2019; Hong et al., 2016). Thus, once the CEO achieves his sustainability targets substantively and transparently, this will be reflected in the company's improved sustainability performance and hence it will be observable in the company's ESG performance score.

H2: Companies with higher ESG performance are more likely to have CEOs who meet all their sustainability targets.

RESEARCH DESIGN

Sample and Data collection

This study examines executive compensation practices in the largest publicly listed companies in France, Germany, and Italy. Specifically, the sample comprises companies included in CAC 40, DAX 40 and FTSE MIB 40 indices in the financial year 2023. These companies are selected because they are the largest and most economically significant companies in France, Germany, and Italy, based on market capitalization, as well as their substantial impact on both national and European economies. Furthermore, the selection of these three countries enables an investigation of major European companies operating under different regulatory and corporate governance settings. Another reason for selecting this sample is that European companies are generally characterized by a more stakeholder-oriented governance model compared to U.S. companies, which have been the primary focus of prior studies. In addition, companies in France, Germany, and Italy are subject to more stringent

sustainability disclosure requirements, as discussed in the institutional setting section. Consistent with prior literature (e.g. Keddie, and Magnan, 2023; Badawi and Bartlett, 2024), the analysis is focused on annual bonuses, as they are tied to short-term performance and typically reflect targets with one-year time horizon. This focus allows assessing the feasibility of assessing the actual level of target attainment, compared to long-term incentive plans, which often span over three or more years and may not have clearly observable outcomes within the study timeframe.

As illustrated in Table 1, the initial sample comprises the 120 largest publicly listed companies across France, Germany, and Italy in the financial year 2023. I eliminate cross listed companies; (2) companies are cross listed in France and Italy, so 2 companies are eliminated from the French subsample, and 2 companies are eliminated from the Italian subsample. (1) company is cross listed in Germany and France so 1 company is eliminated from the French subsample and 1 company is eliminated from the Italian subsample. So, the sample is reduced to 114. Followingly, companies that either do not disclose the necessary information on executive compensation such as the targets themselves and the percentage of targets achievement (3) or do not include sustainability-related criteria in their CEO annual bonus plans (9) are excluded. After applying these criteria, the final sample consists of 102 companies, distributed as follows: 35 French, 35 German, and 32 Italian companies.

Table 1: Sample

Initial sample: companies in CAC 40, DAX 40 and FTSE MIB 40 indices	120
-cross listed companies	6
-companies not disclosing the necessary information on executive compensation	3
-companies not including sustainability-related criteria in their CEO annual bonus	9
=Final sample:	102
German companies	35
French companies	35
Italian companies	32

Methods

I employ both qualitative and quantitative analyses to provide a comprehensive understanding of the structure and achievability of these targets. I proceed as follows:

Qualitative analysis

The first phase involves the manual collection and qualitative analysis of sustainability targets in CEOs annual bonuses. Particular attention is given to attributes such as:

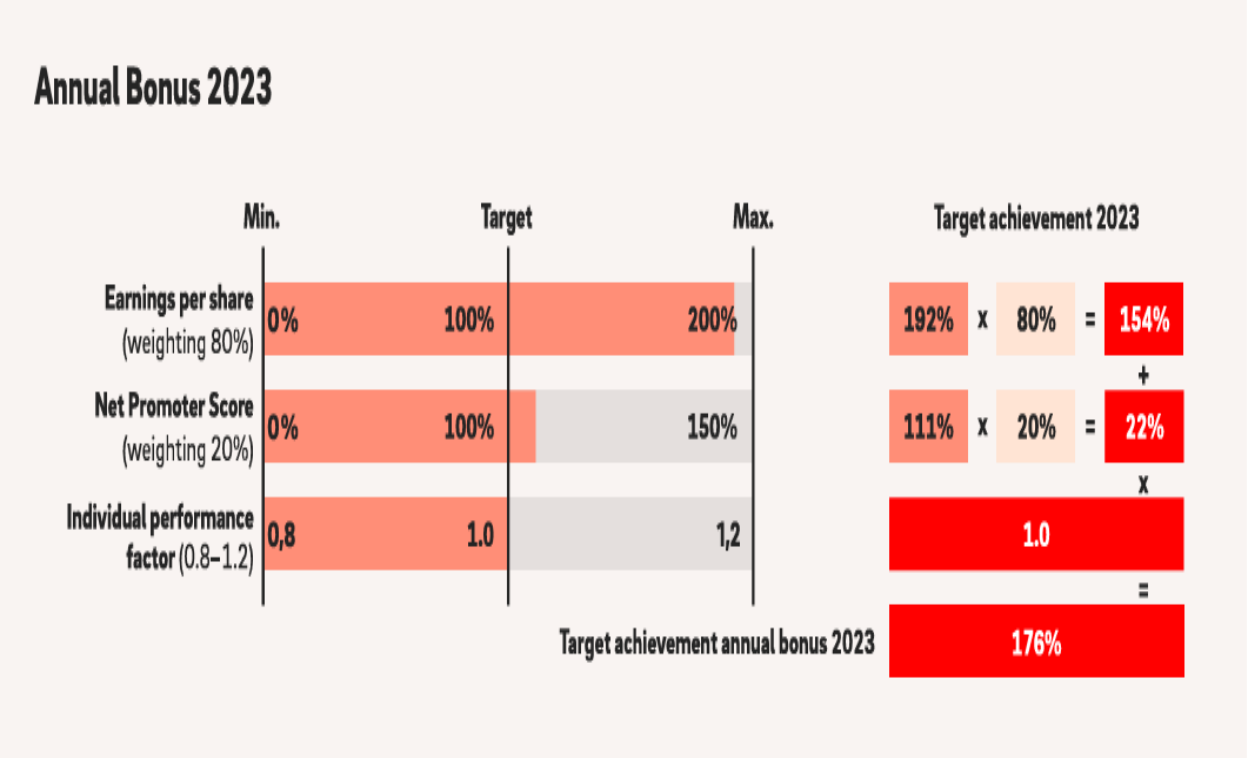
Target content which refers to the description of a given target and provides an indication of what the CEO is specifically expected to achieve at the end of the financial year. The content may range from a single word, such as ESG (Symrise, 2023), to a full paragraph that elaborates on the details of the target. The following is an example of a well described target: “the Upstream GHG net emissions Scope 1 and 2 equity indicator (tCO2 eq.) reflects Eni’s commitment to reducing GHG emissions, in line with the medium/long-term objectives that will

lead the company to decarbonize all products and processes by 2050. Eni aims to eliminate the carbon footprint associated with its activities, which also involves the gradual reduction of Scope 1 and Scope 2 Upstream emissions" (ENI, 2023)

Target weight refers to the proportion of the CEO's overall annual variable pay that is allocated to sustainability targets. It is noteworthy that companies may apply modifiers, multipliers, or Individual Contribution Factors rather than assigning a fixed weight to ESG metrics. To illustrate this approach, Box 1 presents a case in which a company allocates 100% of the variable annual pay to financial targets, while sustainability targets are incorporated in the form of a modifier. In this example, the modifier ranges from 0.8 to 1.2. This implies that if the company achieves all sustainability targets, the modifier equals 1, and the CEO's variable pay for financial targets is multiplied accordingly. If the company achieves only 80% of its sustainability targets, the modifier reduces the variable pay for financial targets proportionally to 0.8 times the percentage achievement of financial objectives.

A methodological question arises regarding how to assign weight to such modifiers. In this study, I calculate the weight of the sustainability targets as (120%−80%)/2=20%. This procedure has been consistently applied to other companies employing similar modifier-based schemes.

Box 1: Example of Modifier



Source : Compensation Report 2023, E.ON SE company

Target nature can be explicit where there are specific and clearly defined targets. For instance, the Italian company Banca Monte Paschi Siena sets the following explicit target "% reduction of Scope 1 v s 2017" (Banca Monte Paschi Siena, 2023). There are also implicit targets which typically consist of vague or general statements that lack specificity or quantifiable metrics. For instance, the German company Siemens Healthineers set the following implicit target "Implementation of other sustainability targets" (Siemens Healthineers, 2023). Finally, Strategic Scorecard that may include ESG measures alone or combine financial indicators and may or may not assign explicit weights to individual components. Box 2 shows a real-life example of a strategic scorecard which comprises four targets in total. The first three are financial metrics,

whereas the fourth is labeled *Group ESG* and structured as a scorecard. This scorecard comprises three metrics: the safety assessment plan, the proportion of women hired, and the proportion of recycled content. Each metric is assigned to a specific weight and corresponding performance level. Yet, they are dealt with not individually, but rather as a batch. See Box2.

Box 2: Strategic Scorecard

ACCESS CONDITION M €

	Threshold	Target	Maximum
Adjusted Group EBITDA	1,320	1,400	1,628 ON *above target*

OBJECTIVES	Weight		Expected performance level, Remuneration Policy 2023*		Expected performance level, following the July 2023 review[13]		Results	Points
	Target	Max	Target	Max	Target	Max		
1_Adjusted Group EBITDA (€M)	35	52.5	1,400	1,500	1,575	1,675	1,628	44.3
2_Group Net Financial Position (€M) *	25	37.5	1,216	1,016	1,116	1,016	1,093	27.9
3_Group ROCE (%)	20	30	17.6%	20.2%	20.5%	22.7%	23.1%	30
4_Group ESG (points)	20	30	Scorecard		No change		Details below	25.8
	100	150						128.0

	Weight	Expected performance level		Result	Points
		Target	Max		
Safety Assessment Plan	33%	2.5	3.75	3.4	45.3
% women hired - Desk Workers	33%	46%	49%	46.03%	33.5
% of recycled content (PE Jackets & Copper)	33%	11.6%	12.2%	12.8%	50

Source: Report on remuneration policy and compensation paid of Prysmian company,2023

Target type indicates the category of the performance objective, distinguishing whether it relates to environmental, social, governance, or a combined ESG aspect. Specifically, environmental targets pertain to ecological performance, such as the percentage reduction of Scope 1 emissions, whereas social targets relate to workforce or societal outcomes, exemplified by the Total Case Incident Rate (TCIR). Governance targets address compliance[12], risk management, or corporate governance practices. Combined ESG targets integrate two or more dimensions, encompassing elements of environmental, social, and governance performance within a single objective.

For the targeted stakeholder group, I adopt the stakeholder classification proposed by Melis et al. (2025), which categorizes stakeholders into the following groups: environment, employees, customers, community, suppliers, and stakeholders dialogue.

For target dimension, I also adopt the classification proposed by Melis et al. (2025), which provides a detailed breakdown of the specific dimensions that companies address within the relevant stakeholder groups. For example, within the Employees stakeholder group, the dimensions include health and safety, employee involvement, and gender diversity. Within the broader dimension of employee involvement, more specific dimensions are identified, such as employee satisfaction, talent development, and training and education.

Followingly, I collect the level of attainment of the target which indicates whether a company fails to meet, meets, or exceeds a given target. Detailed information regarding the percentage

[12] For the purposes of this study, metrics such as Women in Management or Women in the board have been classified as Social not as Governance, as they could reasonably fall into either category.

of attainment for each target is systematically collected to provide a precise measure of performance.

Quantitative analysis

After collecting the level of attainment of the targets, I will proceed with a z test to check if there is a significant difference in means between meeting all sustainability targets and meeting all financial targets.

Followingly, in the next phase I will conduct a quantitative analysis to investigate the determinants of meeting sustainability targets. Drawing from the hand-collected dataset, the analysis assesses whether certain company-level variables are associated with meeting or exceeding sustainability-related targets. The goal of this analysis is to examine whether companies that meet or exceed their sustainability targets also demonstrate higher ESG scores, indicating better overall ESG performance. In such cases, executive compensation tied to sustainability metrics would reflect the CEO's effective contribution to ESG goals. Conversely, if achieving sustainability-related compensation is not associated with improved ESG performance, this may raise questions, suggesting a potential deficiency at the company level that has allowed such outcomes to occur.

Variables

Dependent Variable

All_sus_metorexceeded: This variable takes the value of 1 if all sustainability-related targets linked to the CEO's annual bonus are met or exceeded, and 0 otherwise.

Independent Variables of interest:

To select the independent variables, I draw on prior literature. I have opted for the following two variables: The first variable captures if all financial targets are met or exceeded (Lenihan and Brennan, 2023) to test the first hypothesis. Meanwhile, the second independent variable calculates the ESG score difference (Badawi and Bartlett, 2024) to test the second hypothesis. Table 2 includes the variables´ definitions.

Control Variables: board independence, target nature explicit, number of sustainability targets, overall weight of sustainability targets, company size, industry, and country. Table 2 includes variables´ definitions.

Table 2: Variables definition

Variable	**Definition**	**Source**
All_fin_metorexceed	Binary variable equals to one if all financial targets linked to CEO annual bonus are met or exceeded 0 otherwise.	Company´s reports
ESGscorediff	The difference between the score based on self-reported information in the environmental, social and corporate governance pillars between t and t-1 2023.	DataStream Refinitiv
Targetnature_explicit	Binary variable equals to 1 if the target is explicit and 0 otherwise.	Company´s reports
Nbr_sus	Number of sustainability targets in the CEO annual bonus.	Company´s reports
Overall_sus_weight	The proportion allocated to the sustainability related targets from the overall total variable annual pay of the CEO.	Company´s reports
BD_IND	Proportion of independent board members as reported by the company.	DataStream Refinitiv
lntotalassets	Ln of the sum of total current assets long term receivables, investment in	DataStream Refinitiv

	unconsolidated subsidiaries, other investments, net property plant and equipment and other assets.	
Industry	ICB CODE represents an industry code within the Industrial Classification Benchmark (ICB) which was implemented because of a merger of the industrial classification of Dow Jones and FTSE.	DataStream Refinitiv
Country	It equals to one the company is listed in Germany, two if the company is listed in France and three in case it is listed in Italy.	Company´s reports

Model Specification

I adopt a logistic regression model to investigate the determinants of a company meeting or exceeding all its sustainability targets included in its CEO's annual bonus.

$$\text{logit}(\text{All\_sus\_metorexceeded}_{i,t}) = \beta 0 + \beta 1\ \text{All\_fin\_metorexceeded}_{i,t} + \beta 2\ \text{ESG\_Score\_Diff}_{i,t}$$
$$+ \gamma 1\ \text{TargetNature\_Explicit}_{i,t} + \gamma 2\ \text{Nbr\_sus}_{i,t}$$
$$+ \gamma 3\ \text{Overall\_sus\_Weight}_{i,t} + \gamma 4\ \text{BD\_IND}_{i,t}$$
$$+ \gamma 5\ \log(\text{Total\_Assets}_{i,t}) + \gamma 6\ \text{Industry}_{i,t} + \gamma 7\ \text{Country}_{i,t} + \varepsilon_{i,t}$$

Where:

- All_sus_metorexceeded is the dependent variable for company i.
- β coefficients measure the effect of independent variables.
- γ coefficients capture the effect of control variables.
- ε is the error term.

FINDINGS

Qualitative Analysis

Target numbers

In total, I collected 575 targets, comprising 363 financial targets and 213 sustainability targets. Italian companies reported 119 financial targets compared to 62 sustainability targets, indicating that Italian companies include, on average, twice as many financial targets as sustainability targets in their CEO bonus plans. This proportion differs for French companies, which reported 149 financial targets and 88 sustainability targets, corresponding to approximately 1.6 times more financial than sustainability targets in their variable annual pay structures. German companies reported 94 financial targets and 63 sustainability targets, making German companies those with the smallest gap between financial and sustainability targets, at roughly 1.4 times. See Table 3 Panel A.

At the company level, our sample shows that, on average, companies report 3.6 financial targets, with the number of financial targets ranging from a minimum of one to a maximum of seven. In contrast, for sustainability targets, companies report an average of 2.1 targets, also ranging from one to seven, but consistently fewer than financial targets. When examining country-level differences, French, German, and Italian companies report, on average, 4.4, 2.7, and 3.7 financial targets, respectively, compared to 2.5, 1.9, and 1.9 sustainability targets. This makes French companies those with the highest number of targets related to annual variable pay—both financial and sustainability—while German companies exhibit the lowest number of targets at the company level. See Table 3 Panel B.

Table 3: Targets attributes

	France	Germany	Italy	Total
Panel A: Total number of targets				
Financial targets	149	94	119	362
Sustainability targets	88	63	62	213
Panel B: Average number of targets per company				
Financial targets	4.4	2.7	3.7	3.6
Sustainability targets	2.5	1.9	1.9	2.1
Panel C: Average overall sustainability targets weight				
Financial targets	79.9%	80%	81%	81%
Sustainability targets	20%	20%	19%	19%
Panel D: Average single sustainability target weight				
Financial targets	18%	32%	22%	23%
Sustainability targets	8%	13%	10%	10%

Target content

The content of sustainability-related targets varies considerably across companies and may exhibit distinct characteristics. Some targets are generic, encompassing one or multiple dimensions without providing precise details—for example, labels such as “ESG,” “climate,” “sustainability target,” or “compliance.” In contrast, specific targets are clearly defined and measurable, focusing on a particular metric in a transparent manner, such as “reduction of CO_2

emissions," "Lost Time Injury Frequency Rate (LTIFR)," or "hazardous waste treatment and recovery."

Targets also differ in their scope. Unidimensional targets concentrate on a single metric, such as "women in management," "young employee engagement," "leakage in the distribution network," or "anti-corruption training." Conversely, multidimensional targets encompass multiple metrics simultaneously, exemplified by objectives like "health & safety" or the implementation of an "ESG Strategic Plan."

Furthermore, sustainability targets can be company-specific, tailored to align with a company's unique strategic priorities. For instance, the French company L'Oréal establishes the target "CSR criteria: L'Oréal for the Future programme (L'Oréal, 2023) a proprietary initiative developed to guide its sustainability agenda. Similarly, Schneider Electric constructs its own composite score, the "Schneider Sustainability Impact Score" (Schneider Electric, 2023) integrating multiple sustainability dimensions. Alternatively, some companies prefer to align their targets with broader, standardized frameworks, adopting widely recognized measures such as the "adoption of Science-Based Targets (SBTs)" or "inclusion in the Dow Jones Sustainability Index."

Target weight

Table 3 Panel C provides information on the weights at the company level, summarizing the average overall weight allocated to financial and sustainability-related targets within CEO annual bonus plans across the sample. Table 3 Panel D presents the weights at the target level, detailing the average weight assigned to a single financial or sustainability-related target within the annual bonus structure.

Focusing first on company-level weights, the results indicate that, on average, 81% of the overall weight in the sample is allocated to financial targets, while only 19% is allocated to sustainability-related targets. Examining country-specific characteristics, the average weight assigned to financial targets in French, German, and Italian companies is 79.9%, 80%, and 81%, respectively. Regarding sustainability targets, the average weight is 20% in French companies and 19% in Italian companies. In Germany, many companies use modifiers, multipliers, or Individual Contribution Factors instead of assigning a fixed weight to ESG metrics. After adjusting and converting these mechanisms into fixed weight equivalents, the average weight allocated to sustainability targets in German companies is approximately 20%.

Turning to the target-level information, the average weight of a single financial target across the sample is 23%, compared to 10% for a single sustainability target. Examining country-specific patterns, the average weight assigned to a financial target in French, German, and Italian companies is 18%, 32%, and 22%, respectively. For sustainability targets, the average weight is 8% in French, 13% in German, and 10% in Italian companies. These findings show that German companies assign the highest weight to individual targets, which aligns with the observation discussed earlier that German companies tend to set a smaller number of targets overall, thereby allocating a higher weight to each. See Table 3 Panel D.

Target nature

Table 4 shows that the majority of companies incorporate explicit targets. Specifically, 60% of French companies, 46% of German companies, and 59% of Italian companies adopt explicit targets. Examples of explicit targets in our sample include "CO_2 emissions per employee" and "% of new ESG loans." German companies, however, are the most frequent

users of strategic scorecards, with 28% of companies adopting them. Examples of such scorecards in our sample are the "Customer Net Promoter Score" and the "Employee Engagement Index." By contrast, a smaller proportion of companies rely on implicit sustainability targets. Italian companies, in particular, are more inclined toward this approach, with 19% of companies adopting implicit targets, while French companies use them rarely (9%). Examples of implicit targets in our sample include "Incorporating CSR considerations into business practices" and "Definition of net-zero objectives."

Table 4: Target nature

	France	**Germany**	**Italy**	**Total**
Explicit targets	60%	46%	59%	55%
Implicit targets	9%	26%	19%	18%
Strategic scorecard	31%	28%	22%	27%

Target type

Overall, the 213 sustainability targets analyzed in the sample are distributed as follows: 48 environmental-related targets, 90 social-related targets, 25 governance-related targets, and 50 integrated ESG targets that combine elements of environmental, social, or governance objectives. This distribution indicates that, overall, companies are more likely to adopt social targets compared to environmental or governance-related ones. Regarding environmental targets specifically, 14 of the German targets, 10 of the Italian targets, and 24 of the French targets fall into this category, positioning French companies as the leading adopters of

compensation mechanisms linked to environmental objectives. In contrast, governance-related targets are the least prevalent across the sample. See Table 5.

Table 5: Target type

Target type	**Total**
Environmental	25%
Social	42%
Governance	11%
ESG	22%
Total	100%

Target stakeholder

In our sample, employees and stakeholders dialogue emerge as the most frequently addressed stakeholder category, followed by the natural environment. Conversely, suppliers are the least frequently referenced stakeholders. This pattern is consistent across countries, indicating a similar prioritization of stakeholder groups companies in different national contexts.

Table 6: Target stakeholder

Target stakeholder	**Total**
Environment	25%
Employees	36%
Customers	5%
Suppliers	1%

Stakeholders' dialogue	33%
Total	100%

Target dimension

Across our sample, for the environmental stakeholder group, the most frequently addressed dimension is carbon emission reduction, while the least represented is the circular economy. French companies exhibit the greatest coverage of climate-related dimensions and SBTi accreditation, whereas German companies also show attention to SBTi accreditation. Italian companies seem to address the different environmental dimensions more evenly.

For the employee stakeholder group, the most prevalent dimension is employee involvement, whereas equity is the least addressed. French companies place particular emphasis on health and safety and are the most active in incorporating gender diversity in managerial positions. German companies prioritize employee engagement, while Italian companies focus equally on health and safety and employee involvement.

Regarding the customer stakeholder group, companies from all three countries focus primarily on two sub-dimensions: customer satisfaction and experience quality.

For the supplier stakeholder group, French and Italian companies in our sample do not target this group. Only two German companies address the dimension "sustainable supply chain", in line with the German Act on Corporate Due Diligence Obligations in Supply Chains (Federal Ministry of Labour and Social Affairs [BMAS], 2021) .

Finally, for the stakeholder dialogue group, the most prevalent dimension across the sample is corporate governance, whereas corporate reporting and reputation is the least represented.

Across companies, the most common sub-dimensions include implementation of ESG strategy and definition of ESG targets. Italian companies are distinguished by the presence of the sustainable finance sub-dimension, while German companies also address improvement of governance processes with stakeholders.

Table 7: Target dimension

Dimension	France	Germany	Italy	Total
Environment				
GHG Emissions reduction				
Carbon Emission Reduction	5	7	1	13
Carbon Emission Reduction — Scope 1	3	1	3	7
Carbon Emission Reduction — Scope 2	4		2	6
Carbon Emission Reduction — Scope 3	1			1
Hydrocarbon Production				
Innovation Process				
Carbon Management Programme	3		1	4
Digital Development linked to CO_2 Roadmap				
CDP Rating				
SBTi Accreditation	4	3		7
Energy Management				
Energy Policy			1	1
Renewable Energies	1	1		2

Energy Consumption		1		1
Energy Intensity		1	1	2
Energy Efficiency	1			1
Diversification of Supply Gas	1			1
Circular Economy				
Sustainable Products	1	2		3
Product Durability				
Revenues from Sustainable Products				
Waste Management	1			1
Low-Impact Materials				
Environment Protection				
Biodiversity				
Water Use				
Gas Leakage Reduction			1	1
Ecosystem Empowering			1	1
Environmental Management	1		1	2
Animal Welfare				
Climate Change	4			4
Employees				
Employee Involvement				
Employee Commitment				

Talent Development	1	2	2	5
Employee Engagement	3	6	2	11
Integrity		1		1
Training and Education	2	1		3
Employer Attractiveness	2	1		3
People Care	2	2	2	6
Compliance				
Traceability and Transparency				
Employee Satisfaction	1	2		3
Diversity and Inclusion (D&I)				
D&I	3	1	2	6
Diversity	3	2		5
Cultural Diversity				
Disabled Workforce				
International Profiles Diversity				
Equity				
Equality	1			1
Living Wages Policy	1			1
Gender Equality			1	1
Gender Pay Gap			1	1
Gender Diversity				

Gender Diversity — Managerial Positions	8	1	3	12
Gender Diversity — Workforce		1		1
Health and Safety (H&S)				
Safety	7	1	2	10
Workplace Accidents	3		3	6
Reported Accidents				
Recordable Injuries	1	1	1	3
Severe Accidents			1	1
Fatal Accidents				
Prevention of Accidents				
Lost Time Injury Frequency Rate			2	2
Lost Days Rate			1	1
Tier 1 and Tier 2 Accidents	1			1
Customers				
Customers involvement				
Satisfaction	2	3	3	8
Awareness				
Experience Quality	2	1	1	4
Sustainable Products				
Safety and Security				
Sustainable Products				

Traceability and Transparency				
Revenues from Sustainable Products				
Suppliers				
Sustainable value chain				
Sustainable Supply Chain		2		2
Traceability and Transparency				
Suppliers Engagement				
Risk Management Programme				
Stakeholder Dialogue				
ESG Indices				
ESG Indices	4	2	1	7
DJSI Index			1	1
FTSE4Good Index				
Sustainalytics Index			1	1
Corporate Governance				
Gender Diversity — Governing Bodies				
Compliance to Regulations / Corporate Governance Code	3	2	3	8
Sustainable Finance		1	8	9
Implementation of ESG Strategy	4	5	3	12
Definition of ESG Targets	7	11	9	27
Creation of CSR Committee				

Inclusion of CSR Roadmap in Budgets and Bonuses	1		2	3
Enlargement of the Governance Structure to Improve Sustainability Performance				
Improvement of Governance Process with Stakeholders	3	5		8
Quality of Succession Plans (Appointments & Corporate Governance Committee)	1			1
Corporate Reporting and Reputation				
Reporting				
Image and Reputation	1	1		2

Target achievement

Table 8 shows that, on average, companies are less likely to miss their sustainability targets compared to financial targets. For example, only 6% of German companies failed to meet all their sustainability targets, whereas 17% missed all their financial targets. Similarly, when assessing partial achievement, companies across all three countries are less likely to miss at least one sustainability target compared to at least missing one financial target. 31% of French companies missed at least one sustainability target, while 63% missed at least one financial target. Moreover, companies tend to meet or exceed all sustainability targets more frequently than financial targets. For instance, 75% of Italian companies met or exceeded all their sustainability targets, compared to 69% that achieved similar outcomes on financial metrics. This consistent pattern suggests that sustainability targets are generally more

attainable or possibly structured in a manner that increases the likelihood of achievement relative to financial targets.

Table 8: targets achievement

	France	**Germany**	**Italy**	**Total**	**Pr(|Z| > |z|)**
Panel A: All targets met or exceeded					
Financial targets	46%	68%	69%	61%	0.0526
Sustainability targets	66%	80%	75%	74%	
Panel B: All targets missed					
Financial targets	3%	17%	6%	9%	0.1518
Sustainability targets	3%	6%	3%	4%	
Panel C: At least one target missed					
Financial targets	63%	29%	31%	40%	0.0113
Sustainability targets	31%	17%	25%	25%	

Quantitative Analysis

Further with analyzing the results from Table 8, I proceeded with a Z-test to check if there is a significant difference in means between meeting all sustainability targets and meeting all financial targets and the test results were significant.

Descriptive statistics

Table 9 shows that approximately 74% of the companies in the sample meet or exceed all of their sustainability targets, meaning that only one-quarter of the firms fail to achieve at

least one sustainability target. This may suggest that such targets can be relatively less demanding or compared to other performance targets. In comparison, 60% of the sample meet or exceed all their financial targets, reinforcing the idea that financial targets are generally more stringent. On the other hand, the average year-over-year change in ESG scores is -0.33, suggesting that, on average, companies have experienced a decline in ESG performance compared to the previous year and raising concerns about the prevalence of sustainability incentives in bringing sustainable tangible performance. Furthermore, 54% of the companies disclose the use of explicit sustainability targets linked to their CEO's annual bonuses, highlighting a growing adoption of integrating well-established ESG considerations into executive pay. On average, the proportion of independent directors on the board is 0.61, reflecting a relatively high degree of board independence.

Table 9: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
All_sus_metorexceeded	102	.735	.443	0	1
All_fin_metorexceeded	102	.608	.491	0	1
ESG_score_diff	102	-.333	3.034	-8.27	12.43
Targetnature_explicit	102	.549	.5	0	1
Nbr_sus	102	2.137	1.407	1	7
Overall_sus_Weight	102	.198	.116	0	.6
BD_IND	102	.617	.19	.182	1
Total_assets*	102	1.553	3.499	1300377	25.88
Country_France	102	.343	.477	0	1

Country_Germany	102	.343	.477	0	1
Country_Italy	102	.314	.466	0	1
Industry_Industrial	102	.676	.47	0	1
Industry_Utility	102	.118	.324	0	1
Industry_Financial	102	.206	.406	0	1

*Total assets are reported in absolute values for clarity; values are divided by e+08 except the min value.

Correlation

The correlation matrix for the variables included in the analysis is reported in Table 10. The dependent variable *All_sus_metorexceeded* exhibits a positive correlation with the variable reflecting that all financial targets are met or exceeded, as well as with the variable reflecting the change in the ESG score. Conversely, it is negatively correlated with the variable capturing the explicit nature of sustainability targets, the number of sustainability targets per company, the overall weight of sustainability targets, and the company size. The dependent variable *All_sus_metorexceeded* exhibits also a positive correlation with the variable capturing proportion of the independent directors in the board. Moreover, Table 11 shows there is no problem of multicollinearity between our predictor variables.

Table 10: Correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) all_sus_metorexceeded	1.000													
(2) all_fin_metorexceeded	0.201	1.000												
	(0.043)													
(3) ESG_score_diff	0.154	0.131	1.000											
	(0.121)	(0.189)												
(4) targetnature_explicit	-0.365	-0.042	0.056	1.000										
	(0.000)	(0.676)	(0.579)											
(5) Nbr_sus	-0.446	-0.045	0.042	0.477	1.000									
	(0.000)	(0.654)	(0.677)	(0.000)										
(6) Overall_sus_Weight	-0.119	0.171	0.058	0.263	0.220	1.000								
	(0.235)	(0.085)	(0.565)	(0.008)	(0.026)									
(7) BD_IND	0.057	-0.026	0.117	-0.040	0.023	-0.158	1.000							
	(0.567)	(0.799)	(0.242)	(0.693)	(0.821)	(0.113)								
(8) lntotal_assets	-0.146	0.173	0.013	0.173	0.216	0.161	-0.014	1.000						
	(0.142)	(0.083)	(0.899)	(0.082)	(0.029)	(0.107)	(0.887)							
(9) country_France	-0.128	-0.223	0.041	0.074	0.205	0.006	-0.123	0.105	1.000					
	(0.200)	(0.024)	(0.681)	(0.459)	(0.039)	(0.949)	(0.219)	(0.292)						
(10) country_Germany	0.106	0.115	-0.105	-0.133	-0.106	0.012	-0.037	0.144	-0.522	1.000				
	(0.289)	(0.249)	(0.293)	(0.181)	(0.290)	(0.908)	(0.709)	(0.149)	(0.000)					
(11) country_Italy	0.023	0.110	0.065	0.061	-0.101	-0.018	0.164	-0.255	-0.489	-0.489	1.000			
	(0.822)	(0.270)	(0.514)	(0.544)	(0.310)	(0.854)	(0.100)	(0.010)	(0.000)	(0.000)				
(12) industry_Industrial	0.155	-0.083	0.029	-0.164	-0.077	0.050	-0.115	-0.499	0.235	0.014	-0.255	1.000		
	(0.120)	(0.405)	(0.773)	(0.101)	(0.440)	(0.617)	(0.248)	(0.000)	(0.017)	(0.887)	(0.010)			
(13) industry_Utility	-0.126	0.044	-0.060	0.209	0.136	0.154	0.098	0.111	-0.136	0.057	0.081	-0.528	1.000	
	(0.208)	(0.661)	(0.551)	(0.035)	(0.173)	(0.121)	(0.329)	(0.265)	(0.174)	(0.572)	(0.418)	(0.000)		
(14) industry_Financial	-0.079	0.061	0.014	0.023	-0.019	-0.181	0.056	0.488	-0.164	-0.062	0.231	-0.736	-0.186	1.000
	(0.429)	(0.540)	(0.887)	(0.819)	(0.850)	(0.069)	(0.579)	(0.000)	(0.100)	(0.539)	(0.020)	(0.000)	(0.061)	

Table 11: Variance inflation factor

	VIF	1/VIF
Lntotal_assets	1.897	.527
Industry_group	1.744	.573
Targetnature_explicit	1.395	.717
Nbr_sus	1.365	.733
country	1.279	.782
Overall_sus_Weight	1.24	.806
All_fin_metorexceeded	1.095	.913
BD _ND	1.064	.94
ESG_score_diff	1.049	.953
Mean VIF	1.348	.

Logistic Regression

Table 12 presents the results of our regression analysis examining the determinants of a CEO meeting or exceeding all his sustainability targets. The coefficient of the first independent variable reflecting whether the CEO met or exceeded all his financial targets is positive and statistically significant, indicating that CEOs achieving all their financial targets tend to also meet or exceed all sustainability targets. This finding supports Hypothesis 1.

Similarly, the coefficient for the second independent *ESG_score_diff* is also positive and significant, providing support for Hypothesis 2. Companies with higher ESG performance are more likely to have CEOs who meet all their sustainability targets.

The negative coefficient of the explicit target variable indicates that such targets are less likely to be met or exceeded, potentially due to their greater transparency and accountability, which may increase the difficulty of attainment. Consistent with expectations, a higher number of sustainability targets reduces the likelihood of meeting them, highlighting the risk of

overloading performance schemes. The variable board independence do not exhibit statistically significant explanatory power in this model.

Table 12: Logistic regression

all_sus_metorexceeded	Coef.	St.Err.	p-value	Sig
all_fin_metorexceeded	1.134	.59	.054	*
ESG_score_diff	.21	.113	.062	*
targetnature_explicit	-1.208	.692	.081	*
Nbr_sus	-.668	.232	.004	***
Overall_sus_Weight	-1.103	3.023	.715	
BD_IND	.838	1.55	.589	
Lntotal_assets	-.08	.274	.772	
Industry_group	-.341	.432	.43	
country	-.176	.39	.652	
Constant	4.982	4.61	.28	

**** p<.01, ** p<.05, * p<.1*

ADDITIONAL TESTS

I conducted additional tests to examine the robustness of our results. First, I test the robustness of the findings by moving from a logistic regression model to a linear regression model. To do so, I replace the binary dependent variable with a continuous measure of target achievement *sus_achieved_score*. This variable captures the achievement level of sustainability targets in a more nuanced way, as it is calculated as the weighted proportion of achieved sustainability targets relative to their overall assigned weight. For example, if a company has two sustainability targets—one with a weight of 80% and another with a weight of 20%—and only the first is met, the variable takes a value of 0.80 (80%). I proceed with the same reasoning for financial targets, and I generate the variable *fin_achieved_score*.

The results remain consistent across the two model specifications for the first variable of interest *fin_achieved_score*, further supporting H1. However, the variable *ESG_score_diff*

becomes insignificant. Thus, adopting a dependent variable that captures in a more consistent and granular way the percentage achievement of sustainability targets does not lead us to similar results as in the main analysis, weakening the relationship between CEO sustainability performance e and ESG score of the company. See Table13.

Table 13: Linear regression

sus_achieved_score	Coef.	St.Err.	p-value	Sig
fin_achieved_score	.178	.08	.029	**
ESG_score_diff	.013	.009	.151	
targetnature_explicit	-.119	.065	.068	*
Nbr_sus	-.009	.023	.68	
Overall_sus_Weight	.361	.26	.169	
BD_IND	-.002	.148	.99	
Lntotal_assets	-.013	.025	.623	
Industry_group	-.012	.044	.779	
country	.032	.038	.4	
Constant	.904	.436	.041	**
R-squared	0.153	Number of obs	102	

**** p<.01, ** p<.05, * p<.1*

I further challenge the estimates of our independent variable of interest. I substitute the variable *ESG_score_diff*, which reflects the difference in ESG score, with the variable *E_score_diff* that reflects the difference only in E score (Model 1). As a second step I substitute it with the variable *S_score_diff* which reflects the difference in S score (Model 2). And finally with the variable *G_score_diff* that calculates the difference in G score (Model 3). This step was conducted to check if meeting all sustainability targets is more linked to a specific ESG aspect`s favorable performance than the other. The results do not hold further weakening the

relationship between CEO sustainability performance and the 3 ESG components of the ESGscore of the company. See Table 14.

Table 14: Logistic regression

all_sus_metorexceeded	Model (1)	Model (2)	Model (3)
all_fin_metorexceeded	1.136**	1.078*	1.57**
targetnature_explicit	-1.194*	-1.112	-1.133*
Nbr_sus	-.583***	-.664***	-0.626***
Overall_sus_Weight	-.649	.087	-1.328
BD_IND	1.206	1.342	0.753
Lntotal_assets	-.062	-.047	-0.88
Industry_group	-.343	-.325	-0.32
Country	-.079	-.089	-0.125
E_score_diff	.027		
S_score_diff		.39	
G_score_diff			0.052
Constant	3.817	3.542	.28

**** p<.01, ** p<.05, * p<.1*

CONCLUSION

This paper investigated whether sustainability targets embedded in CEOs' annual bonus plans in large companies across France, Germany, and Italy are easier to achieve than traditional financial targets. The analysis began with a qualitative examination of sustainability targets, focusing on their attributes such as content, weight, nature, and the stakeholder groups they address. This initial stage provided a comprehensive understanding of the structure and characteristics of sustainability-related incentives.

Subsequently, I collected data on the actual achievement of these targets and compared them with the achievement of financial targets. The results indicate that, within my sample, sustainability targets are indeed easier to achieve than their financial counterparts. These

results are consistent with prior research on the attainability of corporate targets, which suggests that sustainability targets can be structured in ways that increase the likelihood of their achievement compared to financial targets (Badawi & Bartlett, 2024; Lenihan & Brennan, 2023). Such findings align with the view that sustainability-linked compensation may serve a dual purpose: signaling a genuine commitment to sustainability or, alternatively, providing opportunities for managerial rent extraction (Aresu et al., 2023; García-Meca et al., 2025).

Building on this finding, the second part of the study employed quantitative analysis to identify the determinants of CEOs achieving or exceeding all their sustainability targets.

The results show that, after controlling industry-, country-, and company-level factors, the likelihood of a CEO meeting all sustainability targets is significantly higher in companies where the CEO also meets or exceeds all financial targets. Furthermore, the main analysis reveals a positive association between meeting all sustainability target and the company's ESG score difference. However, this relationship does not persist in additional tests, suggesting that CEOs' achievement of all sustainability targets may not necessarily translate into substantive improvements in companies' ESG performance.

We also observe notable cross-country differences. For instance, German companies in our sample exhibit higher achievement rates for sustainability targets, likely reflecting stronger stakeholder scrutiny and regulatory pressures, whereas Italian and German companies display greater variability, potentially due to differences in corporate governance structures, regulatory frameworks, and institutional enforcement mechanisms.

This study presents several important contributions to the literature on executive compensation and corporate governance by providing new insights into how companies design

incentive mechanisms to align CEOs' interests with those of broader stakeholder groups. Specifically, it extends the growing body of research on the integration of sustainability criteria into executive compensation (e.g., Aresu et al., 2023; Derchi et al., 2023; García-Meca et al., 2025; Ott & Endrikat, 2023), as well as the emerging literature that questions the nature and attainability of sustainability targets (Badawi & Bartlett, 2024; Lenihan & Brennan, 2023).

Beyond its theoretical implications, this study offers relevant insights for policymakers and stakeholders, particularly investors who are increasingly attentive to sustainability-linked compensation practices. The findings raise important concerns regarding the reliability and substantive meaning of corporate sustainability targets, and by extension, the credibility of CEO performance evaluations tied to such metrics.

Future research could expand upon these findings by examining a more international sample, including countries such as the United States, which operates under distinct corporate governance and regulatory frameworks. Additionally, future research could further examine the processes and actors involved in the design and evaluation of sustainability-linked remuneration. In particular, it would be valuable to assess the determinants of sustainability performance embedded in executive pay-setting processes, including CEO power dynamics, the independence of remuneration committees, and the involvement of external remuneration consultants.

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