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About this Report

This report explores the impact of science-based targets for companies worldwide. It presents findings from a survey of 171 companies that had validated science-based targets for at least two years, a literature review examining the business impacts of science-based targets, and three case studies showcasing how companies benefit from setting targets.





While public discourse questions climate commitment, many thousands of companies around the world continue to transform their operations and supply chains towards net-zero. This is clear in the data presented here, together with a wider evidence base. It makes good business sense to act now in order to manage transition risks and remain competitive in a carbon-constrained world.

At the Science Based Targets initiative (SBTi), we now work with 11,000 businesses in 86 territories, representing over 40% of global market capitalization.² And our network continues to grow: in the last 18 months the number of companies setting near-term targets has doubled and we have seen a more than threefold increase in those setting net-zero targets.

This report provides new evidence about why companies are setting targets and acting to reduce their carbon footprints.

Drawing on direct insights from companies in the SBTi ecosystem, alongside academic research and case studies, the report highlights key areas where companies see the benefit of such approaches: 91% report positive overall impacts, with the highest benefits in reputation (95%), strategic cohesion (80%), investor confidence (76%), and competitive positioning (67%). The report shows that in cutting emissions, climate leaders are starting to realise cost savings and stronger market positions.

These insights are consistent with a significant stack of broader research. Bain finds that companies can cut 25% of industrial emissions through actions that deliver positive returns, BCG shows that companies can obtain operating profitability gains of around 5% from sustainability initiatives, while research by Ecovadis suggests supply chain decarbonization returns of three to six times on investment.³

As the conversation around climate has evolved, the SBTi has been evolving with it. A decade ago, we emerged from the Paris Agreement as a catalyst for bold ambition. Today, we're focused on enabling climate action through the actionable translation of climate science. We're developing standards built for real-world application, practical tools that simplify complexity, and guidance that helps businesses navigate from climate ambition to action. All so companies worldwide can turn science-based climate action into a key strategic advantage.

If you're among the companies that have not yet set science-based targets, consider what validated targets could unlock for your business. Particularly if you have undertaken a Task Force on Climate-Related Financial Disclosures (TCFD) assessment and identified transition risks, we can support you in managing these and setting yourself up for success in the near term and beyond. The companies acting now are managing risks and unlocking opportunities to build competitive advantage in a carbon constrained world for decades to come.

This report provides new evidence about why companies are setting targets and acting to reduce their carbon footprints.



Photo by Ryoji Iwata on Unsplash

- 1. (Cooper & Hawkins, 2025; Bain & Company, 2025)
- 2. (SBTi, 2025)
- 3. (Bain & Company, 2025; BCG, 2025; EcoVadis, 2025)

EXECUTIVE SUMMARY

Introduction

Using findings from a survey of companies with validated science-based targets, a literature review of academic papers and reports, and three business case studies, this report finds that setting science-based targets has a positive impact on companies. Indeed, 91% of companies surveyed reported a very positive or somewhat positive impact on their organization overall. And while it is unsurprising that science-based targets have a positive impact on the pace or ambition of climate action, the report also finds that companies reported a positive impact across multiple other areas, including investor confidence, reputation, and strategy.

Strategy, supply chain alignment, and resilience against regulatory changes are positively impacted by having validated targets

8 in 10 businesses cite a positive impact on strategic cohesion and long-term vision as a result of having science-based targets. Three-quarters (74%) said targets have helped them align with supply chain and customer requirements, while two thirds (67%) reported a positive impact on their competitiveness compared to peers.

Improved resilience against future regulatory changes is highlighted by 72% of the surveyed companies, while academic studies report that companies with science-based targets experience lower stock price volatility, the hypothesis being that validated targets better prepares companies for future regulation (Guerrero-Escobar et al., 2025; Lüdemann & Radakovic 2025).

Academic studies report that companies with science-based targets experience lower stock price volatility, the hypothesis being that validated targets better prepares companies for future regulation.

Reputation and investor perceptions show the greatest positive impact

Science-based targets enhance how companies are seen by customers, investors, and peers, according to respondents. Almost all respondents (95%) report a positive reputational impact, and 80% say target setting strengthened investor perception and relations. Relatedly, a study suggests that being able to attract new investors is a contributing factor for why companies with science-based targets maintain healthy margins despite some seeing increased costs (Zhang, 2022).



91% of companies reporting that the overall impact of setting sciencebased targets on their organization was positive



95% of respondents report a positive reputational impact



80% of respondents say target setting strengthened investor perception and relations

Three in four (75%) respondents said that science-based targets had a positive impact on their credibility within their sectors and the wider business ecosystem. Many also reported enhanced relationships across key stakeholder groups: 69% said target setting improved their perception as a supplier, 67% noted a positive impact in consumer perception and brand trust, and more than half (56%) indicated that supply chain relations were positively impacted.

The financial rewards are nuanced but compelling – short term operational costs are contrasted by long term financial performance, with no negative impacts on profitability or margins

The financial benefits of setting science-based are broad and varied. Three in every four companies (76%) said that setting science-based targets had a positive impact on investor confidence. This aligns with recent findings from the European Central Bank indicating that European banks are pricing climate action into their lending decisions by offering better lending terms for those with emissions targets, with banks that have SBTi commitments offering 16 basis points more discounted interest rates compared to those with no commitments (Altavilla et al., 2024).

Recent findings from the European Central Bank indicate that European banks are pricing climate action into their lending decisions by offering better lending terms for those with emissions targets.

By every measure of the survey, respondents reported largely neutral or positive financial impacts from setting science-based targets, and these are complemented by other financially adjacent competitive factors, such as attractiveness to customers (69%) and consumers (67% – see reputation section). Academic studies also indicate that companies with science-based targets are better protected from market shocks and enjoy higher returns (Bendig et al., 2023).

Operating costs were the only area with any statistically significant downsides reported in the survey, with 31% of companies reporting negative impacts. However, studies show no negative impacts on gross margins or profitability (Zhang, 2022; J. Li et al., 2025), a result echoed by the companies surveyed, 92% of which reported overall neutral or positive impacts of science-based targets on long-term financial performance (41% positive). Early research suggests that companies with targets initially spend 60–64% more on climate initiatives annually in the short term, but this is estimated to result in future annual savings of 17-19% in CO₂ emissions and 22-33% in costs (Freiberg et al., 2021).

In short, the evidence shows that setting science-based targets strengthens financial resilience today while delivering measurable savings and value over time.

Company investment in climate initiatives is estimated to result in future annual savings of 17-19% in CO₂ emissions and 22-33% in costs.



75% of respondents said that science-based targets had a positive impact on their credibility within their sectors



76% of respondents said that setting science-based targets had a positive impact on investor confidence



92% of respondents reported overall neutral or positive impacts of science-based targets on long-term financial performance

All of the above: strong performance on emissions reductions underscore benefits on the aforementioned fronts

Strong cases on the effects of science-based target setting emerged from both the academic literature and the business survey. 90% of companies said that target-setting had positively impacted their climate ambition, whereas 86% reported a positive impact on their pace of decarbonization. This is supported by multiple studies that show that companies with validated targets are cutting emissions more than their peers. Across various studies, companies with targets, on average, reduce absolute and intensity emissions more than those without targets (Romito et al., 2024; Zhang, 2022; J. Li et al., 2025). This is most potent when validated targets are paired with externally assured emissions data (Berg et al., 2025).

In summary

As outlined in this report, there is increasing evidence that decarbonization is good for business and science-based target setting is an important step for many companies in embarking on their impactful, credible, net-zero journey. The findings of this report indicate a wide range of benefits from target-setting – an encouraging signal for companies to set targets and a call to action to those with validated targets to stay the course.

There is increasing evidence that decarbonization is good for business and science-based target setting is an important step for many companies in embarking on their impactful, credible, net-zero journey.



90% of companies said that target-setting had positively impacted their climate ambition



86% reported a positive impact on their pace of decarbonization



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INTRODUCTION

Global corporate climate action continues to build. The most recent *SBTi Trend Tracker* shows that, compared to the end of 2023, by the end of June 2025, the number of companies setting science-based targets grew 97%, while those with both near-term and net-zero targets increased by 227% (SBTi, 2025). Today, over 11,000 businesses worldwide have set or have committed to set SBTi-validated targets, accounting for more than 40% of global market capitalization and a quarter of global revenue.

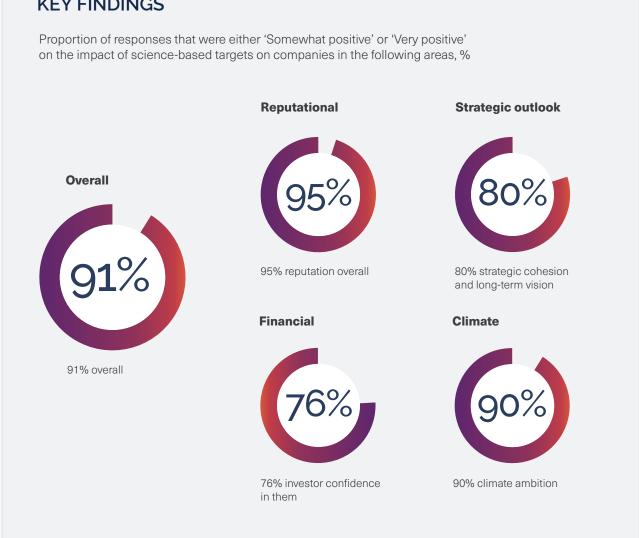
This report explores what having science-based targets means for companies worldwide based on a survey, a review of academic literature, and case studies. Overall, the report finds that there is a strong case for setting science-based targets to reduce greenhouse gas emissions and realize the business benefits that come along with it.

Today, over
11,000 businesses
worldwide have
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SBTi-validated
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for more than 40%
of global market
capitalization.

COMPANY SURVEY

As the number of companies with validated science-based targets has risen quickly over the last half decade, there is now a critical mass of companies that have been validated for more than two years - enough time to have felt many of the impacts of validation. In September-October 2025, the SBTi surveyed 171 companies to understand more about these impacts and how they affect different parts of their business.







i: The overall impact of science-based targets on businesses

Overwhelmingly positive impact

Companies overwhelmingly agreed that science-based targets were having a positive impact on their companies.

91% reported that science-based targets have had a positive overall impact on their company, with no companies reporting a negative impact.

95% of companies also said it had a very positive or positive reputational impact, and 32% said it had a very positive or positive financial impact, with 61% saying it had a neutral financial impact.

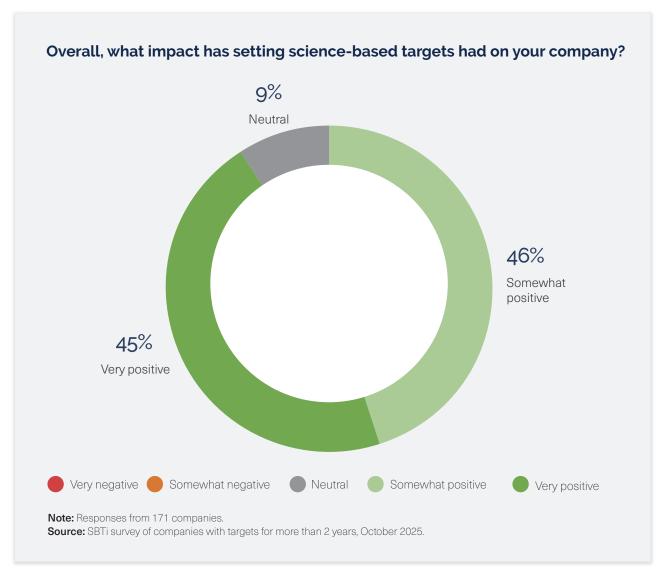
In addition, companies report positive or very positive impact for the following factors*:

90% 86%

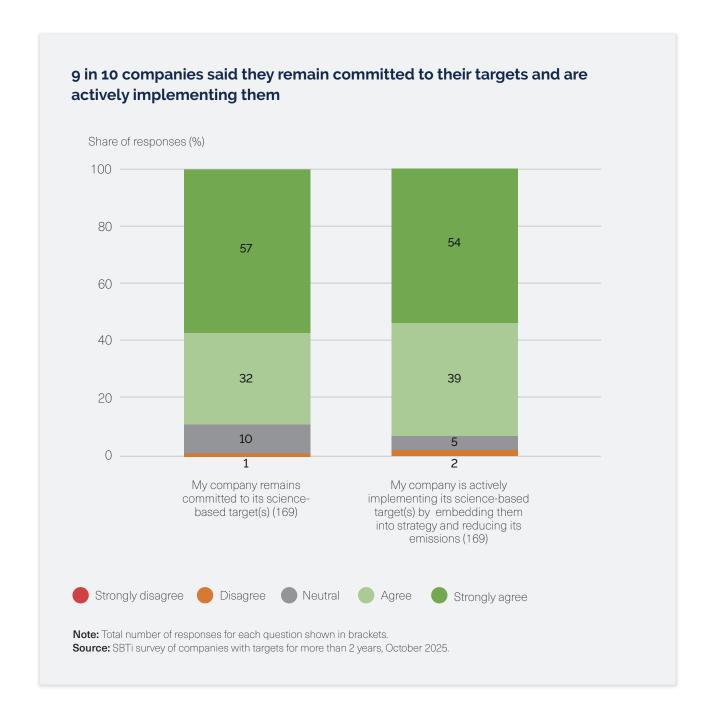
Climate ambition

climate action

On strategic



^{*}See subsequent sections



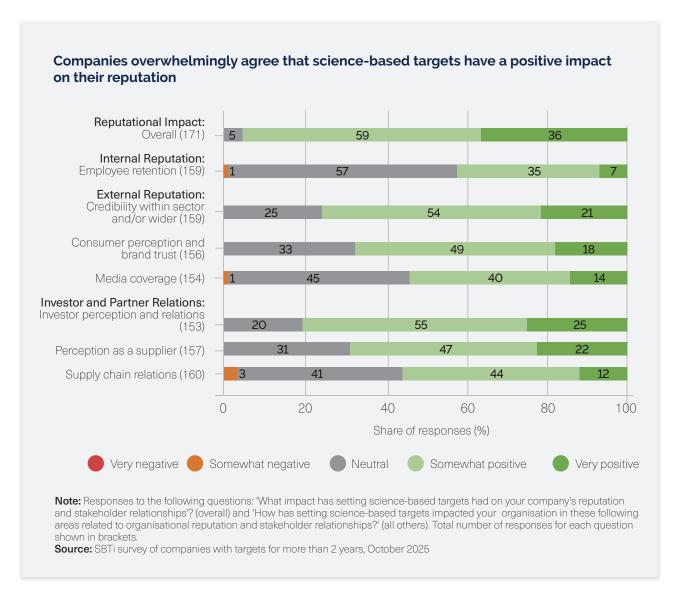
A significant majority of companies surveyed (89%) strongly agreed or agreed that their company remained committed to their science-based target. Over 9 in 10 companies surveyed (93%) strongly agreed or agreed that they were actively implementing their targets by embedding them into their strategy and reducing their emissions.

"Setting SBTi targets has been transformative for Lenovo. It has provided external validation of our decarbonization pathway, strengthening confidence among investors, customers, suppliers, and employees. Internally, it has helped us align our global teams under a clear, credible framework, accelerating collaboration across business units and regions. It reinforces that our sustainability strategy is not just aspirational, but measurable, accountable, and benchmarked against the latest climate science."

Ada Chávez, Sr. Engineer-Net-Zero Lead, Lenovo

ii: Impact of science-based targets across aspects of business

Companies report positive impacts across multiple areas of business



95% of companies said that setting science-based targets had a positive impact on their reputation and stakeholder relationships. 75% said setting a target had a positive impact with their credibility within the sector and/or wider ecosystem. Investor perception and relations also emerged particularly strongly, with 80% of respondents citing a positive impact as a result of setting targets.

In addition:

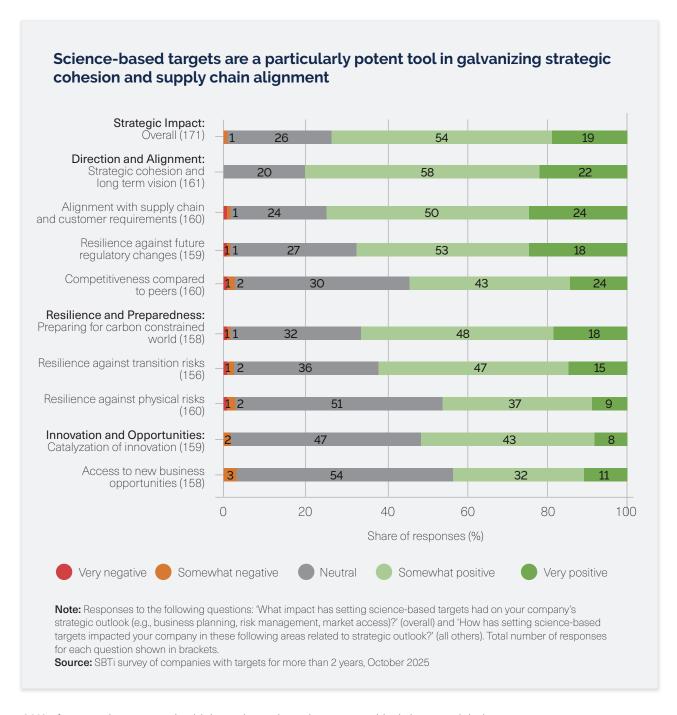
69%

Said setting targets had a positive impact on how they were perceived as a supplier **67**%

Saw a positive impact on consumer perception and brand trust

"Setting science-based targets has allowed us to foster a culture of innovation within our organization, as we continuously seek new ways to achieve our targets."

Marie Péray, Head of Climate and Environmental Sustainability, Sopra Steria



80% of companies surveyed said that science-based targets positively impacted their strategic cohesion and long-term vision, with 74% positively citing alignment with supply chains and customer requirements.

In addition:

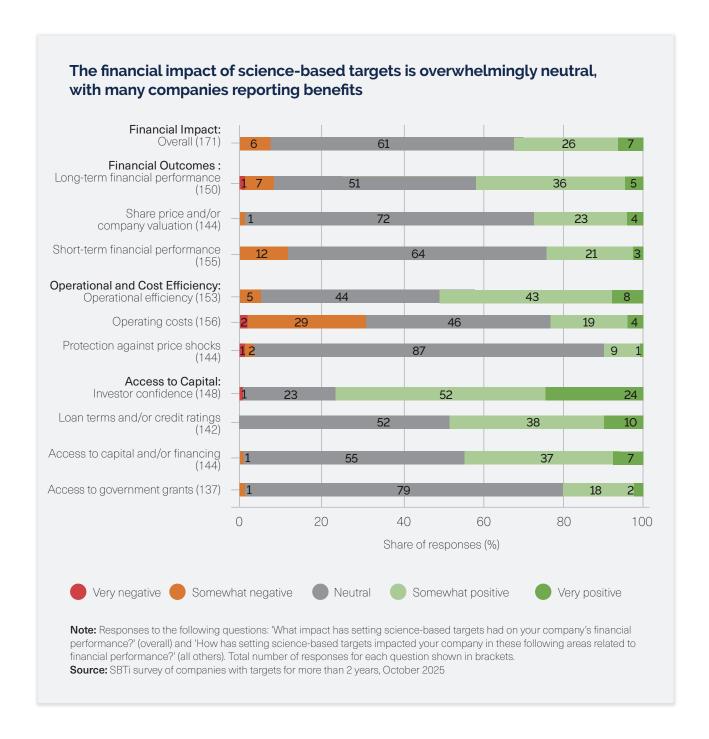
72% 6**7**% 66% 6**2**%

Noted a positive impact on resilience to future regulatory changes

Reported that setting targets improved their competitiveness compared to peers Saw benefits in preparing for a carbon-constrained economy

Cited greater resilience gainst transition risks, including social and economic shifts

"We recognize that climate change presents both a material risk and a strategic opportunity for The Economist Group. Setting a science-based target has helped guide our path from ambition to action." Emily Jackson, SVP Sustainability, The Economist Group



Three quarters of companies reported that science-based targets had a positive impact on investor confidence, with a neutral or positive impact on overall financial performance for the significant majority of companies.

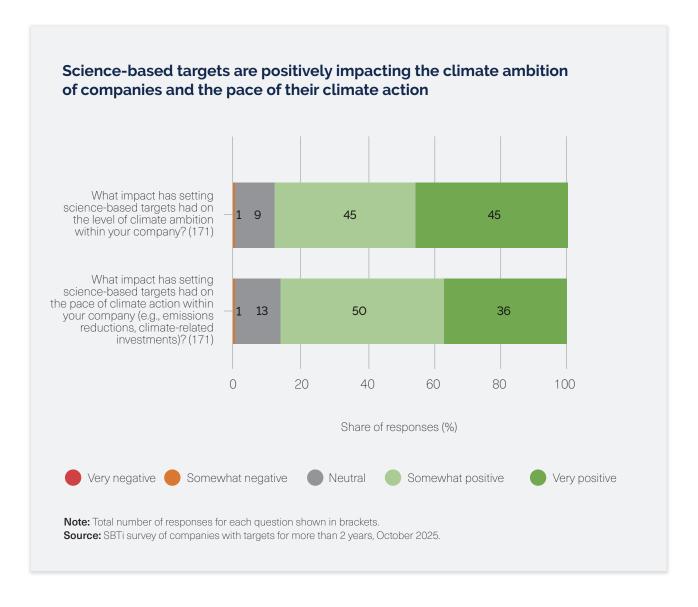
61% of respondents reported that setting science-based targets had a neutral impact on overall financial performance, with a third (32%) reporting a very positive or somewhat positive impact. 76% of respondents reported that setting targets had a positive or very positive impact on investor confidence in their company. While 31% reported a negative impact on operating costs, with 41% reporting a positive impact on long-term financial performance.

In addition:

27% 24%

id targets had Said there was a positive effect was a positive effect was a positive effect on a second said there was a positive effect on a second said there was a positive effect on a second said there was a positive effect on a second said there was a positive effect on a second said there was a positive effect on a second said there was a positive effect on a second said there was a positive effect.

Said targets had a positive effect on share price and/or company valuation, with 72% neutral Said there was a positive effect on shortterm financial performance, with 64% neutral



90% of respondents said that setting science-based targets had a positive impact on climate ambition in their company, while 86% said targets had a positive impact on the pace of climate action, such as with emissions reductions and climate-related investments.

"Applying to and validating our science-based targets has been the biggest accelerator of climate change action within the company."

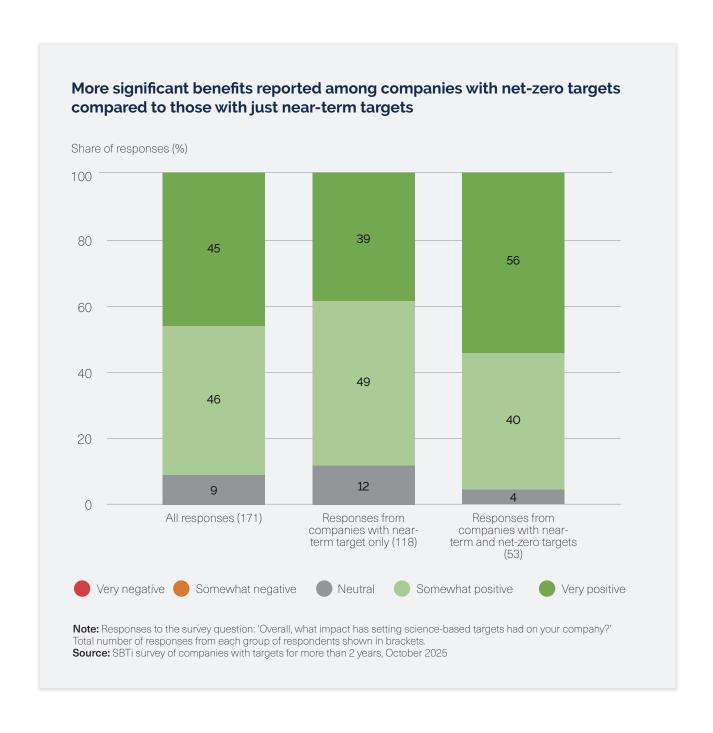
Mathieu Parfait, CSR Director, DIAM Group

iii: Influence of target type

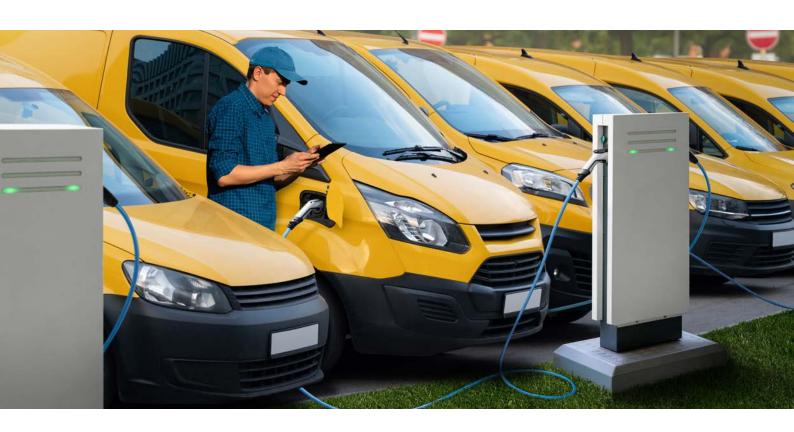
Target type influenced the perceived impacts

Companies with net-zero targets were more likely to report a greater positive impact on their businesses than those with near-term targets only.

96% of those with net-zero targets reported an overall positive impact of setting targets, compared to 88% of those with near-term targets. Companies with net-zero targets were significantly more likely to report a very positive impact of having science-based targets (56% vs 39%).







LITERATURE REVIEW

The rapid expansion of the number of companies setting SBTivalidated science-based targets has prompted researchers around the world to ask: what is the impact of science-based target setting on the climate and on companies?

To complement the survey of companies with validated targets, the SBTi has conducted a review of recent empirical studies, quasi-experimental papers, and large corporate analyses about the impacts of science-based target setting. It does not consider literature addressing methodologies or sector pathways. The review considered material published between 2021 and 2025, identifying 22 individual studies for inclusion. More details on the approach and the evidence base can be found in <u>Appendix A</u> and the <u>bibliography</u>.

The evidence indicated that companies enjoy a number of benefits when setting science-based targets that both include and extend beyond greenhouse gas emissions reduction. Below is a summary of the impacts that research has linked to science-based target setting, covering climate outcomes, market dynamics, company performance, and access to finance.

The evidence indicated that companies enjoy a number of benefits when setting science-based targets that both include and extend beyond greenhouse gas emissions reduction.



Climate impact

Consistent reduction of operational emissions

A growing body of evidence has demonstrated a strong correlation between science-based target setting and greenhouse gas emissions reductions. Research consistently showed that companies with science-based targets reduce their operational emissions faster than their targetless peers, with the most reliable reductions occurring when targets are validated by the SBTi and performance data is externally assured. However, obtaining reliable scope 3 data remains a significant barrier, making it difficult for researchers to assess progress.

Deeper greenhouse gas emissions reductions

Multiple studies showed that companies with validated targets are cutting emissions faster than their peers. The literature found that across a range of time periods studied, these companies consistently reduce absolute scopes 1 and 2 emissions and achieve lower carbon intensity compared with those without targets (J. Li et al., 2025; Romito et al., 2024; Zhang, 2022). For example, Zhang (2022) found that over the four years post validation, companies with targets reduced their absolute scopes 1 and 2 emissions by 5.3% more, and emissions intensity (relative to total sales) by 8.7% more, compared to companies without targets. A study by MSCi found that companies with validated net-zero targets are, on average, cutting their scope 1 emissions, while those without targets have seen them increase (Lee et al., 2025). Analysis of over 8,500 listed companies from 2018-2023 showed that companies with SBTi net-zero targets reduced their scope 1 emissions by a median of 0.5% per year, compared to a 4.3% increase in firms without targets, and a 0.2% increase among companies with self-declared net-zero targets.

A strengthening impact

While the median annual reduction of scope 1 emissions by companies with net-zero targets currently sits at 0.5%, research has shown that the effects of science-based targets strengthen over time. The evidence indicated that material decarbonization benefits usually emerge a few years following validation, reflecting long-term investment cycles (J. Li et al., 2025; Zhang, 2022).

Validation and assurance are key

Bolay et al. (2024) found that companies with ambitious climate targets made stronger progress when their targets were validated by the SBTi, while those without validation tended to advance less. Berg et al. (2025) demonstrated that the most reliable reductions are observed where emissions data is externally assured, highlighting assurance as a key signal of real-world abatement.

Limits and execution gaps

Ruiz Manuel & Blok (2023) found that emissions reductions of those with validated targets are significant, but can be concentrated among a few emission-intensive firms. Two studies found that a proportion of early adopters committing to or validating targets prior to 2019 were off-track on their targets (Bolton & Kacperczyk, 2023; Giesekam et al., 2021).

Scope 3 action lag

While firms with targets have made good progress on operational reductions in scopes 1 and 2, value chain (scope 3) decarbonization has been less strong thus far (Giesekam et al., 2021; Nicolajsen et al., 2025). Furthermore, cases have been identified where, in the short term, emissions intensity has risen (Q. Li, 2024). The data quality for scope 3 emissions remains a substantial problem and is making progress difficult to measure (Giesekam et al., 2021; Zhang, 2022).

Research consistently showed that companies with science-based targets reduce their operational emissions faster than their targetless peers.



Capital market effects

Improved resilience and lower stock volatility

Research has found that setting science-based targets provides several financial benefits. Not only do companies with validated targets enjoy better protection from crises and lower stock volatility, European firms with targets have been noted to receive better loan terms. The capital investment of early adopters of science-based targets are estimated to result in future annual savings of 17-19% and 22-33% in CO₂ and cost, respectively (Freiberg et al., 2021).

Improved protection in crises.

US companies with SBTi-validated targets showed higher crash-period returns and less severe losses during the 2020 stock market crash than those without validated targets (Ben-Amar et al., 2024).

Lower stock price volatility.

Several studies reported lower stock price volatility after target validation, even when average returns do not rise — possibly because science-based targets signal better preparedness for future regulatory changes (Guerrero-Escobar et al., 2025; Lüdemann & Radakovic, 2025).

Short-term stock impacts are limited.

Studies generally showed little to no immediate effect on stock returns when firms commit to or set science-based targets (Guerrero-Escobar et al., 2025; Ko & Prakash, 2024).

Long-term returns vary.

Dahlström et al. (2023) compared a portfolio of 1,518 companies with SBTi-validated targets to a matched control group without targets. They found that after validation companies with targets experienced higher stock returns, especially when accounting for risk and in high-emission industries. However, Pineda Pérez & Grijalvo (2025), based on a panel study of 4,000 companies, reported that target validation was associated with a negative impact on stock price. These competing results suggest that findings can vary significantly based on sample, sector, and analytical approach taken.





Corporate performance

Stable profits while cutting emissions

Targets may help secure internal investment.

Based on data up to 2019, setting science-based targets is linked to companies spending 60–64% more annually on climate-related initiatives, compared with firms that do not adopt targets (Freiberg et al., 2021). The study found that these investments, such as installing solar panels or shifting to electric vehicles, are expected to deliver, on average, future annual savings of 17–19% in $\rm CO_2$ emissions and 22–33% in costs, though exact savings will depend on the company and region they operate in.

No profitability penalty while emissions fall.

Two studies found that the adoption of targets and subsequent emissions reductions have no negative impact on gross margins or profitability (J. Li et al., 2025; Zhang, 2022). One study found that, despite increases in the cost of goods sold, companies with targets maintained their gross margins, possibly from boosted brand reputation, coupled with attracting investors and new customers (Zhang, 2022).

Lower emissions lead to higher returns. A study of 465 firms (2015–2020) found a positive association between emissions reductions and financial performance for companies with science-based targets in terms of return on assets and potential future gains (Bendig et al., 2023).

Two studies found that reducing emissions has no negative impact on gross margins or profitability.







Access to finance

Differentiated interest rates based on targets

Commitments shape bank lending terms. A recent European Central Bank empirical analysis indicated that European banks are incorporating climate risk into their lending terms. In particular, banks who have committed to set SBTi targets offer more discounted interest rates (by 16 basis points) to firms with declared emissions targets (including SBTi targets) and charge a greater premium to high emitters (by 2 basis points) than banks with no SBTi commitments (Altavilla et al., 2024).

Lending reallocation. SBTi-linked goals (commitments or validations) appear more influential than other frameworks in steering banks' sectoral lending away from high-carbon activities, although the impact varies and takes time to appear (Angelico & Bernardini, 2024).

SBTi-linked goals appear more influential than other frameworks in steering banks' sectoral lending away from high-carbon activities.

Summary of findings

Research into the impact of science-based targets is still at a relatively early stage, with a limited number of empirical studies available. While these studies provide valuable insights, they can be constrained by small or regionally-focused samples. Persistent challenges around the reliability and completeness of emissions data – particularly for scope 3 – further limit the precision of current findings. Nevertheless, emerging evidence points to key trends worthy of further investigation.

The evidence so far consistently shows that having science-based targets is associated with meaningful, firm-level emissions reductions, particularly when targets are externally validated and data is assured. Benefits accumulate over time rather than immediately, and progress on scope 3 remains the most significant hurdle for both companies and researchers. Evidence on financial outcomes of science-based target setting points to resilience in crises in certain contexts, cost savings from operational investments, reduced stock price volatility and – in some cases – positive risk-adjusted stock returns.

To strengthen these findings and expand on them, areas that are worthy of further investigation could include: longer-term studies of firm alignment against their science-based targets that include their scope 3 emissions; to what extent targets internally shape company behaviour and strategy on climate; better understanding of how targets shape stock returns over the long term; and empirical studies looking into how targets affect a company's reputation.

Although further research would be beneficial, the findings so far suggest that science-based targets can deliver both climate impact and business value.

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CASE STUDY: PAI Partners

Using science-based targets to drive portfolio value

Science-based targets have become a catalyst for business transformation across PAI Partners' portfolio, which spans 40 companies and has a combined €40 billion in sales. For the private equity firm, working with portfolio companies to set targets is not just about climate alignment – it is a strategy to strengthen long-term resilience, unlock commercial opportunities, and meet rapidly rising stakeholder expectations.

"Businesses that operate more efficiently and contribute to the global decarbonization agenda tend to be more resilient and drive lasting value creation for our investors and our stakeholders" said Denise Odaro, Head of Environmental, Social, and Governance (ESG) & Sustainability at PAI Partners. "For us, this is not just theory – we've seen this firsthand with our portfolio".

Rising stakeholder expectations demand credibility

That strategic value creation is increasingly linked to credibility. PAI Partners has observed a 56% increase in ESG-related investor requests between the first half of 2023 and the same period in 2024. This surge in stakeholder expectations underscores the demand for credible, sciencebacked climate commitments. Setting science-based targets has allowed PAI Partners and its portfolio companies to demonstrate that they are responding to these expectations with transparency, accountability, and actions rooted in the latest climate science.

Sustainability credentials as a competitive advantage

That market pressure extends beyond investors. In businessto-business (B2B) markets, sustainability credentials are becoming increasingly decisive in procurement processes. As Denise noted, "In B2B markets, you see the sustainability credentials influence procurement decisions... having SBTi, it's a gold standard". Portfolio companies with science-based targets are therefore better positioned to compete for commercial opportunities, especially in sectors where decarbonization plans are now expected in many requests for proposals.



Performance in action: SGD Pharma's decarbonization journey

This strategic edge is evident in the performance of several PAI-backed businesses. One standout example is SGD Pharma, which achieved a 17% absolute emissions reduction in just two years. The company will be rebuilding one of its furnaces in 2026 to shift its energy mix from 10% to 60% electricity, resulting in significant emissions savings. SGD Pharma has also trialled hydrogen as an alternative fuel source (which can replace 50% of natural gas requirements for this test site), engaged suppliers to strengthen sustainability practices, and expanded onsite renewable energy use in its operations. These measures are collectively strengthening both its environmental performance and its competitive positioning.

Embedding climate action into decision-making

Internally, setting targets has also helped improve governance across portfolio companies.
Climate action is no longer siloed within ESG teams; it involves procurement, finance, operations, and executive leadership, among others. As Denise noted, when climate action is embedded across teams, "You're really exemplifying the best governance you can have". With clear targets in place, companies are aligning decision-making across functions, guided by a shared climate objective.

Building preparedness for emerging regulations

This preparedness extends to regulation. With climate reporting, transition planning and standards becoming more rigorous across markets, companies with science-based targets are better positioned to respond. PAI Partners has developed tools to assess physical climate risks across the portfolio, helping companies anticipate and manage emerging pressures. The firm sees this as especially important in navigating the expanding scope of regulatory expectations across private markets.

For portfolio companies, the benefits of setting science-based targets are clear: they support increased trust from stakeholders, stronger positioning in procurement processes, reduced exposure to regulatory and reputational risks, and ultimately, a clearer path to long-term value creation. At PAI Partners, science-based targets are more than an ESG metric, they're a lever for performance, resilience, and growth.



CASE STUDY: HFINFKFN

Using Science-Based Targets as a North Star for Decarbonization

When HEINEKEN set its science-based targets in 2021, the company's goal was to ensure that its climate ambition was credible, measurable, and aligned with global climate goals. For HEINEKEN, having its targets validated by the SBTi meant translating ambition into a clear, science-based pathway toward reaching net zero across its value chain by 2040.

Turning ambition into a shared compass

Since HEINEKEN's science-based targets were validated, they have become unifying goals across the business. Sonia Thimmiah, Senior Director of Global Sustainability, said that "It's really helped set the north star to direct action across the business in terms of where we want to go". The targets brought structure and alignment to the company's work, turning climate goals into operational priorities and uniting teams behind a shared purpose.

Embedding targets into decision-making

Integrating these targets into core business functions has helped make climate action part of everyday decision-making. Collaboration between their supply chain, procurement, sustainability, and finance, ensures climate goals are an integral part of broader operational goals. This has enabled HEINEKEN to identify where emissions reductions can be achieved most cost effectively, and to focus efforts on where they will have the greatest overall impact.

Empowering suppliers to take action

Supplier engagement is a central element of HEINEKEN's efforts to meet its science-based targets.
HEINEKEN supports its suppliers to

reduce their carbon emissions by providing enabling mechanisms and clear expectations, from helping its partners build renewable energy expertise to requiring strategic suppliers to set their own science-based targets. This collaborative approach extends progress beyond the company's direct operations and supports a broader transformation across their value chain.

Collaboration, integration, prioritization: principles for change

Three principles continue to guide HEINEKEN's efforts to sustain progress over time: collaboration, integration, and prioritization. Collaboration ensures shared ownership across teams and the value chain. Integration embeds sustainability into how the business plans and performs. And prioritization keeps the focus on what matters most, ensuring resources create the greatest impact. Progress is not without challenges, but these principles provide a framework for navigating complexity and maintaining direction.

For HEINEKEN, these principles define how science-based targets work in practice: they turn ambition into structure, structure into action, and action into results. In 2024, this helped the company reduce its Scope 1 & 2 emissions by 34% against its 2022 baseline. As Sonia summed it up, "Don't let perfection get in the way of progress." It's a reminder that real transformation comes from steady, day-to-day progress, and that every step forward strengthens both the company's resilience and its ambition to reach its net zero goals.

"It's really helped set the north star to direct action across the business in terms of where we want to go."

Sonia Thimmiah, Senior Director of Global Sustainability, HEINEKEN





CASE STUDY: ReNew

Using science-based targets to align supply chains and strengthen resilience

"The targets have enabled us to share insights and best practices across our value chain – engaging suppliers and customers in climate action."

Vaishali Nigam Sinha, Co-founder and Chairperson, Sustainability, ReNew

ReNew is a leading Indian decarbonization solutions company, generating around 22,000 GWh of clean energy annually, powering more than 6 million households – equivalent to 9% of the country's total renewable power. Science-based targets have become a cornerstone of its climate strategy, providing a robust framework to turn ambition into measurable action. Its targets strengthen accountability, guide investment, and embed sustainability across the business.

Driving investment

Science-based targets have also strengthened investor confidence and expanded access to sustainable finance. ReNew's SBTi-validated net-zero target has contributed to strong Environmental, Social, and Governance (ESG) ratings and improved positioning with institutional investors, sustainabilitylinked lenders, and ESG-focused funds. "ReNew's adoption of science-based targets has been instrumental in streamlining our climate strategy, operationalizing decarbonization targets and enhancing investor confidence" Vaishali Sinha (Co-founder – ReNew and Chairperson Sustainability) explained. "With transparent and time-bound emission targets, we have positioned ourselves as an ESG pioneer amongst institutional investors and sustainability-linked lenders, globally."

Integrating science-based targets into procurement

The impact of ReNew's sciencebased targets extends well beyond its own operations. Like most companies, a significant share of its emissions lies within its supply chain, making supplier engagement and alignment a critical part of their decarbonization strategy. As Vaishali reflects, "More than just guiding our internal efforts, these targets have enabled us to share insights and best practices with our value chain partners - engaging and aligning them with our Net Zero commitment". Aligned with this, ReNew has made a public commitment to cascade its SBTi Net-Zero target across its supply chain, engaging suppliers in the journey toward decarbonization.

ReNew collaborates closely with its suppliers on their sustainability efforts and encourages them to set science-based targets - 23% of its critical supplier base, now has their own net-zero targets. At a company level, ESG parameters are embedded in supplier screening and selection process, creating a more transparent, responsible, and resilient supply chain. This not only supports ReNew's own emissions reductions but also strengthens its value chain engagement, mitigating procurement and operational risks, outcomes increasingly valued by customers and investors alike. Every year, ReNew assesses its suppliers

against E, S and G parameters, continuously monitoring risks and also upskilling them to meet marquee global benchmarks. For instance, during FY2024-25, ReNew assessed critical suppliers, covering about 91% of its Scope 3 emissions and supported them through targeted, individual Corrective Action Plans (CAP) including emission targets.

Strengthening resilience and managing risk

With many jurisdictions now mandating climate-related disclosures, including India's Business Responsibility and Sustainability Reporting (BRSR) framework, ReNew has found that science-based targets provide a structured framework for reporting emissions and providing reduction pathways. This helps them stay ahead of the regulatory curve, align themselves with national laws, as well as investor's expectations across the globe.

Leading the sector

ReNew's experience shows how integrating climate goals into governance, investment decisions, and supply chains can turn sustainability from aspiration into measurable business value. As Vaishali firmly believes, "Setting science-based targets has been a pivotal milestone for ReNew, serving as a strategic anchor in our decarbonization journey".





CONCLUSION

For companies worldwide, there is a clear case for climate action. This report shows that the benefits of science-based target setting are evident across businesses' climate impact, strategy, reputation, and finance – evidenced both by the survey data from companies with targets and independent research alike. Among survey respondents, reputation was the most positively cited impact of science-based targets (95% overall), however strategic and supply chain alignment (80% and 74% respectively) are also high-impact commercial areas – reiterated as key strengths by HEINEKEN and PAI Partners.

Despite a growing evidence base around the financial benefits of science-based target setting, further work on quantifying the long-term benefits for companies is needed. Current academic research indicates that there is no impact on gross margins, which is also reflected in the survey data that yielded many neutral responses. However, CO₂ and energy savings and reputational factors deserve further attention, and may provide companies with long-term, net-positive financial benefits.

This report provides a compelling case for optimism. The widespread evidence from companies and academic research alike shows that setting science-based targets delivers tangible benefits – both for the planet and for business performance. For companies weighing environmental responsibility against financial outcomes, the message is simple – they are not mutually exclusive but mutually reinforcing. The SBTi provides the tools, standards, and insights to drive profound corporate action across organizations and systems and the evidence is increasingly clear: decarbonization is good for business.

This report provides a compelling case for optimism. The widespread evidence from companies and academic research alike shows that setting science-based targets delivers tangible benefits – both for the planet and for business performance.



Bibliography

Altavilla, C., Boucinha, M., Pagano, M., & Polo, A. (2024). Climate risk, bank lending and monetary policy. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4918451

Angelico, C., & Bernardini, E. (2024). New facts on carbon pledges of European banks: amazing or a maze? https://doi.org/10.2139/ssrn.5018174

Bain & Company. (2025). The Visionary CEO's Guide to Sustainability 2025: The Power of Pragmatism. https://www.bain.com/globalassets/noindex/2025/bain_report_the_visionary_ceos_guide_to_sustainability_2025.pdf

BCG. (2025). Sustainability in Private Markets: How Staying the Course Creates Value. https://www.bcg.com/publications/2025/the-value-of-staying-sustainable-in-private-markets.

Ben-Amar, W., Comyns, B., & Martinez, I. (2024). Firm commitments on climate change: Effects of science-based targets on financial outcomes during the COVID-19 crisis. *Business Strategy and the Environment*, 33(8), 7768–7787.

Bendig, D., Wagner, A., & Lau, K. (2023). Does it pay to be science-based green? The impact of science-based emission-reduction targets on corporate financial performance. *Journal of Industrial Ecology*, 27(1), 125–140.

Berg, F., Huidobro, J. O., & Rigobon, R. (2025). On the Importance of Assurance in Carbon Accounting. *MIT Sloan Research Paper No. 6969-24*.

Bolay, A.-F., Bjørn, A., Patouillard, L., Weber, O., & Margni, M. (2024). What drives companies' progress on their emission reduction targets? *Journal of Cleaner Production*, 468(143124), 143124.

Bolton, P., & Kacperczyk, M. (2023). Firm Commitments. *NBER Working Paper Series*. http://www.nber.org/papers/w31244

Cooper, K., & Hawkins, N. (2025). "Constancy of Purpose" Under Pressure: An Observational Study Examining How Political Shifts Are Transforming Corporate Sustainability and DEI. Harvard University. https://ssrn.com/abstract=5292859

Dahlström, P., Lööf, H., Sahamkhadam, M., Stephan, A., & Lu, E. R. (2023). Science-based emission targets and risk-adjusted portfolio return: An analysis using global SBTi-validated stocks. *CESIS Electronic Working Paper Series*.

EcoVadis. (2025). *Carbon Action Report 2025*. https://resources.ecovadis.com/whitepapers/carbon-action-report-2025

Freiberg, D., Grewal, J., & Serafeim, G. (2021). Science-based carbon emissions targets. *Working Paper 21-108*. https://doi.org/10.2139/ssrn.3804530

Giesekam, J., Norman, J., Garvey, A., & Betts-Davies, S. (2021). Science-based targets: On target? *Sustainability, 13(4)*, 1657.

Guerrero-Escobar, S., Hernández-del-Valle, G., & Hernández-Vega, M. (2025). The stock market effects of committing and setting GHG targets: evidence from the science-based targets initiative. *Global Finance Journal*, 67(101165), 101165.

Kaspereit, T. (2025). A dynamic, survivorship bias-free view on Science-Based Targets: Research opportunities concerning private and listed firms. In *Climate Risks Reporting Practices and Assurance* (pp. 113–143). Emerald Publishing Limited.

Ko, I., & Prakash, A. (2024). Stock markets, corporate climate pledges, and the Science-Based Target Initiative. *Npj Climate Action*, 3(1). https://doi.org/10.1038/s44168-024-00148-8

Lee, L. E., Séné, T., & Vanston, S. (2025). *Transition Finance Tracker Q2*. MSCI Sustainability Institute.

Li, J., Peng, X., & Zhang, H. (2025). The role of science-based targets on carbon mitigation: Addressing the tension between net zero anxiety and economic growth. *The British Accounting Review*, 57(2), 101491.

Li, Q. (2024). The Illusion of Science-Based Targets in Tackling Scope 3 Emissions and Supply Chain Carbon Leakage. *Academy of Management Annual Meeting Proceedings*.

Nicolajsen, A. B., Bjørn, A., Mc Aloone, T. C., & Pigosso, D. C. A. (2025). Mind the gap: To what extent are Danish early adopters of science- based targets addressing impacts across their products' life cycles? *Proceedings of the 6th PLATE Conference (Product Lifetimes and the Environment)*.

Pineda Pérez, B., & Grijalvo, M. (2025). Corporate engagement with the Science Based Targets Initiative: Financial implications and key motivators. *ESIC MARKET Economic and Business Journal*, *56*(1), e332.

Romito, S., Vurro, C., & Pogutz, S. (2024). Joining multistakeholder initiatives to fight climate change: The environmental impact of corporate participation in the Science Based Targets initiative. *Business Strategy and the Environment*, 33(4), 2817–2831.

Ruiz Manuel, I., & Blok, K. (2023). Quantitative evaluation of large corporate climate action initiatives shows mixed progress in their first half-decade. *Nature Communications*, 14(1), 3487.

Lüdemann, Sven, and Matteo Radakovic. 2025. "Green Targets, Green Gains?: The Financial Implications of Adopting Science-Based Targets." Bachelor's thesis, University of Gothenburg.

Science Based Targets initiative. 2025. "SBTi Trend Tracker 2025." https://sciencebasedtargets.org/reports/sbti-trend-tracker-2025.

Zhang, H. (2022). The impact of science-based targets on GHG emissions and financial performance [Master's thesis]. Western Sydney University.

Appendix A: Methodologies

Survey methodology

The survey findings are based on companies' perceptions of the impact of science-based targets. The survey was conducted by the SBTi over a two-week period, from September 22 to October 6, 2025. Eligible corporates – those with a validated science-based target in place for more than two years – were contacted directly by email. This was supplemented by engagement via the SBTi's newsletter, social media channels, and follow-up communication by the SBTi's engagement team.

The survey was primarily quantitative and used a five-point Likert scale to assess companies' perceptions of the impact of science-based targets across four domains: climate, financial, strategic, and reputational. The list of questions that were analyzed and included in the report are shown in Appendix B. To make participation straightforward, not all questions were mandatory. As a result, response counts vary and do not always match the total number of valid respondents.

The survey resulted in 256 responses from companies, including financial institutions. Of these, 189 reported having science-based targets in place for more than two years. After validation against internal records, 171 responses were confirmed as meeting the survey's eligibility criteria.

Of the 171 valid responses, the vast majority came from corporates (95%) in high-income countries (92%), based on the World Bank classification. As a result, the survey findings largely reflect the perspectives of larger companies in high-income countries, which should be considered when interpreting the results.

When presenting the results, the percentage share of each selected response is shown (rounded to the nearest integer). The labelled percentages are rounded using the 'largest remainder' method to ensure they always sum to 100%.

European companies accounted for 63% of responses, followed by Asia (23%), and North America (9%). Latin America and the Caribbean, Oceania, Africa, and the Middle East contributed only nine responses in total. Due to the limited sample size, results from these regions were not interpreted separately, except as part of global trends.

Just over two-thirds of the companies surveyed had validated near-term targets (68%), while the remaining 32% had both a validated near-term target and a validated net-zero target. This distribution allowed for meaningful comparisons between the two groups in their responses.

Literature review methodology

A literature review was conducted on empirical literature published between 2021 and 2025, covering peer-reviewed studies, working papers, theses, and grey literature reports that empirically assess the outcomes of adopting or validating science-based targets. Literature addressing methodologies or sector pathways related to the SBTi was beyond the scope of this review and not included.

Academic publications were identified primarily through Google Scholar. While this may omit studies indexed only in specialist databases, Google Scholar was selected as an open-access platform that provides broad coverage across disciplines. The core search term was "science based targets", used alone and in combination with supplementary keywords (empirical, evidence, impact, outcome, change, effect, effectiveness). This targeted approach ensured direct relevance to the SBTi, though it may have excluded research using broader terminology such as "corporate climate commitments" or "net-zero targets." Searches were restricted to studies published from 2021 onward to capture more recent empirical findings and account for the time lag in peer-reviewed publishing. In addition, a recent book chapter by Kaspereit (2025), which reviewed a range of empirical studies on the SBTi's impact, was used to identify further relevant work not captured directly by the Google Scholar searches.

Main search term

· "science based targets"

Supplementary search terms (used in combination with the main search term)

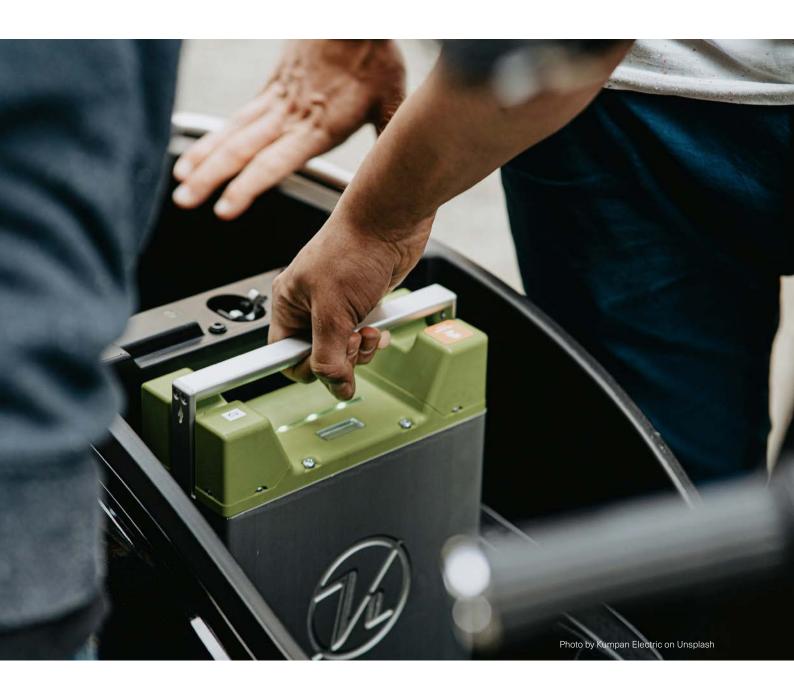
• empirical, evidence, impact, outcome, change, effect, effectiveness

Titles and abstracts were reviewed to generate an initial long list of 46 studies. This list was supplemented by relevant non-academic (grey literature) reports identified separately. Grey literature was added separately to capture practitioner insights not found in academic databases. Although this introduces a degree of selection bias, the intention was to broaden the evidence base, and the review was not designed to be fully systematic in nature.



Each study was subsequently assessed for its contribution to understanding the impacts of the SBTi, with a focus on company-level climate and financial outcomes. This process produced a refined evidence base of 22 studies. These span diverse methodologies with varying levels of robustness. Quasi-experimental approaches – including difference-in-differences and panel regression – compare adopters and non-adopters (e.g., Freiberg et al., 2021; Li et al., 2025; Pineda Pérez & Grijalvo, 2025; Zhang, 2022). Event-study methods

analyse market reactions to target adoption (e.g., Guerrero-Escobar et al., 2025; Ko & Prakash, 2024). Portfolio and matching approaches, such as coarsened exact matching, assess relative financial performance (e.g., Dahlström et al., 2023; Romito et al., 2024). The most robust studies apply rigorous matching to ensure comparability between adopters and non-adopters, strengthening causal inference on the effects of science-based targets.





Appendix B: Survey questions

This appendix includes the full set of survey questions used in the analysis and presented in the report. These comprise both direct questions and statements to which respondents were asked to indicate their level of agreement or perception, using predefined response scales ("Likert" scale). Note that not all questions that were asked were included in the report.

To what extent do you agree with the following statements?

- My company is actively implementing its science-based target(s) by embedding them into strategy and reducing its emissions.
- My company remains committed to its sciencebased target(s).

Overall, what impact has setting science-based targets had on your company?

What impact has setting science-based targets had on the level of climate ambition within your company?

What impact has setting science-based targets had on the pace of climate action within your company (e.g., emissions reductions, climate-related investments)?

What impact has setting science-based targets had on your company's financial performance?

How has setting science-based targets impacted your company in these following areas related to financial performance?

- Short-term financial performance
- · Long-term financial performance
- Share price and/or company valuation
- · Operating costs
- · Investor confidence
- · Loan terms and/or credit ratings
- · Access to capital and/or financing
- · Access to government grants
- · Protection against price shocks

What impact has setting science-based targets had on your company's strategic outlook (e.g., business planning, risk management, market access)?

How has setting science-based targets impacted your company in these following areas related to strategic outlook?

- Operational efficiency
- Strategic cohesion and long-term vision
- Resilience against future regulatory changes
- Resilience against physical risks (risks from direct impacts of climate change)
- Resilience against transition risks (risks from economic and social shift to low carbon economy)
- Competitiveness compared to peers
- Alignment with supply chain and customer requirements
- · Catalyzation of innovation
- · Access to new business opportunities
- · Preparing for carbon constrained world

What impact has setting science-based targets had on your company's reputation and stakeholder relationships?

How has setting science-based targets impacted your organisation in these following areas related to organisational reputation and stakeholder relationships?

- Employee retention
- · Consumer perception and brand trust
- Investor perception and relations
- Media coverage
- Credibility within sector and/or wider ecosystem
- · Supply chain relations
- · Perception as a supplier



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