2025 Climate Action Plan Close Out: Engagement Effectiveness

Norges Bank Investment Management

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Introduction

The goal of Norges Bank Investment Management is to generate the highest financial returns, within the management mandate laid down by the Ministry of Finance. As a long-term and globally diversified financial investor, our returns depend on sustainable economic, environmental and social development, as well as on well-functioning, legitimate and efficient markets. Accordingly, the management mandate specifies that our responsible investment activities shall be based on the long-term goal that portfolio companies organise their activities to be compatible with global net zero emissions in accordance with the Paris Agreement.

To implement this mandate provision, we published our 2025 Climate Action Plan in 2022. Engagement with our portfolio companies for better climate management stands at the core of this plan. As an engaged shareholder, we believe we can support meaningful change in portfolio companies through constructive dialogue about their climate strategies and by sharing our perspectives on climate risk and opportunity management. This study seeks to evaluate the effectiveness of these climate engagements.

Our approach builds on the academic literature on ESG engagement and its effectiveness that we are aware of, which indicates that investor engagement on ESG issues can lead to positive changes in corporate behaviour. Dimson et al. (2015) find that successful ESG engagements led to positive abnormal returns. Barko et al. (2022) show that targeted companies significantly improved their ESG ratings following engagement. Hoepner et al. (2024) further find that engagement reduced downside risk, particularly for environmental and governance issues. More recently, Derrien et al. (2024) find that climate risk engagements increase the adoption of science-based targets and climate disclosure, though emissions reductions remain limited to scope 1 and 2.

However, establishing direct causality between specific investor actions and corporate changes remains methodologically challenging due to the multiple concurrent influences on corporate decision-making. Companies operate within complex stakeholder ecosystems, receiving signals from investors, regulators, customers, and civil society organisations while simultaneously responding to evolving market conditions and regulatory frameworks. This multifaceted environment makes identifying the impact of individual shareholder engagement complex.

Despite these attribution challenges, our investment stewardship managers' practical experience supports these academic findings. They observe that well-structured dialogues with portfolio companies may influence changes to company practices.

We attempted to evaluate the effectiveness of the fund's climate engagements carried out under the 2025 Climate Action Plan, using a quantitative approach based on our internal engagement data and publicly available metrics. We conduct three separate, but complementary analyses. First, we use an Al-powered approach to analyse the frequency and quality of climate-related discussions in our company meetings, aiming to assess whether our engagement process has

systematically improved over time. Second, we evaluate the effectiveness of our engagements based on our internal outcome reporting, with the goal to assess our success in communicating expectations and influencing corporate practices. Third, we assess the impact of our engagements by comparing net zero target adoption between engaged and non-engaged companies. While our net zero engagements encompass discussions on many elements of companies' climate strategy and disclosures, including decarbonisation pathways, governance structures, risk management, and transition planning, in the third part of the analysis we focus on targets for methodological reasons. We use net zero target adoption as a concrete, publicly available indicator of climate change management, allowing for external verification of engagement developments. To provide practical context, we complement these analyses with a case study of a net zero engagement.

Analysis 1: Al-enhanced meeting note analysis

1.1 Methodology

Company meetings form the foundation of our engagement strategy, serving as important touchpoints to exchange information, gather insights, and provide guidance on best practices. Our dataset comprises 31,971 meetings conducted between 2015 and 2024 across our portfolio. Portfolio managers and investment stewardship managers document these discussions through detailed notes uploaded to our document repository system.

To obtain systematic insights from these meetings notes into the frequency and quality of climate-related discussions, we apply an Al-powered analytical framework using Large Language Models (LLMs). We run 10 models and average their outputs to mitigate LLM hallucinations. The models are relatively flexible in their quality assessments, as they are not constrained by rigid scoring criteria and use a general prompt. Each of the 10 LLM models analyses each meeting note independently providing information on:

- Topic presence: Binary classification (present/absent)
- Quality score: Quantitative discussion score of the topic (0-1 scale)
- Qualitative assessment: Explanatory rationale for scoring decisions

Topics are classified as present when their average presence score across all LLMs exceeds 0.5.

Although no specific quality score criteria are provided to the models as an input, analysis of the LLM outputs reveals consistent scoring patterns that align with the following criteria (derived from Al analysis of all samples).

TABLE 1: Quality score criteria based on the outputs of the LLM

Quality Score	Characteristics
0.0 - 0.3	 Minimal or superficial mentions No substantive discussion or details Awareness of climate risks but no strategic depth
0.3 - 0.6	 Some relevant mentions but limited depth Basic environmental considerations without comprehensive strategies
0.6 - 0.8	 Substantive discussion with specific initiatives Clear targets and commitments mentioned Strategic planning evident but may lack detailed implementation
0.8 - 1.0	 Comprehensive, in-depth climate discussions Specific targets, timelines, and detailed strategies Clear alignment with frameworks (Paris Agreement, net zero) Evidence of concrete action plans and advocacy

The scoring reflects depth of climate change engagement, from mere mentions to comprehensive strategic discussions with actionable plans.

We took a number of steps to address limitations of our analytical approach. While notes are taken by different note takers, our tests indicate that this variation in their note-taking style does not have a major effect on the scoring. Analysts from the Environmental team compared a sample of meeting notes with their respective Al-generated quality scores, confirming that the assessments were reasonable.

To further validate the AI approach, we compared LLM climate tagging with manual classification by note takers for 2018-2024. The methods showed strong overall agreement. When we reviewed individual meeting notes that were classified differently, we found variation between note takers in applying thresholds for what constituted climate-related discussion. The LLM approach provides more neutral and consistent classification, so we use it for the following analysis. A remaining limitation is that we base our analysis on written meeting notes since transcripts do not exist, and we assume that meeting notes are representative of the actual discussions.

1.2 Analysis results

From 2015 to 2024, we find 5,899 meetings addressing climate topics based on our Al analysis. We observe a substantial increase from seven percent of meetings discussing climate in 2015 to over 30 percent in 2021, before stabilising in recent years as shown in Figure 1. Of these meetings, 86% were conducted solely by portfolio managers, while the Environmental team participated in the remaining 14% of meetings. The majority of meeting notes were therefore written by portfolio managers.

¹A major concern when relying on individual analysts' notes is potential variation in how each analyst expresses themselves. To test this hypothesis, we subtracted each analyst's mean score and found similar results to those obtained previously.



FIGURE 1: Climate tagging of meeting notes

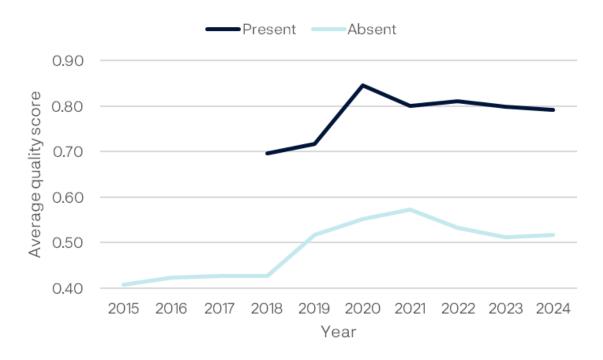
These climate discussions cover 1,126 unique companies across all sectors, with the highest concentration in carbon-intensive industries where climate considerations are most material. While we engaged with the largest number of companies in the industrials sector (245 companies), the sectors with the largest share of climate meetings were utilities, energy, and basic materials. In these high-impact sectors, climate became increasingly prevalent as a discussion topic by 2024, rising to around 90 percent of meetings with utilities companies, 80 percent of meetings with energy companies, and 60 percent of meetings with basic materials companies. This concentration reflects our strategic focus on engaging companies where climate risks and opportunities are most material to their business models.

Based on our analysis from 2015 to 2024, we observe an increase in the quality of discussions from 2018 onwards, with scores stabilising after 2020. 2018 was the first full year the fund had an ownership team with specialist expertise to support portfolio managers in assessing environmental aspects of our portfolio companies.

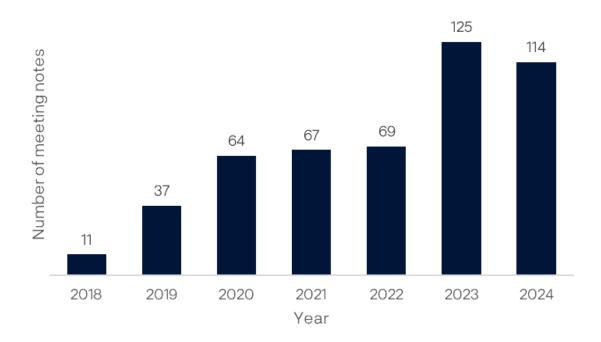
Our quality analysis distinguishes between meetings where analysts from the Environmental team participated and where they were absent. Meetings with Environmental team members have an average quality score 30 percentage points higher. While this could reflect the team's specialised contributions and the importance of the interactions between analysts from the Environmental team and portfolio managers, we acknowledge the possibility of a selection effect, as the Environmental team does not attend all company meetings.

FIGURE 2: Quality of climate meetings

(a) Average quality score by Environmental team presence



(b) Number of high-quality discussions by environmental team (quality score 0.8+)



While average quality levels remained stable in recent years, the absolute number of high-quality meetings with Environmental team participation increased significantly (Figure 2b). This occurred despite no change in the average quality score, which means that the Environmental team members must also have participated in more low-quality meetings. This appears consistent with the strategy to have dedicated net zero dialogues with in-depth discussions but also to more fully integrate climate risk across all meetings.

Analysis 2 - Self-reported engagement outcomes

2. 1 Engagement data

A core component of the fund's 2025 Climate Action Plan was to engage with the highest emitters in the equity portfolio on their plans for achieving net zero emissions by 2050. We included these high-emitting companies on a focus list. The list includes the top 70 percent of financed scope 1 and scope 2 emissions from the companies in the equity portfolio, our largest investments in sectors with significant indirect exposure to climate risk, plus a smaller number of companies with elevated climate risk based on proprietary assessments. We engage these companies through so-called net zero dialogues, in depth discussions on companies' climate management.

Our analysis shows that our engagement universe is significantly different from the list of companies engaged by Climate Action 100+, the largest collaborative investor engagement initiative with more than 600 members. Of the 252 companies we engaged as part of our net zero engagements considered here, only 65 were also engaged by Climate Action 100+ (27 percent overlap). Of these, 24 ranked in the top 70th percentile of our financed emissions. This limited overlap reflects distinct methodological approaches. We prioritise companies for engagement based on their contribution to our own carbon footprint, while Climate Action 100+ targets the world's largest emitters regardless of how much investors own of each company.

The 253 net zero engagements in this analysis started between 12th October 2021 and 31st July 2025, comprising 867 individual objectives across multiple companies and sectors. These engagements follow a systematic approach, with dialogues initiated simultaneously for all companies within each specific industry. The sample covers net zero dialogues across 10 distinct industries shown in Figure 3.

Figure 3 shows the number of net zero dialogues started by year. The initiative began in October 2021 with the first cohort of companies in energy, followed by a gradual expansion across sectors. The majority of dialogues were initiated in 2023, with the most recent industry-wide engagement launched in June 2024. Given that these engagements typically span multiple years, many dialogues remain active and ongoing (93 percent of the engagements).

The sectoral composition of our net zero engagements reflects a focus on carbon-intensive industries. Basic materials and industrials companies represent the largest share at 44 percent, aligning with these sectors' substantial emissions footprints. Utilities, energy, and consumer companies collectively represent 39 percent of engagements.

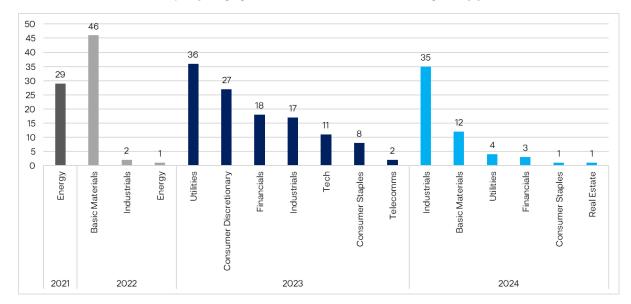


FIGURE 3: Number of company engagements started on net zero targets by year and sector

North American and European companies each comprise approximately one-third of the engaged companies. Asian companies constitute 26 percent of engagements, recognizing the region's growing importance in global emissions, while the remaining engagements span companies across other regions.

We systematically track engagements and outcomes through an engagement-tracking platform. Engagements are logged at company-level and consist of multiple objectives. Objectives are categorised into four distinct types:

- Convey: Communication of expectations (e.g., communicate our 2025 climate action plan and expectations)
- Relate: Relationship building and dialogue establishment (e.g., re-establish contact with company on climate topics)
- Understand: Information gathering and assessment (e.g., understand approach to climate and trajectory of climate strategy)
- Impact: Achieving measurable changes in corporate behaviour (e.g., encourage company to commit to net zero by 2050 or sooner, improved disclosures, clarification of strategy, or strengthening board accountability mechanisms)

2.2 Engagement outcomes and company characteristics

Across our engagement objectives, we achieved an overall success rate of 58 percent, combining outcomes classified as fully successful and partially successful. While 24 percent of objectives are currently classified as 'too early to assess', 16 percent show no progress. Recognizing the multi-year nature of climate engagements, we anticipate that many of these objectives may still be achieved as our dialogues continue to develop.

As shown in Figure 4, we observe high success rates in convey, relate, and understand objectives. Impact objectives show different results and lower immediate success, with a larger share of objectives logged as too early to assess. This could be driven by convey, relate, and understand objectives being more achievable, and/or impact objectives taking longer given many engagements are not yet concluded.

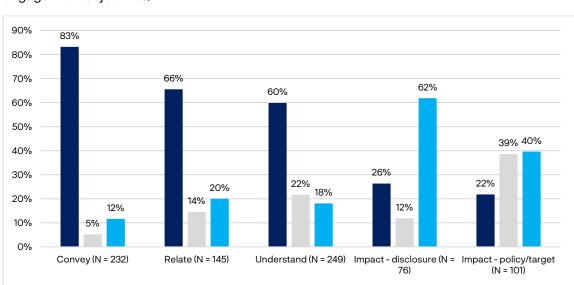


FIGURE 4: Engagement objective types and their associated outcomes (N = no. of unique engagement objectives)

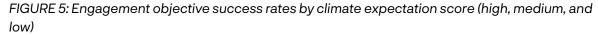
We examine various company characteristics to understand differences in engagement outcomes. As a first dimension, we investigated whether a company's current climate management quality influences engagement success. To do this, we distinguished companies based on their climate expectation scores, which systematically assess the extent to which companies meet our expectations on managing and disclosing climate risks and opportunities.

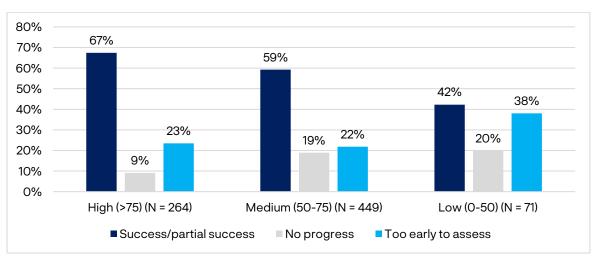
■ No progress

■Too early to assess

■Success/partial success

Our scoring framework evaluated companies against expectations on topics such as transition plans, net zero targets, board oversight, and emissions disclosure. We find that companies with higher climate expectation scores demonstrate superior engagement outcomes. This suggests that companies already progressing on climate and exhibiting strong climate risk-management may be more receptive to further improvement. In subsequent analyses, we explore additional company characteristics to provide a more comprehensive understanding of engagement effectiveness.





When analysing engagement outcomes by market capitalisation (Figure 6), we observe a clear differentiation in success rates. Large-cap companies demonstrate a 62 percent engagement objective success rate, compared to 31 percent for small-cap. Small-cap companies also show a higher proportion of objectives with no progress (28 percent) compared to large-cap companies (15 percent).

This variation in performance could be attributed to differences in resources and/or differences in regional sustainability standards. It could also be a result of the cumulative pressure faced by large-cap companies from multiple investors engaging on similar issues, amplifying the impact of our engagement efforts. Notably, market capitalisation is positively correlated with climate expectation scores—40 percent of large-cap engaged companies fall into the high expectation score category, while only eight percent are in the low score bucket. Therefore, the observed differences may partially reflect the same underlying factors of organisational capability and climate management sophistication.

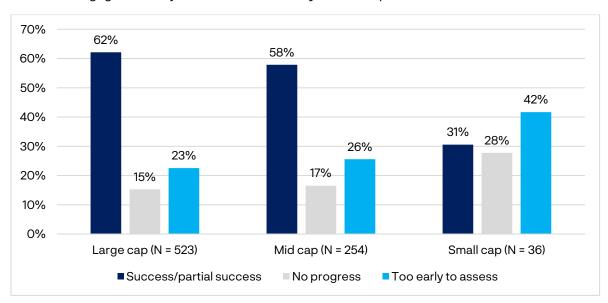


FIGURE 6: Engagement objective success rates by market capitalisation

Note: large cap refers to companies with a market capitalisation exceeding \$10 billion, mid cap to companies between \$2 billion and \$10 billion, and small cap to companies with a market capitalisation below \$2 billion.

Across sectors with a significant number of objectives, we observe consistent engagement success rates between 54 and 68 percent. The technology sector stands out as an exception, with a notably lower 29 percent success rate. In most sectors, we make progress on nearly all objectives, with less than 15 percent showing no advancement on average—except for technology (46 percent no progress). When focusing specifically on impact objectives related to policy, targets, or disclosure, we see the strongest outcomes in consumer staples, basic materials, financial, and energy sectors.

Case study: steel sector net zero engagement

To illustrate how our net zero engagements can translate into concrete outcomes, we present a case study of our engagement with a major North American steel producer included on our climate focus list.



Prior to our 2025 Climate action plan, we had engaged with the company for several years as part of our thematic "low carbon transition in the steel industry" engagement. While the company had established emissions reduction targets, it lacked a comprehensive net zero commitment aligned with the goals of the Paris agreement and a detailed transition plan.

Following the publication of our Climate action plan, we deepened our engagement through a structured approach. In September 2023 we shared our plan and explicitly communicated our expectation for net zero alignment by 2050, requesting a dedicated meeting to discuss their climate strategy. For the next two months we maintained persistent outreach through multiple communication attempts. Days before the scheduled meeting, the company announced comprehensive climate commitments including a net zero target, updated interim emissions reduction targets, and a detailed transition plan.

In the time since, we have continued regular engagement to monitor implementation progress and maintain constructive dialogue. The case demonstrates how sustained, strategic engagement can influence corporate climate commitments. The company's decision to develop not just a net zero target, but also interim targets and a transition plan, aligns precisely with the comprehensive

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approach we advocate in our engagements.

Analysis 3: Net zero target impact assessment

3.1 Attribution challenge

Measuring the impact of engagement presents significant methodological challenges. Companies operate in dynamic environments influenced by multiple factors including regulatory changes, competition, market conditions, and engagement from other investors. Without appropriate control groups, it becomes difficult to isolate the specific contribution of our engagement activities from these confounding influences.

To attempt to address this attribution challenge, we conduct comparative analyses of net zero target adoption between engaged companies and two carefully constructed control groups. This approach enables us to estimate the incremental impact of our engagement by comparing

outcomes between similar companies that we engaged with on climate issues and those we did not.

3.2 Outcome variable selection

While we engage on many elements of companies' climate strategy and disclosures, we select net zero target adoption as our primary outcome variable for several reasons. Net zero commitments represent concrete, observable corporate actions that can be tracked systematically across companies and time periods. Net zero targets are recognised by many investors, regulators, and stakeholders as credible measures of corporate climate ambition. They may serve as leading indicators of substantive climate action, signalling corporate intent to align with global climate objectives before operational changes fully materialise. Furthermore, the binary nature of target adoption (either a company has adopted such targets or has not) provides clear measurement criteria, reducing subjective interpretation challenges inherent in other engagement outcomes.

We define target uptake as the commitment of science-based targets validated by either the Science Based Targets initiative (SBTi) or classified as credible net zero commitments by NBIM's internal criteria (i.e., the target needs to include a minimum 90 percent reduction in emissions by 2050). Again, we do this for methodological reasons in order to accurately identify developments, not because this is what our engagements with companies are exclusively targeting. We are specifically not prescriptive in our asks of companies; our starting point is that the companies need to adequately govern, measure, address and disclose their climate-related financial risks and opportunities. Our analysis identifies companies without targets prior to engagement commencement and monitors subsequent target establishment using consistent time-based methodology across both groups.

3.3 Matching methodology

Treatment group

Our treatment group comprises companies engaged on net zero dialogues as described in the Section 2. We exclude companies that had already established net zero targets prior to the fund's engagement, retaining only those companies without such commitments at the time engagement activities began. We further exclude companies with insufficient data for comparative analysis. After applying these criteria, our final sample contains 59 treated companies, of which 17 percent maintain overlap with the Climate Action 100+ initiative. These companies represent a diverse range of industries, with the largest concentrations in industrials (18 companies) and basic materials (17 companies), followed by energy (13 companies), utilities (six companies), consumer discretionary (four companies), and financials (one company). 12 of the treated companies were engaged from 2021 (October), 14 from 2022 (September), 16 from 2023 (47 percent in Q2, 33 percent in Q3, and 20 percent in Q4), and 17 from 2024 (all in Q2).

Control group 1: propensity score matched companies

The definition of peer companies is critical to control for company characteristics that affect both the likelihood of being engaged by us and subsequent target-setting decisions. Previous academic studies commonly use size and industry classification as matching characteristics because of their fundamental relations to corporate behaviour and performance (Dimson et al., 2015; Barko et al., 2022). However, recent literature suggests that selecting control companies based on additional characteristics beyond basic company attributes could reduce potential

² Another potential outcome variable would be corporate emissions to see whether improved climate management also translated into declining corporate emissions. However, given that we consider the climate action plan period with many engagements in 2023, we lack reported corporate emissions data for a sufficient number of years post-engagement.

biases in assessing treatment effects from differences in companies' underlying climate risk profiles and emission patterns (Dyck et al., 2019; Flammer et. al, 2021).

For the construction of control 1, we only consider companies within the fund's investment universe that operate in the same industry and country as the treatment companies, eliminating any country-specific or industry-specific factors that may affect target-setting behaviour. We also make sure that control companies were neither NBIM engagement targets nor on the NBIM climate focus list during the research period. In addition, we match companies based on emissions measured as the natural logarithm of combined scope 1 and scope 2 emissions, and size as the natural logarithm of total assets³. Both emissions and size are measured in the year preceding the engagement date for treated firms. The control companies should not have a net zero target before the engagement date of the treated company (e.g. for October 2021 engaged firms, control companies are selected from those without net zero targets as of end September 2021).

We apply propensity score matching using the nearest neighbour approach to select from the control group the company with the closest propensity score to each treated company. The propensity score is estimated using a logistic regression model incorporating all matching covariates. We implement one-to-one matching without replacement to ensure each control company is used only once, resulting in a final matched sample of 59 control companies (7 percent were also engaged by Climate Action 100+).

Control group 2: financed emissions

To provide an additional benchmark and test the robustness of our findings, we construct a second control group based on financed emissions. We rank all portfolio companies by their contribution to the fund's total financed emissions (scope 1 and 2). Companies are then prioritised for engagement based on this ranking, with those representing the largest climate risk - collectively accounting for 70% of the fund's financed emissions - selected for our climate focus list. Thus, companies that are just beyond the 70% threshold would have almost been considered for engagement. We therefore form a control from companies in the 70-77.5% of portfolio financed scope 1 and 2 emissions. This specific range was chosen as it is very close to the 70% cutoff and yields a similar number of observations to the treatment group from companies across a number of different industries. This control group approach complements the propensity score matching approach of control group 1 as it focuses directly on financed emissions that is the main determinant in identifying companies for engagement.

More specifically, we select all companies that were in the 70-77.5% percentage range of the portfolio financed scope 1 and 2 emissions in 2020. This gives 127 companies. We then exclude companies that had a prior engagement history with the fund to make sure there is no engagement effect (112 remaining), we exclude companies that were due to other climate considerations on the climate focus list (97 remaining), and removed any company that already had a science-based net zero target by September 2021, leaving us with 55 companies.

Ideally, for this approach, we would have started engaging with a similar number of companies in October 2021, so the companies in the treatment group and in control group 2 would get the same time to set targets. However, we only started engaging 12 companies from October 2021 with more engagements starting over the next three years. For engagements to take effect, the length of time

³ Our matching procedure uses only Scope 1 and 2 emissions, as these are more consistently reported and directly controlled by companies.

⁴ A smaller number of companies are added to the Climate focus list, for example, due to high exposure to physical climate risk.

the interactions with a company last, matters. In addition, the number of companies setting targets by year is not increasing linearly but there is year-on-year variation.

In our attempt to address this problem, we decided to construct three different variations of control 2:

- Control group 2a (April 2023): 46 companies without credible net zero targets by April 2023. This date was calculated to ensure that companies in treatment and control group had equivalent time to adopt targets. We subtracted the average engagement duration (783 days) of companies in the treatment group from our analysis end date (May 2025) to set April 2023 as the cutoff date, counting how many companies in this control group set targets between April 2023 and May 2025. The difference between 55 and 46 companies represents companies that set targets already before April 2023 and are thus excluded.
- Control group 2b (January 2023): 48 companies without credible net zero targets by the start of 2023. The difference to 55 again represents companies that set targets before January 2023.
- Control group 2c (October 2021): 55 companies without credible net zero targets when our first net zero engagement with 12 companies began.

3.4 Analysis Results

Figure 9 reports the differences in net zero target adoption between engaged companies and control groups. Among the 59 engaged companies, 17 percent committed to net zero targets postengagement by NBIM, while control group 1, also consisting of 59 companies, sees only seven percent adopt net zero targets over the same observation period. For control group 2, the pattern varies across the subgroups: control group 2c shows 16 percent adoption, control group 2b shows four percent adoption, and control group 2a shows two percent adoption.

The treated group shows higher net zero adoption rates compared to all control groups. This variation across control groups highlights the importance of using multiple matching approaches to assess the robustness of engagement effects. The difference between the treated group and control groups adoption rates suggests that fund engagement may play a role in encouraging companies to establish net zero commitments, noting that the majority of companies considered in this sample did not set net zero targets over the investigation period. Cumulative net zero target adoption rates between 2021 and 2025 for the treatment group and all control groups is shown in the Appendix (Figure 10).

⁵ We examined engagement impacts on emissions using difference-in-differences methodology, comparing 59 treated firms against control group 1. However, our treatment group may be too small for robust estimation, particularly given limited post-engagement corporate emissions data—approximately half of engagements began in 2023, providing only one year of post-treatment observations. These temporal and sample size constraints prevent definitive causal conclusions about engagement's impact on emissions at this stage, though we observe positive trends.

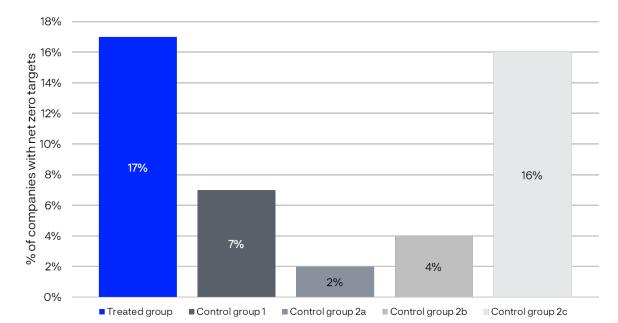


FIGURE 9: Net zero target adoption by group, 2021-25

3.5 Methodological Considerations

Our approach uses two different control groups to strengthen analysis and test robustness, a clear outcome variable (net zero target adoption), and follows clear, systematic selection criteria to minimise bias. However, we acknowledge that the analysis has several limitations.

Attribution challenges mean we cannot definitively isolate our engagement effects from other influences, including regulatory pressures, peer investor engagement, or competitive dynamics. As described in section 2.1, our set of engaged companies differs significantly from that of Climate Action 100+. This can give us some confidence that our analysis indeed captures some effects that are linked to our engagement. That said, we and other investors aim to identify the companies with the largest financial risks associated with climate change, so it is likely that companies with elevated climate risks are engaged by a number of their investors on the issue.

Despite taking care in composing the control groups with different methodologies, residual differences between treatment and control groups in industry composition, geographic distribution, or other uncaptured characteristics may contribute to observed variations. Finally, the temporal scope of our analysis captures a limited time window, potentially missing longer-term impacts or delayed corporate responses to engagement.

Conclusion

Through three complementary analyses, we discuss the evolution, quality, and effectiveness of our climate engagements.

Our Al-based analysis indicates a growth in company meetings where climate issues were discussed, rising from seven percent of meetings in 2015 to over 20 percent in 2024. Our method also indicates an increased quality of these dialogues over time. Our systematic tracking of engagement outcomes shows high success rates for relationship-building and information-gathering objectives (60-83 percent). Impact objectives appear more challenging, with 22 to 26 percent marked as successful. Our analysis suggests that larger companies and those with stronger existing climate frameworks show greater receptiveness to engagement.

Our comparative analysis provides quantitative indication of impact. While the majority of companies did not adopt climate targets in the investigation period, engaged companies seem more likely to set net zero targets than non-engaged companies. While we cannot prove direct causation due to methodological limitations and results are based on observing a relatively small sample of companies, this difference holds across multiple control groups that are similar across multiple dimensions with the engaged companies.

It is crucial to emphasise that identifying the effects of investor engagement on companies remains inherently complex and challenging. Our internal research indicates that historically better climate management translated to lower emissions over time; however, this relationship will not be consistent across all companies or time periods.

Our evaluation suggests that company engagement can play a role in improving companies' climate management and potentially accelerating corporate climate commitments beyond general market trends. These findings support the strategic approach outlined in our 2025 Climate Action Plan while highlighting areas for continued refinement. The insights gained from this analysis will inform our future engagement strategies, helping us focus resources on where they can contribute most effectively to portfolio-wide decarbonisation and climate risk management.

References

Barko, T., Cremers, M., & Renneboog, L. (2022). Shareholder engagement on environmental, social, and governance performance. *Journal of Business Ethics*, 180, 777-812

Derrien, F., Garel, A., Romec, A., & Zhou, F. (2024). Climate risk engagements. Available at SSRN: https://ssrn.com/abstract=5051906 or http://dx.doi.org/10.2139/ssrn.5051906

Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics*, 131(3), 693-714

Dimson, E., Karakaş, O., & Li, X. (2015). Active ownership. The Review of Financial Studies, 28(12), 3225-3268

Flammer, C. (2021). Corporate green bonds. Journal of Financial Economics, 142(2), 499-516.

Hoepner, A. G., Oikonomou, I., Sautner, Z., Starks, L. T., & Zhou, X. (2024). ESG shareholder engagement and downside risk. *Review of Finance*, 28(2), 483-510

Appendix

Figure 10: Cumulative net zero target adoption rates for treated and control group companies

