



Network for Studies on Pensions, Aging and Retirement

# Private Shareholder Engagements on Material ESG Issues

Rob Bauer, Jeroen Derwall, Colin Tissen

**NETSPAR ACADEMIC SERIES**

DP 08/2022-045

# Private Shareholder Engagements on Material ESG Issues

Rob Bauer\*

Jeroen Derwall<sup>†</sup>

Colin Tissen<sup>‡</sup>

This version: August 2022<sup>§</sup>

## ABSTRACT

We study private shareholder engagements with 2,465 publicly listed firms from 2007 to 2020 about environmental, social, and governance (ESG) issues. We examine to what extent private engagements address financially material ESG issues and contribute to firm performance. We find that around 75% of engagements are financially material and that targets of successful material engagements significantly outperform their peers by 2.5% over the next 14 months. Further, we find that material engagements are more often significantly associated with improvements in profitability, sales, and cost ratios than immaterial engagements. Finally, our evidence indicates that a decrease in CO<sub>2</sub>e intensity accompanies environmental engagements but that total CO<sub>2</sub>e emissions are unaffected.

---

\*Maastricht University, ICPM Toronto and European Center for Sustainable Finance (ECCE): r.bauer@maastrichtuniversity.nl

<sup>†</sup>Maastricht University, European Center for Sustainable Finance (ECCE), and Utrecht University: j.derwall@maastrichtuniversity.nl

<sup>‡</sup>**Corresponding author**, Maastricht University, Tongersestraat 53, 6211LM, Maastricht, The Netherlands: c.tissen@maastrichtuniversity.nl

<sup>§</sup>We thank Heiko Lin and Yannick Laux for their research assistance. We also thank participants of the Maastricht University and Utrecht University seminar series for their comments. We obtained financial support from Columbia Threadneedle Investments UK International Limited for hiring the research assistants, who are affiliated with Maastricht University. Maastricht University licenses the SASB Standards.

# 1. Introduction

In this paper, we use the most extensive global sample of private environmental, social, and governance (ESG) engagements in empirical research to date and examine the effect of financially material engagements on the stock market, accounting, and ESG performance of targeted firms. Institutional investors increasingly engage with portfolio companies on ESG issues. Using letters, calls, physical meetings, public statements, or votes on shareholder proposals, investors ask for improvements in firms' ESG policies. For example, by way of the Climate Action 100+ initiative, investors engage with firms producing more than 80% of the global industrial emissions to encourage them to reduce greenhouse gas emissions and improve corporate disclosure (Climate Action 100+, 2022). Previous research findings indicate that such shareholder engagements are a reliable mechanism for investors to affect ESG policies relative to other methods, such as capital allocation (Kölbel, Heeb, Paetzold, & Busch, 2020).

However, to what extent can the addressed ESG issues in engagements affect near-term costs and future payoffs? In this paper, we are the first to distinguish between financially material and immaterial private ESG engagements using the Sustainability Accounting Standards Board (SASB) and MSCI Standards. We focus on private engagements (i.e., calls, letters, meetings) instead of public engagements (i.e., filing and voting on shareholder proposals) because regulation limits the depth of shareholder proposals. We find that between 74.8% and 86.7% of private engagements in our sample are financially material, which is much higher than the 34% to 44% for public engagements (Grewal, Serafeim, & Yoon, 2016; Schopohl, 2017; Bauer, Derwall, & Tissen, 2022).

Investors need to know the consequences of their engagement efforts on target firms' performance. Because data on private ESG engagements are challenging to obtain, the academic research on this critical question is limited. The most well-known empirical study of private engagements is the work by Dimson, Karakaş, and Li (2015), who cover a 1999-2009 US sample, while Barko, Cremers, and Renneboog (2021) study a more recent global sample. The asset manager Columbia Threadneedle Investments UK International Limited (formerly traded as BMO Global Asset Management EMEA), that collaborated with Dimson et al. (2015) has provided us with data on its 2007-2020 corporate engagements that cover a wide range of ESG issues.<sup>1</sup>

The breadth of topics covered and the detailed descriptions of the engagements allow us to

distinguish financially material from immaterial engagements. We find that 19.9% of engagements lead to success and that material engagements are between 2.3 (MSCI) and 6.4 (SASB) percentage points more likely to succeed than immaterial engagements. Our finding that material engagements are more often successful indicates that target firms, to some extent, can recognize which engagements are financially relevant.

How do firms that experience engagements perform subsequently? To answer this question, we first study the stock market performance of targeted firms relative to their peer group after the engagement. Firms in this peer group are in the same MSCI industry, country, and within-industry size quartile as the targeted firm. We find that firms targeted by successful material engagements significantly outperform peers by 2.5% over the following 14 months (i.e., the median time it takes to reach success). However, when distinguishing between engagement topics, outperformance is only statistically significant for successful material governance engagements. In contrast, firms experiencing material engagements without a recorded milestone outperform peer firms by 0.19% over the same period, but this outperformance is not statistically significant.

After adjusting returns for risk using a market model, we find positive and significant outperformance following material engagements, regardless of whether the engagement has a recorded milestone or not. The average cumulative risk- and peer-adjusted abnormal returns in the 14 months after a *material* engagement are 2.4% (environment), 6.0% (social), and 2.3% (governance), whilst the abnormal returns of *immaterial* engagements are not statistically significant. Therefore, we contribute to the empirical research showing that materiality matters: positive financially material ESG news leads to positive share price reactions (Serafeim & Yoon, 2022) and a portfolio of firms with good ratings on financially material ESG issues outperforms a portfolio of firms with poor ratings on such issues (Khan, 2019).

Next, we test whether engagements are associated with changes in accounting measures of performance, costs, and expenditures. We find a 3.8% decrease in operating expenses over assets and a 16.7% decrease in R&D expenses over sales after governance engagements. In terms of return on equity (ROE), target firms report a 13.8% (1.72 percentage points) higher ROE after governance engagements relative to peers. We also find an improvement in ROE (+20.1%/2.85 pp) for social engagements, which can potentially be explained by a 5.5% increase in sales and a 16.2% (19.5%) decrease in capex (R&D) over sales. Next, firms targeted by environmental engagements

spend 11.3% and 9.3% more on capex and R&D after engagement than peers, but do not report a higher ROE. Importantly, we find that material engagements have a stronger effect on accounting performance than immaterial engagements.

Further, we find significant improvements in the MSCI ESG score and the environmental score of target firms. On average, successful engagements are associated with a 3.8% (3.4%) increase in the target firm's MSCI ESG (ENV) score in the years after being targeted, relative to peer firms. Next to ESG scores, we find that environmental engagements are associated with a 12.4% decrease in CO<sub>2</sub>e intensity (emissions divided by sales) after engagement, relative to peers. This effect is stronger when the engagement specifically addresses corporate emissions (-24.6%). However, in contrast to reductions in emission intensity, the total level of CO<sub>2</sub>e emissions does not significantly change.

Our findings have several implications for investors. First, we find that material ESG engagements are associated with improvements in accounting and stock market performance and are more likely to reach a milestone than immaterial engagements. Hence, active owners should make materiality salient when engaging with portfolio firms. Second, we find that target firms have a higher ESG score and lower CO<sub>2</sub>e emission intensity after engagement relative to peers. To the extent that ESG scores are a proxy for a firm's sustainability, our results indicate that ESG engagements can improve the non-financial performance of target firms. Finally, our paper provides a detailed framework that explains how individual engagement activities can be mapped to the SASB and MSCI materiality standards. This data structure allows investors to examine their engagements' effects quantitatively and improve their client reporting.

## **2. Determining the Materiality of ESG Engagements**

Not all ESG issues are financially relevant to each firm. For example, water management is important to a beverage company but might not affect the financial performance of a car manufacturer. Literature outside the field of shareholder engagement indicates that material ESG issues can affect performance and returns more than immaterial ESG issues. For example, firms with good ratings on financially material issues outperform firms with poor ratings, while firms that score well on financially immaterial issues do not (Khan, Serafeim, & Yoon, 2015; Khan, 2019).

However, when looking at research on public engagements in the US, many shareholder proposals are immaterial (Grewal et al., 2016; Schopohl, 2017; Bauer et al., 2022).

We study private engagements because investors are much more likely to privately engage than to file a shareholder proposal (McCahery, Sautner, & Starks, 2016; Krueger, Sautner, & Starks, 2020), and little is known about the materiality of private ESG engagements. Dimson et al. (2015) study a US sample of private engagements using the same asset manager as our study; while Barko et al. (2021), Dimson, Karakaş, and Li (2021) and Hoepner, Oikonomou, Sautner, Starks, and Zhou (2022) study global private engagements by other asset managers and investor networks. These studies do not distinguish between material and immaterial ESG engagements.

The question remains to what extent are private ESG engagements material and whether material engagements have stronger effects on the performance of targeted firms than immaterial engagements. Determining the materiality of an engagement is an essential first step to answering this question. We use the materiality frameworks developed by the Sustainability Accounting Standards Board (SASB) and MSCI to identify material ESG topics by industry.

## **2.1. Materiality Frameworks**

SASB is an independent organization that establishes 77 industry-specific disclosure standards to guide the disclosure of financially material sustainability information by firms to their investors. They argue that information about how firms manage material ESG factors helps investors understand near-term costs and the probability that the effective management of these factors will pay off in the long term. These long-term improvements can result from improved efficiency, reduced operating expenses, enhanced reputation, greater resilience to risks, and an enhanced competitive advantage (SASB, 2020).

In order to develop its disclosure standards, SASB engages in ongoing evidence-based research and consultation with market participants and industry experts. The results of this process are summarized in the SASB Standards<sup>®</sup> (Value Reporting Foundation. All Rights Reserved. 2021). These standards surface sustainability information which is reasonably likely to affect the financial performance of a firm in a specific industry and cover 26 general issue categories in five dimensions: environment, social capital, human capital, business model and innovation, and leadership and governance.

In addition to SASB, we use the materiality map that MSCI ESG Research developed as a foundation for their firm-level ESG ratings. MSCI's ESG ratings measure firms' resilience to long-term financially material ESG risks. MSCI identifies key (material) issues per industry by examining which risks can lead to substantial costs and which opportunities firms in an industry could benefit from. They identify these issues using a quantitative model that captures externalized effects such as carbon intensity, water intensity, and injury rates (MSCI, 2022).

We use both the SASB Materiality Map and the MSCI Industry Materiality Map because each framework has its own merits. Empirical studies have established the SASB framework as a measure for the financial materiality of ESG factors (i.e., Khan, 2019; Flammer, 2021), but we have no access to firm-level ESG ratings that are based on the SASB taxonomy. The advantage of MSCI's materiality framework is that it underpins their firm-level ESG ratings and subratings that we use it when studying the relationship between engagements and firms' ESG performance. Hence, in this paper, we use both SASB and MSCI to determine the materiality of each engagement, but we rely on the MSCI classification when delving into ESG subtopics.

## **2.2. Mapping Engagements to the Materiality Frameworks**

The private engagement data come from Columbia Threadneedle Investments UK International Limited (hereafter CTI) and contains the engagements belonging to their own assets and their responsible engagement overlay (reo<sup>®</sup>) service. This service has a global client base of external investors representing €1,007bn of assets under engagement as of 31/3/22.<sup>2</sup>

The data contains 25,122 engagement activities and 4,080 milestones from 2007 to 2020. We know the company name, engagement date, and a summary of the engagement content for each engagement activity. Moreover, the engagement data comprise the topic category (e.g., climate change or human rights), the method used (e.g., phone call or letter), whether there were other investor participants, and the leadership level addressed. Successes at target firms, such as improved disclosures, targets, and policies, are marked as "milestones". The milestone data comprise the company name, milestone date, milestone contents, and the milestone topic category.

We need to make two adjustments to the data structure. First, the original data do not connect engagements to milestones. Milestones can result from all aspects of public and private engagements. We examine only private engagements and link them to the milestones directly in order to

examine the engagement's success. Second, although the original data contain a topic classification, it is not sufficiently detailed to determine the materiality of engagements. For each engagement, we studied CTI's comprehensive engagement summary and manually determined whether the engagement corresponded with a material ESG topic, as identified by SASB and MSCI.

We performed the following tasks to do so.<sup>3</sup> First, we determined the SASB and MSCI topics discussed in each engagement based on the description.<sup>4</sup> When the engagement description did not contain sufficient detail, we removed it from our sample. Moreover, if multiple topics were discussed, we duplicated the engagement entry for each topic. Based on this classification, we created engagement sequences that comprised sets of engagements and milestones on the same SASB/MSCI topic targeting the same firm over time. The end of a sequence occurred when CTI reached a milestone. For example, say that CTI sent a letter on workforce diversity to a target firm and followed it up with a meeting. Three months later, the target firm publishes a report on workforce diversity. These two engagement activities (letter and meeting) and the milestone (disclosure) form a sequence. After this milestone, a new sequence starts if the investor targets the same firm with another workforce diversity engagement.

It is important to understand that the SASB and MSCI topics do not relate one-to-one. For example, when the asset manager engages a car manufacturer on carbon emissions, this engagement is part of the "environment" category (product carbon footprint) for MSCI, but the "business model & innovation" category (product design & lifecycle management) for SASB. Our classification also depends on the industry of the target firm. For instance, engagements on animal welfare are classified as "product design & lifecycle management" for meat, poultry, and dairy producers and as "supply chain management" for food retailers and restaurants.

After the data processing and ensuring that the target firm is covered by MSCI ESG, we end up with 7,415 sequences containing 12,727 engagement contacts and 1,476 milestones. Hereafter, we refer to sequences as engagements. Most of the engagements in our sample target European (38.36%), North American (34.40%), and Asian (19.83%) firms; while the remaining engagements cover Oceania, South America, and Africa (Figure 1).

### 3. The Materiality and Success of ESG Engagements

How often do private ESG engagements address material topics? Panel B of Table 1 shows that 74.77% of engagements are material if we evaluate them with the SASB framework. Traditional governance topics (i.e., board independence, board size, and CEO-chairman separation) are not covered by SASB, but we deem them material for all industries. Beyond these governance topics, engagements on environmental issues (70.55%), business model & innovation (67.58%), and social capital (63.76%) are material most often. In contrast, engagements on leadership & governance (53.68%) and human capital (43.31%) are least likely to be material following the SASB standards. The picture looks slightly different in Table 2 when examining the breakdown by MSCI topic; it shows that 83.31% of environmental, 70.53% of social, and 100% of governance engagements are material.

In Table 3, we report the percentage of successful engagements by topic and SASB/MSCI materiality. We find that material engagements are 6.39 percentage points (pp) more likely to succeed than immaterial engagements when using the SASB framework (success rates of 21.52% versus 15.13%) and 2.34 pp when using the MSCI framework (19.77% versus 17.43%). Both differences are statistically significant at the 1% level. Materiality is most important for governance engagement because immaterial engagements are 10.05 pp less likely to succeed than material engagements. For social engagements, our results indicate a positive effect of materiality on success between 3.71 and 5.93 pp. Further, material environmental engagements are 5.15 pp more likely (SASB) and 3.77 pp *less* likely (MSCI) to succeed than immaterial engagements. The differences in topic classification can potentially explain this result; some engagements that are part of the “environment” category of MSCI are in the “business model & innovation” (governance) category of SASB. Since the negative effect of materiality on the success of environmental engagements following MSCI is only significant at the 10% level, while all positive effects are significant at the 5% or 1% level, we conclude that there is a positive effect of materiality on the success of private ESG engagements.

Table 4 indicates the important determinants of engagement success other than materiality. In Panel (A), we observe that the success rate has gone down over time. However, engagements in later years can be ongoing and, therefore, still become successful. We can also conclude that the target firm’s industry matters for engagement success (Panel B). Engagements targeting the

“extractives & minerals” and “health care” industries are most likely to lead to success, while firms in the “transportation” and “resource transformation” industries are the least responsive. Although surprisingly engagements targeting “extractives & minerals” firms most often succeed, the successes often concern disclosure or target setting rather than actual changes in performance.

Engagement characteristics are also a crucial determinant of success. In Panel (C), we show that engagements containing only one contact are very unlikely to succeed (1.45%), while the success rate of engagements containing multiple contacts is much higher (44.16%). Moreover, engagements with below-median intensity (i.e., primarily emails or letters) are 15.65 percentage points less likely to reach a milestone than engagements with above-median intensity (i.e., primarily calls or physical meetings). Another form of intensity, the number of investor participants, also matters. The asset manager has an average success rate of 14.08% when engaging alone but a success rate of 22.13% when collaborating with other investors or stakeholders. This finding reinforces a general industry trend of collaboration. Further, when looking at engagement topics in Panel (D), traditional governance engagements are most likely to succeed (23.32%), while human capital engagements (e.g., labor practices, employee diversity & inclusion) are least likely to reach a milestone (10.70%).

We can conclude that investors aiming to maximize their success rate should make materiality salient when engaging with the target firm. The success rate increases further when there are multiple and intense contacts, such as calls or meetings. Even though these contacts increase the cost of engagement, collaboration allows investors to share costs and also increases the probability of reaching success. In Appendices A1 and A2, we formally examine the determinants of engagement success using a logistic regression, and all conclusions remain the same.

#### **4. What is the Effect of Engagements on Target Firms?**

A key goal of shareholder engagement on ESG issues is to achieve change or to have ‘impact’ on the target firm in terms of ESG policies, practices and performance. Depending on the scope of the active owner and the nature of the ESG topic, the engagement may also have the aim to ultimately improve the target firm’s financial returns. In this section, therefore, we ask: how do firms perform after being targeted?

Our goal in this section is twofold. First, because we address engagements on topics deemed

material to investors, we are particularly interested in firms' financial performance measures after an engagement. We study stock market performance and test whether target firms outperform peer firms in the months following engagement. Moreover, we examine whether engagements are related to changes in accounting ratios in the years after being targeted. Our next objective is to examine whether ESG engagements can improve the ESG policies and performance of target firms along with their CO<sub>2</sub>e emissions relative to peers. We obtain the data on firm characteristics and monthly stock returns from Factset, ESG scores from MSCI, and carbon emission data from Refinitiv.

Before we can perform our tests, we need to find a comparable set of peer firms because firms in different industries and countries are exposed to different ESG issues and regulations. Therefore, we match every target firm to a set of non-targeted peer firms in the same MSCI subindustry and country. Moreover, since size greatly influences performance, we ensure peer firms are in the same within-industry market size quartile the year before the engagement. If we cannot find such peers, we match on the less granular MSCI sector instead of the subindustry, which occurs for about 25% of the target firms.<sup>5</sup> Further, in case there are more than 10 peer firms for a target firm, we keep those with the closest market size to the target firm.

In all tests, we average the characteristics of peer firms by year to create a pseudo-firm. Subsequently, each time we compare target firms to peer firms, "peer firm" refers to this pseudo-firm. We report the average differences between target firms and peer firms in the year before the engagement in Table 5.<sup>6</sup> When looking at accounting measures, it becomes clear that target firms are larger than peer firms within their industry market size quartile.<sup>7</sup> However, we do not find a consistent pattern of over- or underperformance compared to peers in the performance and valuation metrics.

Because we map all engagements to MSCI topics, we can directly link each engagement to one of the 30 key issue scores (see Table 2). We find that target firms do not have a higher or lower MSCI<sub>KI</sub> score than peer firms. Although this result seems surprising, firms with higher ESG scores are potentially more receptive to engagements that in turn, increases the probability of successful engagements and can lead to spillover effects within the industry. Therefore, the asset manager occasionally engages with industry leaders instead of laggards. Besides ESG scores, we also evaluate the level of corporate CO<sub>2</sub>e emissions and their intensity (emissions-to-sales). We find that target firms emit 31.3% more tonnes of CO<sub>2</sub>e and have a 29.4% higher CO<sub>2</sub>e intensity than peer firms in

the year before engagement.

#### **4.1. Stock market performance**

In this subsection, we test whether target firms outperform peer firms in the months after an engagement. We use two measures of stock market performance. First, we examine peer-adjusted returns that equal the monthly returns of the target firm minus the monthly returns of its peers. Second, we adjust these returns for risk using the capital asset pricing model (CAPM) to ensure that the results in the first analysis are not driven by differences in risk between target firms and their peers.

##### **4.1.1. Peer-adjusted returns**

Following Dimson et al. (2015) and Barko et al. (2021), we use monthly returns because most engagements are not publicly known and, therefore, will take time to be reflected in stock prices. We deduct the average return of a peer firm from the average return of the target firm for each month that then equals the monthly excess return. In Figure 2, we accumulate these excess returns from the month before engagement to 18 months after.

Panel (A) shows that the engagements that led to success are associated with positive cumulative excess returns (CERs) in the months after the engagement. For example, 14 months after the start of a successful engagement, which is the median time it takes to reach a milestone, the CER equals 2.17%. Next, we distinguish between material and immaterial engagements. Panel (B) shows that materiality matters for CERs following engagement. For example, after a successful material engagement, the average firm experiences a CER of 3.10% over a 14-month window. In contrast, successful immaterial engagements are associated with a 0.60% CER.

To study the statistical significance of these CERs, we calculate the average CER of all target firms in the periods [0], [0,6], and [0,14] (in months) and test whether they are significantly different from zero.<sup>8</sup> We report these results in Table 6 and separate the CERs by the success and materiality of each engagement. In addition, we show the differences in CERs between successful/unsuccessful and material/immaterial engagements and whether these differences are statistically significant.

In the first three columns of Table 6, we report on all engagements (column 1) and those that are (un)successful (columns 2 and 3). The average CER across all ESG engagements is positive for all

event windows (respectively, 0.10%, 0.44%, and 0.34%), but statistically not significant. However, columns 2 and 3 indicate that the average CER across ESG engagements depends on whether the engagements were successful or not. The CER of successful ESG engagements is positive for periods [0] and [0,6], and it becomes significantly positive (1.87%, significant at the 10% level) over the 14-month period after first contact.

In columns 4 to 9 of Table 6, we shed light on whether materiality matters for the average CER across ESG engagements. Several important observations emerge from this table. First, we find that over the 14-month window, the average return following immaterial engagements is significantly negative (-2.16%, column 5) and below the return following material ESG engagement (0.70%, column 4). This negative return is primarily driven by negative returns on immaterial engagements that are successful (-2.79%, column 9). Second, column 6 shows that successful material engagements are associated with a positive and significant CER of 2.54% over the 14 months after the engagement. Hence, to the extent that engagements are successfully completed, engaging on material ESG issues is associated with positive CERs.

In Table 6, we also divide ESG engagements into environmental, social, and governance categories. On the environmental front (E), we find that target firms significantly outperform their peers 6 months after an engagement by 1.69% (column 1), but the significance disappears over the 14-month window. Of the E engagements, mainly material engagements are associated with this positive 6-month outperformance (1.74%, column 4). Given that most E engagements are not (yet) successfully completed, one could infer that the positive 6-month performance following E engagements does not require the engagement to be successfully completed. Columns 3 (no successful completion) and 8 (material, no successful completion) indeed show positive 6-month excess returns for E engagements. On the social front, we do not find significant CERs for all event windows. As for governance (G) issues, we find substantial outperformance by targets firms following G engagements. For example, successful G engagements are associated with a significant CER of 3.02% in the window [0,14]. Notably, the CER is only statistically significant for material governance engagements when distinguished by materiality.

#### 4.1.2. Peer- and risk-adjusted returns

One concern with the analysis of peer-adjusted returns is that the peer firms might be more or less risky than the target firms. Hence, the return differentials could be explained by different risk exposures instead of engagements. We account for risk by using the CAPM. First, we obtain developed market returns from the website of Kenneth French and estimate each firm's equity beta based on its performance in the three years before engagement. Based on this beta, we estimate expected returns after engagement. Then, we deduct the expected returns from the realized returns to calculate the monthly abnormal return for each firm. Next, we deduct the monthly average peer-firm abnormal return from the abnormal return of each target firm to obtain the excess abnormal return.

We plot the cumulative excess abnormal returns (CEAR) in Panels (C) and (D) of Figure 2. We find positive CEARs for the average ESG engagement, irrespective of whether there is a recorded success. The CEARs of successful engagements are slightly larger between 0 and 3 months and between 10 and 14 months after engagement (when the median milestone is recorded) than the CEARs of unsuccessful engagements. However, the differences are less pronounced than the CERs in Panel (A). In Panel (B), we distinguish between the materiality of successful and unsuccessful engagements. The results indicate that CEARs are higher after successful engagements than after unsuccessful engagements, irrespective of whether they are material. However, we find the weakest performance for immaterial unsuccessful engagements.

Next, we report in Table 7 the average CEARs based on different time intervals. When examining the full set of ESG engagements (column 1), we find positive and significant CEARs of 0.39%, 1.84%, and 3.24% for the periods [0], [0,6], and [0,14]. The average CEAR of successful engagements (3.50%, column 2) is slightly higher than unsuccessful engagements (3.18%, column 3), but this difference is not statistically significant. Similarly, the average CEAR following material engagements (3.00%, column 4) is insignificantly higher than the average CEAR associated with immaterial engagements (1.48%, column 5). However, when looking at engagements by materiality and success, only the CEARs of material engagements are significant; 3.81% for successful material engagements (column 6) and 2.78% for unsuccessful material engagements (column 8).

We show the CEARs broken down by engagement topic in the remainder of Table 7. We

find positive and significant CEARs for unsuccessful and material engagements in all periods for E engagements. The CEARs of successful engagements are positive, although not statistically significant. Regarding social engagements, we find positive and significant CEARs that are strongest for successful engagements (4.53% versus 4.07% for unsuccessful engagements). These CEARs are only significant for material engagements: 2.83% at 6 months and 6.02% at 14 months after the engagement. The same holds for G engagements, where we find a significant average CEAR of 2.27% for material engagements 14 months after the engagement, while the average CEAR for immaterial engagements (2.42%) is not significant. Moreover, although CEARs are positive and significant for successful and unsuccessful engagements 14 months after the engagement, the outperformance is strongest for successful engagements (4.01% vs 1.78%).

To conclude, we find positive and significant cumulative risk- and peer-adjusted returns after ESG engagements, but only when they are material. In untabulated findings, which are available on request, we find that the results in this subsection are similar when we adjust for risk using the Fama-French five-factor model instead of CAPM, and when we use buy-and-hold returns instead of cumulative returns.

## **4.2. Accounting performance**

To examine whether there are other effects on financial performance besides stock market performance, we use a difference-in-differences model to examine whether engagements are associated with changes in accounting performance. In brief, we compare the pre-targeting performance of a targeted firm (often dubbed the “treated” firm in a difference-in-differences model) with performance observed post-targeting. Because target firms’ performance over time may change due to firm characteristics that are unrelated to the engagements they experience, the pre- and post-engagement performances of targeted firms are evaluated relative to the performance of non-targeted peers (i.e., the control group). These peers share key characteristics with the target firms in the year before targeting.

However, two complications arise when analyzing performance after engagements. First, firms can be targeted multiple times within our sample period which makes it difficult to connect changes in performance to specific engagements. We, therefore, only examine each firm’s first engagement containing multiple contacts to account for this difficulty. We do not count engagements containing

only one contact as a firm's first engagement because they are very unlikely to be successful (1.45% vs 44.16%, Panel C of Table 4). Moreover, we take the first E, S, or G engagement with multiple contacts when examining ESG engagements by topic. This approach ensures that target firms have never been treated by an intensive engagement in the pre-target period. Second, the treatment (being targeted) can happen at any time within the sample period. Hence, there is no fixed treatment date, unlike a classic difference-in-differences setup. Instead, we use our sample of peer firms to solve this timing issue by examining what happens to the accounting performance of peers after a firm is targeted. Thus, each target-peer pair has the same pre-target and after-target periods. This method results in the following empirical specification:

$$Performance_{ijt} = \beta_1 After_{ijt} + \beta_2 Target_{ij} \times After_{ijt} + \theta X_{j,t-1} + \Lambda_{F,T} + \epsilon_{it} \quad (1)$$

where  $Performance_{ijt}$  is the accounting performance measure  $i$  for firm  $j$  in year  $t$ . Specifically, we study ROE (net income / total shareholder equity), ROIC (net income / total invested capital), opex/assets, log(sales), capex/sales and R&D/sales. When a firm changes after an engagement, this change could lead to higher costs following new investments. In contrast, improved governance could lead to cost-cutting. We capture the effect of engagements on costs and investments by examining operational, capital, and research and development expenses. Moreover, improvements in ESG performance could lead to an improved reputation and a subsequent increase in sales. Subsequently, these two effects influence the firm's profitability; we capture them with the ROE and ROIC.  $After_{ijt}$  is an indicator equal to one after the target year and zero before or in the target year. For peer firms, we use the target year of the paired target firm. Moreover,  $Target_{ij}$  is an indicator equal to one for target firms and zero for peer firms. Hence,  $Target_{ij} \times After_{ijt}$  captures the treatment effect.

To account for changes in firm characteristics over time, we add a set of lagged control variables ( $X_{j,t-1}$ ): log(size), Tobin's Q, sales growth, ROE, leverage, dividends per share, capex/sales, client ownership, institutional ownership, inside ownership, and an institutional blockholder indicator. Further, we add firm and time fixed effects ( $\Lambda_{F,T}$ ) and only keep the five years before and after an engagement in the panel. Hence, we examine the within-firm changes in accounting performance up to five years after an engagement.

We report the results in Table 8.<sup>9</sup> Looking at all ESG engagements as a whole, we find significant increases in ROE (1.34 pp, column 1) and ROIC (0.77 pp, column 2) and a decrease in R&D over sales (-0.81 pp, column 6). Compared to the average accounting performance before engagement, these results correspond to a 10.90% and 9.50% increase in ROE and ROIC and a 15.87% decrease in R&D as a percentage of sales relative to peers.

The effects we report at the top of Table 8 correspond to all engagements in our sample, but we could expect that E, S, and G engagements do not relate to the financial ratios in the same way. The remainder of Table 8 corroborates our expectation. For G engagements, we find evidence that engagements are followed by cost-cutting, resulting in increased profitability. Target firms have 3.80% fewer operating expenses over assets and 16.74% less R&D as a fraction of sales in the years after engagement relative to peers. Additionally, target firms experience a 13.80% increase in ROE and a 11.30% increase in ROIC after engagement on G issues. We also find an improvement in ROE after S engagements (+20.05%), but there is no significant effect on ROIC. This improved profitability can potentially be explained by the 5.65% increase in sales and the 16.21% (19.52%) decrease in capex (R&D) over sales compared to peers. Further, engagements on E issues are associated with increased capital expenditures (+11.28%) and R&D investments (+9.27%) as a percentage of sales.

Next, we examine whether the effects on accounting performance are stronger for financially material engagements. To do so, we add a triple interaction term to our difference-in-differences model ( $Target \times After \times Material$ ), and an interaction term between  $After \times Material$ . Because there can be disagreement on materiality dependent on the framework used, we only define engagements that are (im)material according to both SASB and MSCI as “(im)material”. For ease of interpretation, we report only the estimated marginal effects of being treated separately by the materiality indicator in Table 9.

When all ESG engagements are analyzed together, the results in Table 9 indicate that immaterial engagements are less likely to correlate with statistically significant changes in accounting performance than material engagements. According to the coefficient estimates in Table 9, there is a decline in operating expenses relative to assets (-2.30%) and in R&D expense over sales (+11.93%) after material ESG engagements, which is significant at the 10% level. In contrast, the effects estimated based on all immaterial ESG engagements are not significantly different from zero.

Consistent with earlier results, Table 9 shows that performance following (im)material engagement may vary by E, S, or G engagements. Targets experiencing material G-focused engagements have higher profitability ratios (14.64% and 10.47% higher ROE and ROIC) and lower expenses (4.56% and 14.29% lower Opex/Assets and R&D/Sales) post-targeting. However, immaterial G engagements are on average also associated with higher ROIC and lower R&D expenses, but not significantly associated with the other accounting ratios we study.

Along the social spectrum, we find consistent evidence that the materiality of the topic raised at the target matters for post-engagement performance. Engagements on material S issues are associated with significantly higher sales (+5.13%), a higher ROE (+21.37%), lower capital expenditures-to-assets (-23.05%), and lower R&D/Sales (-22.82%). Targets do not experience statistically significant post-engagement changes in these measures of performance and costs after immaterial engagements.

In the previous analysis (Table 8) we showed that targets mainly have higher capital expenditures and R&D expenses after E engagements. After breaking E engagement down by materiality, we find that targets experience more capital spending after they have been targeted on a material environmental issue (+18.23%). However, R&D expenses increase after both material (+19.14%, significant at the 1% level) and immaterial engagement (+37.32%, significant at the 10% level).

Overall, these results indicate that social and governance engagements are associated with improvements in profitability and decreased corporate expenses. Following the agency theory, improved governance could decrease overinvestment and, therefore, decrease expenses. Even though the decrease in expenses is more surprising for social engagements, we only find decreases in capital expenditures and R&D and no effect on overall operating expenses. Hence, the findings are unlikely to be the result of changes in employee pay. Further, although we do not find profitability improvements following environmental engagements, target firms increase their investments in R&D relative to peers. This increase could mean that firms targeted by environmental engagements invest more in innovations that decrease the environmental footprint of their operations.

### **4.3. ESG performance**

Our final empirical analysis examines whether engagements are associated with changes in a firm's ESG performance. We use the same difference-in-differences model as in the previous section

but replace the dependent variables with measures of ESG performance. These measures are the MSCI ESG score and key issue (sub)scores, the level of CO<sub>2</sub>e emissions, and CO<sub>2</sub>e emission intensity.

#### 4.3.1. ESG scores

Before we discuss the results of the difference-in-differences model, we examine the average ESG scores of target and peer firms over time.<sup>10</sup> In Figure 3, we define the target year as year  $t$  and plot average ESG scores from the five years before engagement to five years after engagement. The results indicate that the trends in ESG scores in the five years before engagement are reasonably similar between target and peer firms. Moreover, we see an increase in the average MSCI ESG and MSCI environmental scores after the engagement that indicate positive targeting effects.

We empirically confirm these targeting effects in Table 10. After an engagement, we find a significant within-firm increase of 0.188 in the MSCI ESG score. Given the average score of 4.994 in the period before engagement, that increase corresponds to a 3.76% increase relative to peers. Similarly, for environmental engagements, we find a significant 3.44% increase. This result holds when examining the category-specific environmental score. However, we do not find significant effects of engagements on the governance and social scores.

Although the estimated targeting effects on ESG scores seem small, our results are conservative. We use firm fixed effects and the MSCI ESG scores have limited within-firm variation.<sup>11</sup> Moreover, we do not estimate an aggregate engagement effect because we only examine the first intensive E, S, and G engagements at each target firm. Therefore, our results could be interpreted as lower bound estimates of the effects of engagements on the ESG performance of target firms.

Moreover, because studies have found that ESG ratings diverge (e.g., Gibson Brandon, Krueger, & Schmidt, 2021; Berg, Kölbel, & Rigobon, 2022), we check the robustness of our results by examining Refinitiv ESG as an alternative source of firm-level ESG data. We show in Appendix A4 that there are significant and positive improvements after engagement in the Refinitiv ESG, governance, and environmental scores. Moreover, the magnitude of these effects is similar to the effect on MSCI's ESG scores. For example, the Refinitiv ENV score improves by 2.71% in the years after engagement relative to peers.

### 4.3.2. Corporate emissions

After finding that environmental engagements are associated with improvements in the MSCI and Refinitiv environmental scores, we examine whether we also find an effect on scope one and scope two corporate emissions. We plot the average level of CO<sub>2</sub>e emissions and their intensity over time in Figure 4. In Panels (A) and (B), we see that target and peer firms have similar decreasing trends in the years before engagement. This decreasing trend might seem surprising but can be explained by the increase in Refinitiv's availability of emission data. In earlier years of our sample, Refinitiv mainly covers large firms, while emission data of smaller firms have been added over time.

To illustrate, we plot the average CO<sub>2</sub>e intensity for a strongly balanced panel of firms for the four years before and after engagement in Panel (C).<sup>12</sup> We observe that the strong negative trend in emission intensity disappears when coverage is constant. Moreover, when we plot the estimation results of the difference-in-differences model in which we control for time-varying firm characteristics and time trends (Panel D), we see similar emission intensities for target and peer firms before engagement. However, after an engagement, the emission intensity of target firms decreases relative to peer firms.

In Table 11, we show the regression results for our emission measures. Columns (1) to (3) indicate that environmental engagements are not significantly associated with a change in total, scope one, or scope two CO<sub>2</sub>e emissions. However, we find a significant 0.12 decrease in the log of the CO<sub>2</sub>e intensity of target firms (column 4) that corresponds to a 12.41% reduction. Moreover, we divide scope one and scope two intensities into columns (5) and (6) and find that the effect shown in column (4) is mainly driven by a lower scope one emission intensity.<sup>13</sup> Hence, environmental engagements are associated with a decrease in the intensity of scope one emissions rather than a firm's scope 2 emissions.

Our detailed engagement classification allows us to look at environmental engagements that specifically address corporate emissions. In Table 12, we show the results of regressions in which we only include engagements that we mapped to the MSCI categories "carbon emissions", "product carbon footprint", and "toxic emissions & waste". We find no effect on the level of emissions but a significantly negative effect on emission intensity. However, the effect on emission intensity is more substantial for these engagements that specifically address emissions. Our results indicate a

24.61% decrease in total CO<sub>2</sub>e intensity, a 30.47% decrease in scope one intensity, and a 25.73% decrease in scope two intensity for target firms relative to peers.

As a validation check, we also examine the effect of governance and social engagements on CO<sub>2</sub>e intensity. Although we would not expect an effect of social engagements on a firm's environmental performance, it is plausible that governance can improve environmental performance. For example, Dyck, Lins, Roth, and Towner (2021) find that board renewal improves environmental performance. We find that firms targeted by governance engagements lower their CO<sub>2</sub>e intensity significantly compared to peer firms (Appendix A5, column 2), but the effect is less strong than the effect of environmental engagements (-7.36% vs -12.41%). As expected, we find no change in the emissions of firms targeted by social engagements. Overall, we can conclude that environmental and governance engagements are followed by a decreased emission intensity but no change in total emissions.

## 5. Discussion and Conclusion

We study a unique database of 12,727 private shareholder engagements on ESG issues targeted at 2,465 publicly listed firms worldwide from 2007 to 2020. We provide new insights into private engagement characteristics and evaluate target firms' financial and ESG performance after targeting. Importantly, we investigate to what extent private engagements address financially material ESG issues and how materiality matters for the financial performance of firms following targeting.

Using the materiality frameworks of SASB and MSCI ESG, we determine which engagements address ESG issues that are material given the industry in which the target firm operates. We find that over 74% of private engagements address material topics, suggesting that materiality matters to the choice of engaging. We also find that target firms recognize which issues are material since material engagements are more likely to succeed.

An important question we answer in this paper is how firms perform after engagements on material ESG issues. We find that firms targeted by successful material engagements significantly outperform peers by 2.5% over the 14 months following an engagement. After adjusting returns for risk using the CAPM, target firms have significant cumulative peer-adjusted returns of 2.4%, 6.0% and 2.3% in the 14 months after successful material E, S, and G engagements, respectively. This risk-adjusted outperformance is significant for both successful and unsuccessful engagements.

A potential explanation for this finding is that the share price reaction might reflect an expectation of future milestones.

Regarding accounting performance, we find that material engagements are more often significantly associated with profitability, sales, and cost ratios compared to immaterial engagements. Material social and governance engagements most consistently show significant associations with future performance in terms of higher profitability and lower expense ratios. Furthermore, environmental engagements positively relate to capital expenditures when they are material.

Next to financial performance, our evidence indicates that engagements are, on average, accompanied by an improved ESG performance of target firms. Importantly, environmental engagements are associated with a decrease in CO<sub>2</sub>e intensity and an increase in the MSCI environmental score. However, we do not observe a significant decrease in the total level of CO<sub>2</sub>e emissions.

Several implications arise from the results of our paper. First, the results indicate that materiality matters for the post-targeting stock market and accounting performance of target firms. Hence, investors who engage on ESG in alignment with financial goals are more likely to accomplish their objectives by focusing on material ESG issues. Second, our finding that material engagements are more likely to succeed can be taken to mean that investors who strive for engagement success should address material topics, regardless of whether they pursue financial or other goals with their engagements. At the very least, our findings illustrate that investors benefit from making materiality salient when engaging on ESG issues.

Third, we recommend that investors use materiality frameworks, such as SASB or MSCI, to collect structural data on their engagement efforts. Investors differentiate between financially material and stakeholder-material sustainability. Where financially material sustainability encompasses the effects of the economy, environment, and its people (stakeholders) on the corporation, while stakeholder materiality involves the effect of the corporation on its stakeholders. It is important to note that ESG issues can be both shareholder and stakeholder material (i.e., double material). In this paper, we do not determine to what extent private ESG engagements are material from a stakeholder perspective. The Global Reporting Initiative (GRI) is currently developing sector-level stakeholder-materiality standards which investors and academics can use to examine the double materiality of shareholder engagement in future reporting and research.

We conclude this paper with a few cautionary notes and recommendations for future research.

First, although academics and practitioners increasingly deem engagement a plausible mechanism for shareholders to generate a positive societal impact, we are cautious not to interpret our results as evidence that the engagements causally affect firm behavior. Since we cannot observe the entire universe of private engagements by other stakeholders, identifying which ones affect firm behavior is challenging. Moreover, given ESG data limitations, we mostly study larger firms while the potential to influence smaller ones through engagement is arguably greater. Hence, our study provides a solid indication but not a definitive account of the overall effect of engagements on target firms.

Second, many investors aim to improve firms' ESG performance via engagement, but our study may not capture long-term improvements in ESG performance. Many ESG policies that firms adopt today materialize slowly. For example, after an engagement on carbon emissions, a target firm might set long-term targets to reduce emissions. However, only time will tell whether the targets can be reached. Because we study ESG scores and emissions in the five years after an engagement, we cannot make claims about the long-term effects of engagement.

Finally, our paper does not take a stance on whether frameworks for assessing the financial materiality of ESG issues, such as those of SASB and MSCI, should be prioritized over other materiality frameworks in engagement decisions. For example, given the scope of our paper, we do not address the extent to which engagements guided by financial materiality steer firms towards achieving the UN sustainable development goals (SDGs) or climate targets laid out by climate science. How well different materiality frameworks help investors in contributing to such goals is an interesting question that we leave for future research.

## Notes

<sup>1</sup>For example, the distribution of environmental, social, and governance engagements is 35.2%, 25.2%, and 39.6%, respectively.

<sup>2</sup>Columbia Threadneedle Investments UK International Limited formerly traded as BMO Global Asset Management EMEA and their reo<sup>®</sup> service had external assets representing €303bn at the end of 2020.

<sup>3</sup>Considering the amount of manual data processing, we hired two research assistants.

<sup>4</sup>The descriptions can range from a single sentence to multiple paragraphs and have become more detailed over time.

<sup>5</sup>We match based on the MSCI sectors and subindustries instead of the more common SIC classifications because MSCI ESG measures different ESG issues depending on the firm's industry. Hence, to accurately examine the effect of engagement on the ESG performance of target firms compared to peer firms, they must operate in the same MSCI industry.

<sup>6</sup>We formally test the determinants of being targeted using a logistic regression in Appendix A3.

<sup>7</sup>We could use within-industry market size deciles instead of quartiles to control for this, but because we also match on MSCI subindustry and country, this would lead to an insufficient number of matches.

<sup>8</sup>Our results are very similar when using [0,12] instead.

<sup>9</sup>An assumption of difference-in-difference models is that treatment and control firms show similar trends in the outcome variable before the treatment that would have continued if there were no engagement. In untabulated results, we check this "common-trends" assumption and find that it reasonably holds.

<sup>10</sup>See Footnote 9

<sup>11</sup>For example, the average within-firm standard deviation for the MSCI ESG score is 1.15 compared to a between-firm standard deviation of 2.17.

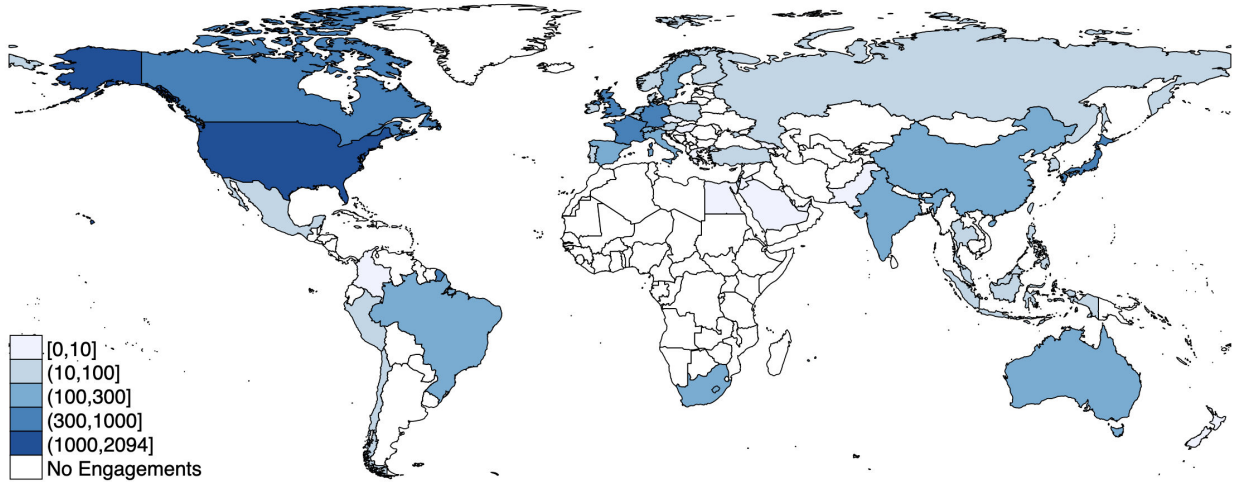
<sup>12</sup>We use four instead of five years because moving to this strongly balanced panel already decreases the sample by two-thirds, and there are even fewer firms with emission data for 10 years around the engagement.

<sup>13</sup>There are more observations for total CO<sub>2</sub> emissions than scope one/scope two CO<sub>2</sub> emissions. This difference indicates that some firms only report their total level of emissions to Refinitiv and do not separate their emissions by scope one and scope two.

## References

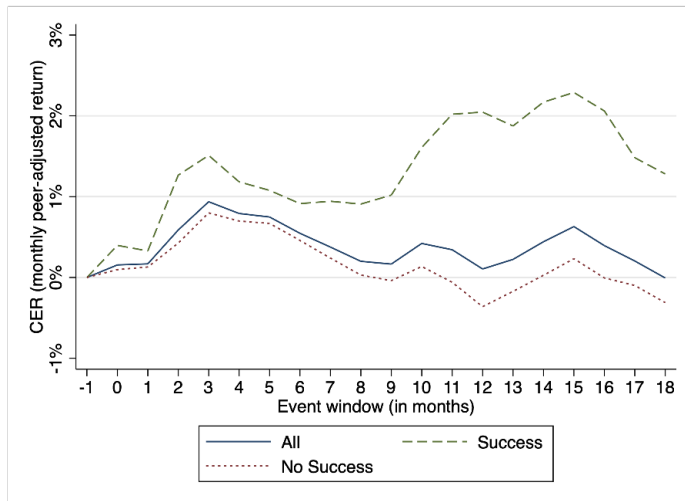
- Barko, T., Cremers, M., & Renneboog, L. (2021). Shareholder Engagement on Environmental, Social, and Governance Performance. *Journal of Business Ethics*. doi: <https://doi.org/10.1007/s10551-021-04850-z>
- Bauer, R., Derwall, J., & Tissen, C. (2022). Corporate Directors Learn From Environmental Engagements. Available at SSRN: <https://ssrn.com/abstract=3981634>.
- Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate Confusion: The Divergence of ESG Ratings. *Review of Finance*. doi: 10.1093/rof/rfac033
- Climate Action 100+. (2022). Initiative Snapshot. Retrieved May 6, 2022, from <https://www.climateaction100.org>.
- Dimson, E., Karakaş, O., & Li, X. (2015). Active Ownership. *Review of Financial Studies*, 3225–3268. doi: <https://doi.org/10.1093/rfs/hhv044>
- Dimson, E., Karakaş, O., & Li, X. (2021). Coordinated Engagements. Available at SSRN: <https://ssrn.com/abstract=3209072>.
- Dyck, A., Lins, K. V., Roth, L., & Towner, M. (2021). Renewable Governance : Good for the Environment? Available at SSRN: <https://ssrn.com/abstract=3224680>.
- Flammer, C. (2021). Corporate Green Bonds. *Journal of Financial Economics*, 142(2), 499-516. doi: <https://doi.org/10.1016/j.jfineco.2021.01.010>
- Gibson Brandon, R., Krueger, P., & Schmidt, P. S. (2021). ESG Rating Disagreement and Stock Returns. *Financial Analysts Journal*, 77(4), 104–127. doi: 10.1080/0015198X.2021.1963186
- Grewal, J., Serafeim, G., & Yoon, A. (2016). Shareholder Activism on Sustainability Issues. Available at SSRN: <https://ssrn.com/abstract=2805512>.
- Hoepner, A. G., Oikonomou, I., Sautner, Z., Starks, L. T., & Zhou, X. (2022). ESG Shareholder Engagement and Downside Risk. Available at SSRN: <https://ssrn.com/abstract=2874252>.
- Khan, M. (2019). Corporate Governance, ESG, and Stock Returns Around the World. *Financial Analysts Journal*, 75(4), 103-123. doi: 10.1080/0015198X.2019.1654299

- Khan, M., Serafeim, G., & Yoon, A. (2015). Corporate Sustainability: First Evidence on Materiality. *The Accounting Review*, 1–55. doi: 10.2308/accr-51383
- Krueger, P., Sautner, Z., & Starks, L. T. (2020). The Importance of Climate Risks for Institutional Investors. *The Review of Financial Studies*, 33(3), 1067-1111. doi: 10.1093/rfs/hhz137
- Kölbel, J. F., Heeb, F., Paetzold, F., & Busch, T. (2020). Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact. *Organization & Environment*, 33(4), 554-574. doi: 10.1177/1086026620919202
- McCahery, J. A., Sautner, Z., & Starks, L. T. (2016). Behind the Scenes: The Corporate Governance Preferences of Institutional Investors. *Journal of Finance*, 71(6), 2905–2932.
- MSCI. (2022). MSCI ESG Ratings Methodology. Retrieved from <https://www.msci.com/documents/1296102/21901542/ESG-Ratings-Methodology-Exec-Summary.pdf>
- SASB. (2020). WSJ Editorial Misrepresents SASB. Retrieved from <https://www.sasb.org/blog/wsj-editorial-misrepresents-sasb/>
- Schopohl, L. (2017). The Materiality of Environmental and Social Shareholder Activism - Who Cares?! Available at SSRN: <https://ssrn.com/abstract=2991544>.
- Serafeim, G., & Yoon, A. (2022). Which Corporate ESG News Does the Market React To? *Financial Analysts Journal*, 78(1), 59-78. doi: 10.1080/0015198X.2021.1973879

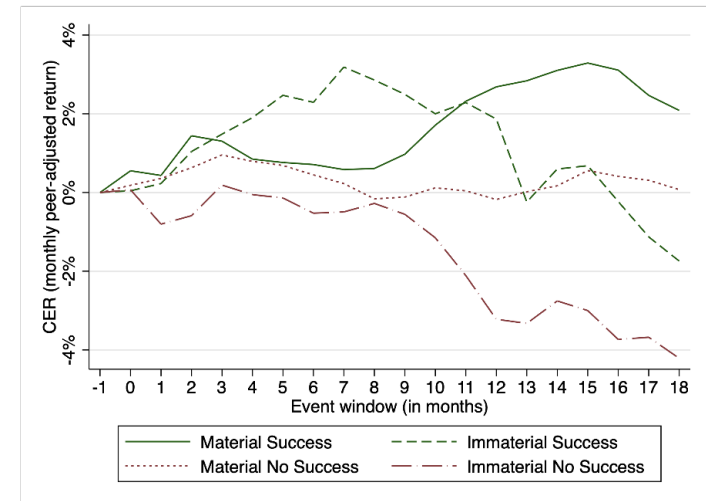


**Figure 1. The Number of Engagements by Country**

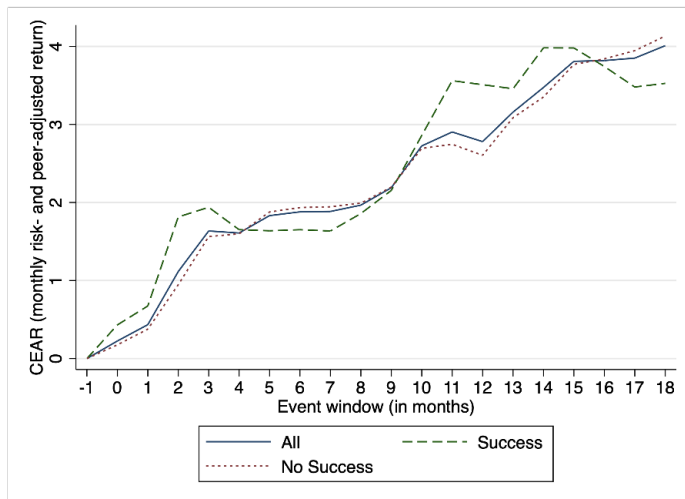
This figure displays the number of engagements by headquarters country of the target firm.



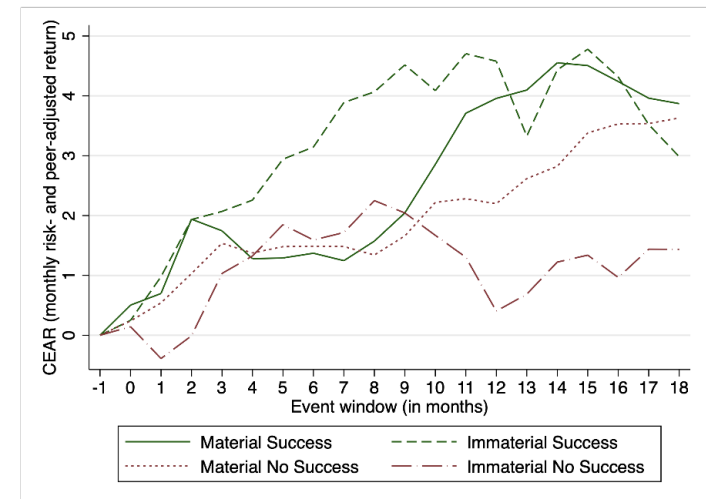
(a) Cumulative excess returns by success



(b) Cumulative excess returns by success and materiality



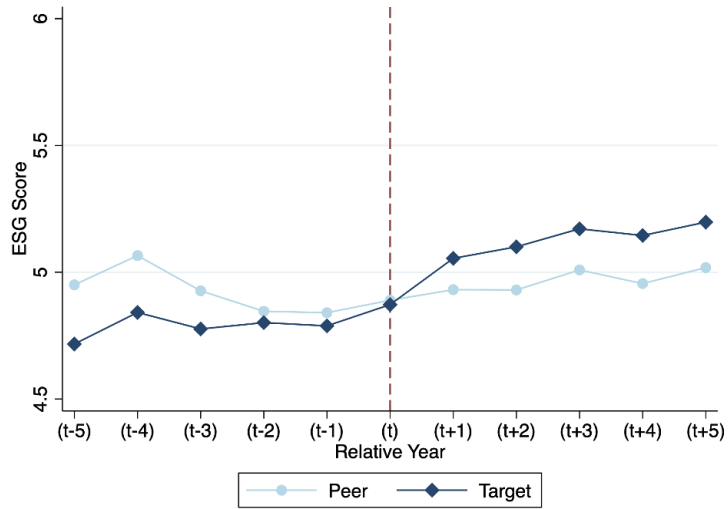
(c) Cumulative excess abnormal returns by success



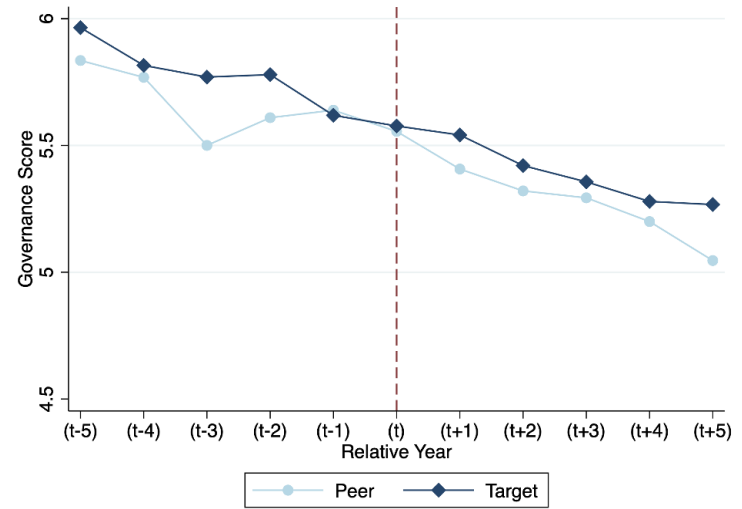
(d) Cumulative excess abnormal returns by success and materiality

### Figure 2. Cumulative (risk- and) Peer-adjusted Returns after the Engagement Start

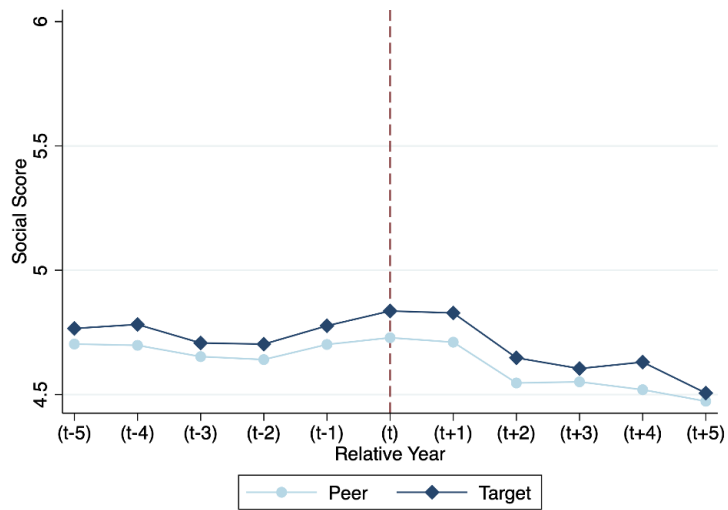
The figures display cumulative returns after engagement by materiality and success. In Panel (A), we display excess returns that are calculated by deducting the average return of peer firms from the average return of target firms in each month. In the month before engagement, we buy an equally weighted portfolio of peer firms and plot its cumulative excess returns over 18 months after engagement. In Panel (B), we show the cumulative excess returns by materiality and success. For Panel (C), we first estimate the abnormal returns by deducting the monthly expected returns based on the CAPM model from the realized monthly returns. Then, we plot the cumulative excess (monthly average abnormal return of the target firm minus average abnormal return of the peer firm) abnormal return over time. Lastly, in Panel (D), we display the cumulative excess abnormal returns by success and materiality.



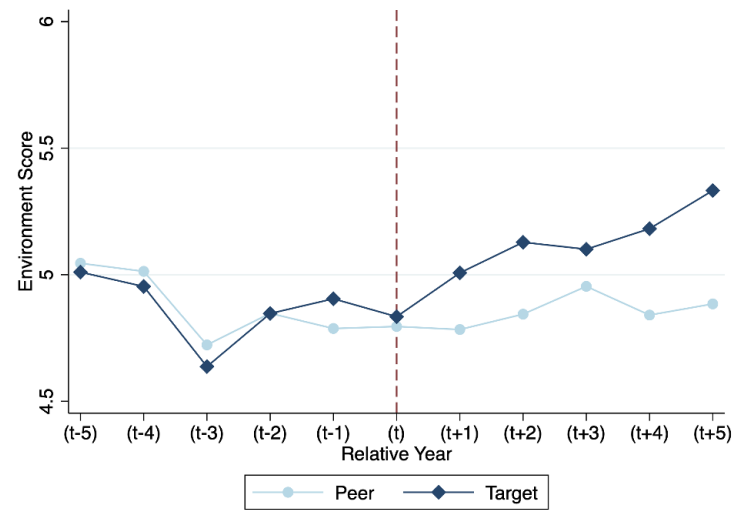
(a) All Engagements



(b) Governance Engagements



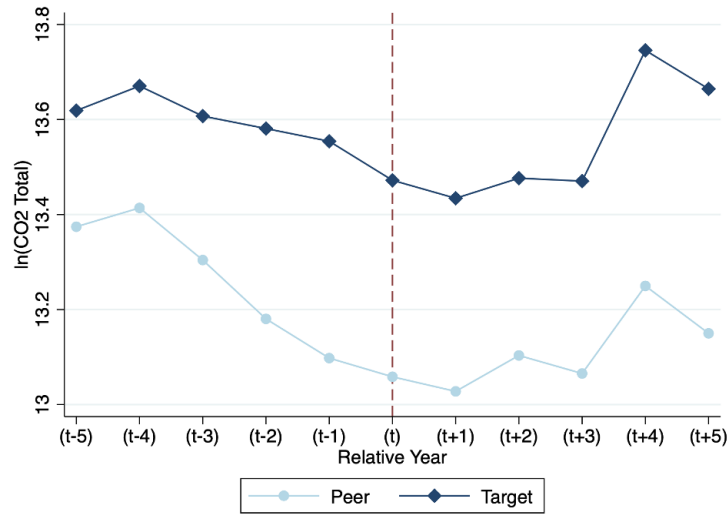
(c) Social Engagements



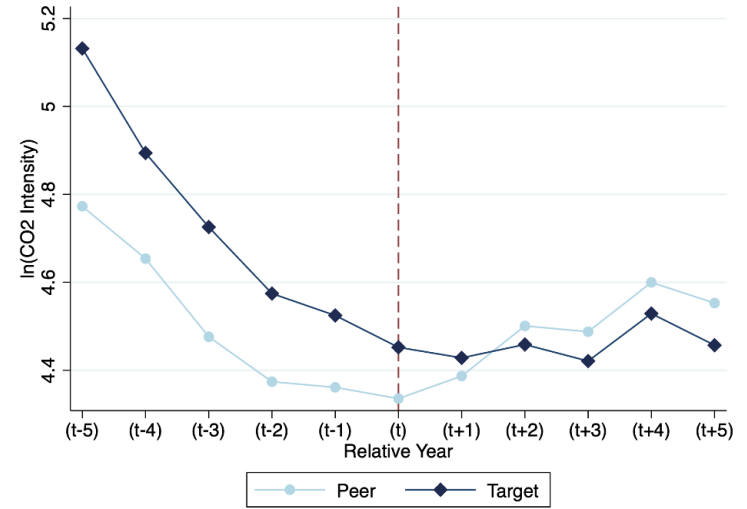
(d) Environment Engagements

**Figure 3. Average MSCI ESG scores Before and After Engagement**

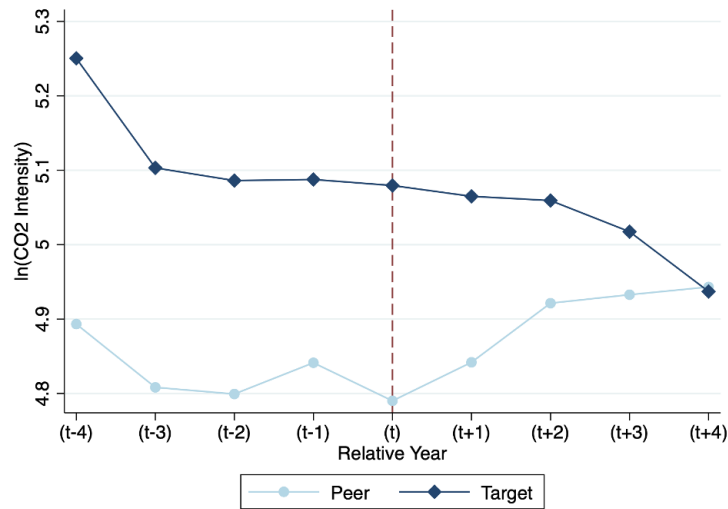
The figure displays the average MSCI ESG scores by relative year for the target and peer firms in the samples of Table 10. Panel (A) displays the average MSCI ESG scores, Panel (B) displays the average MSCI GOV scores, Panel (C) displays average MSCI SOC scores, and Panel (D) shows the average MSCI ENV scores.  $t$  indicates the event year (the engagement year) for target firms, and the pseudo-event year (the year of the engagement at the matched target firm) for peer firms.



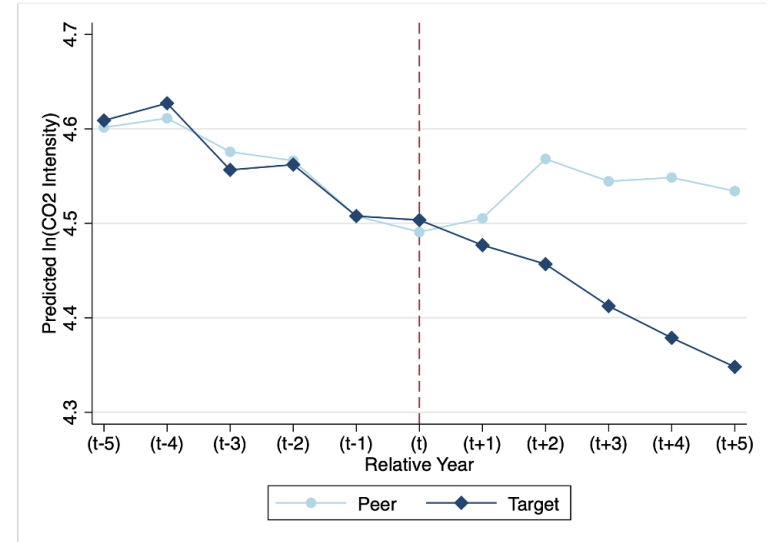
(a) Average CO<sub>2</sub>e emissions



(b) Average CO<sub>2</sub>e Intensity



(c) Average CO<sub>2</sub>e Intensity - Constant Panel



(d) Estimated CO<sub>2</sub>e intensity

**Figure 4. Average or Estimated CO<sub>2</sub>e emissions and CO<sub>2</sub>e Intensity Before and After Engagement**

The figure displays the CO<sub>2</sub>e emissions and the CO<sub>2</sub>e intensity (CO<sub>2</sub> emissions divided by last year's sales) by relative year for the target and peer firms in the samples of Table 11. Panel (A) displays the average CO<sub>2</sub>e emissions, Panel (B) displays average CO<sub>2</sub>e intensity, Panel (C) displays average CO<sub>2</sub>e intensity for a highly balanced panel, and Panel (D) shows the estimated CO<sub>2</sub>e intensity based on the specification in column (4) of Table 11. *t* indicates the event year (the engagement year) for target firms, and the pseudo-event year (the year of the engagement at the matched target firm) for peer firms.

**Table 1: The Number of Engagements and their SASB-based Materiality**

The table presents the number of engagements by year and topic in Panel (A). The engagement year is the year of the first contact within an engagement sequence. In Panel (B), we report the percentage of material engagements by subtopic. The engagement topics are based on the SASB Materiality Map.

<i>Sequence Topic</i>	<i>Panel (A): The number of sequences</i>																<i>Panel (B): Materiality</i>
	Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	Material
<b>Environment</b>	<b>86</b>	<b>33</b>	<b>278</b>	<b>76</b>	<b>373</b>	<b>207</b>	<b>34</b>	<b>66</b>	<b>417</b>	<b>127</b>	<b>193</b>	<b>64</b>	<b>116</b>	<b>76</b>	<b>2,146</b>	<b>70.55%</b>	
Environment	7	9	15	21	316	171	6	21	11	49	157	7	9	8	807	74.35%	
Ghg Emissions	33	9	197	33	12	6	8	13	391	8	9	15	34	34	802	72.19%	
Water & Wastewater Management			2	56	8	4	9	13	17	5	37	19	16	17	6	209	80.38%
Ecological Impacts	38	2	6	13	37	7	1	4	5	13	1	2	9	11	149	51.68%	
Waste & Hazardous Materials Management	2	1	2		4	12	4	4	4		5	18	31	12	99	62.63%	
Energy Management	6	10	2	1		2	1	7	1	20	1	3	12	4	70	30.00%	
Air Quality							1				1	3	4	1	10	70.00%	
<b>Human Capital</b>	<b>28</b>	<b>17</b>	<b>17</b>	<b>26</b>	<b>21</b>	<b>55</b>	<b>19</b>	<b>44</b>	<b>43</b>	<b>10</b>	<b>18</b>	<b>32</b>	<b>101</b>	<b>167</b>	<b>598</b>	<b>43.31%</b>	
Employee Health & Safety	7	9	6	18	17	45	15	8	2	7	6	4	14	101	259	54.83%	
Labor Practices	21	7	9	6	3	9	2	20	17	2	7	25	52	43	223	39.91%	
Employee Engagement, Diversity & Inclusion			1	2	2	1	1	2	16	24	1	5	3	35	23	116	24.14%
<b>Social Capital</b>	<b>48</b>	<b>28</b>	<b>41</b>	<b>48</b>	<b>50</b>	<b>33</b>	<b>35</b>	<b>38</b>	<b>28</b>	<b>49</b>	<b>38</b>	<b>141</b>	<b>57</b>	<b>53</b>	<b>687</b>	<b>63.76%</b>	
Human Rights & Community Relations	16	17	13	23	35	16	13	22	18	5	4	3	9	25	219	47.95%	
Data Security	11	1			2		9	2	4	4	11	89	5	3	141	57.45%	
Customer Welfare	3	4	16	5		14	3	2	3	9	5	10	31	14	119	85.71%	
Access & Affordability	6	2	2	5	4	3	2	2			8	11	14	3	4	66	84.85%
Product Quality & Safety	4	1	1	1	5		4	4	2	6	5	21	6	5	65	64.62%	
Selling Practices & Product Labeling	3	2	3	13	4		4	2	1	16	2	3	3	1	57	66.67%	
Customer Privacy	5	1	6	1				4		1		1		1	20	70.00%	
<b>Business Model &amp; Innovation</b>	<b>45</b>	<b>26</b>	<b>82</b>	<b>53</b>	<b>45</b>	<b>83</b>	<b>68</b>	<b>52</b>	<b>109</b>	<b>54</b>	<b>46</b>	<b>50</b>	<b>144</b>	<b>161</b>	<b>1,018</b>	<b>67.58%</b>	
Supply Chain Management	25	11	31	36	24	55	23	14	74	23	7	8	64	69	464	66.38%	
Product Design & Lifecycle Management	15	11	40	14	13	21	13	6	6	13	33	32	44	74	335	74.33%	
Business Model Resilience	1	2	10	1	4	1	29	29	29	14	1	1	7	10	139	63.31%	
Materials Sourcing & Efficiency	4	1	1	1	3	5	3	2		4	5	9	28	8	74	52.70%	
Physical Impacts Of Climate Change			1		1	1		1					1		6	66.67%	
<b>Leadership &amp; Governance</b>	<b>23</b>	<b>17</b>	<b>22</b>	<b>76</b>	<b>132</b>	<b>70</b>	<b>120</b>	<b>76</b>	<b>66</b>	<b>13</b>	<b>9</b>	<b>19</b>	<b>17</b>	<b>33</b>	<b>693</b>	<b>53.68%</b>	
Business Ethics	20	15	15	74	126	52	112	69	10	8	6	15	9	17	548	59.31%	
Management Of The Legal & Regulatory Environment	3	2	3	1	3	15	6	6	55	3	1	4	6	13	121	27.27%	
Critical Incident Risk Management					3	3					1	1			10	70.00%	
Systemic Risk Management			1				1			1	1		1	3	9	66.67%	
Competitive Behavior			1	1			1	1					1		5	20.00%	
<b>Governance (Traditional)</b>	<b>67</b>	<b>83</b>	<b>69</b>	<b>97</b>	<b>84</b>	<b>114</b>	<b>150</b>	<b>229</b>	<b>321</b>	<b>137</b>	<b>273</b>	<b>259</b>	<b>206</b>	<b>184</b>	<b>2,273</b>	<b>100.00%</b>	
<b>Total</b>	<b>297</b>	<b>204</b>	<b>509</b>	<b>376</b>	<b>705</b>	<b>562</b>	<b>426</b>	<b>505</b>	<b>984</b>	<b>390</b>	<b>577</b>	<b>565</b>	<b>641</b>	<b>674</b>	<b>7,415</b>	<b>74.77%</b>	

**Table 2: The Number of Engagements and their MSCI-based Materiality**

The table presents the number of engagements by year and topic in Panel (A). The engagement year is the year of the first contact within an engagement sequence. In Panel (B), we report the percentage of material engagements by subtopic. The engagement topics are based on the MSCI Materiality Map.

<i>Sequence Topic</i>	<i>Panel (A): The number of sequences</i>															<i>Panel (B): Materiality</i>	
	<b>Year</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>	<b>Material</b>
<b>Environment</b>	<b>101</b>	<b>44</b>	<b>290</b>	<b>125</b>	<b>398</b>	<b>250</b>	<b>81</b>	<b>103</b>	<b>452</b>	<b>151</b>	<b>226</b>	<b>94</b>	<b>188</b>	<b>109</b>	<b>2,612</b>	<b>83.31%</b>	
Carbon Emissions	34	11	197	32	13	6	36	41	403	14	10	14	37	36	884	100.00%	
Environment	9	9	15	21	316	172	6	21	13	49	157	9	14	10	821	75.00%	
Water Stress		2	56	8	4	9	13	17	5	37	19	16	17	6	209	50.00%	
Biodiversity & Land Use	38	2	6	13	37	7	1	4	5	14	1	2	9	11	150	24.00%	
Raw Material Sourcing	7	4	2	7	13	36	13	5	2	4	5	9	25	11	143	57.63%	
Financing Environmental Impact	3	2	5	38	2	1	6	3	3	1	4	2	14	10	94	83.58%	
Opportunities In Renewable Energy	5	9	2	2	1	1	1	7	1	27	1	3	11	5	76	80.56%	
Product Carbon Footprint	1	1	2	2	6	7	2	2	1	3	23	6	14	2	72	47.37%	
Toxic Emissions & Waste	1		2		4	9	3	1	4		2	6	22	13	67	100.00%	
Packaging Material & Waste	1	1	1		1			1		2	2	27	19	4	59	80.42%	
Climate Change Vulnerability			2	1	1	1		1	15				2	1	25	62.67%	
Opportunities In Clean Tech	2	1									2		1		6	72.73%	
Electronic Waste						1							3		4	100.00%	
Opportunities In Green Building			1	1											2	79.41%	
<b>Social</b>	<b>108</b>	<b>60</b>	<b>120</b>	<b>124</b>	<b>92</b>	<b>130</b>	<b>75</b>	<b>96</b>	<b>145</b>	<b>85</b>	<b>70</b>	<b>193</b>	<b>229</b>	<b>343</b>	<b>1,870</b>	<b>70.53%</b>	
Labor Management	21	8	11	8	4	9	4	35	41	3	11	28	85	64	332	100.00%	
Supply Chain Labor Standards	20	8	30	30	12	19	13	10	71	13	6	6	55	26	319	0.00%	
Product Safety & Quality	10	5	6	14	12	12	8	7	5	29	9	25	34	103	279	100.00%	
Health & Safety	7	10	6	18	17	45	15	8	3	8	6	4	14	100	261	77.78%	
Community Relations	16	17	16	23	35	16	14	23	18	7	4	3	9	26	227	56.52%	
Privacy & Data Security	16	2	3	1	2		9	6	4	5	11	90	5	4	158	68.97%	
Responsible Investment	9	5	30	20	2	2	4	1	2	4	3	3	3	2	90	90.57%	
Opportunities In Nutrition & Health	3	3	16	5		13	3	2		6	4	9	5	11	80	70.00%	
Access To Health Care	2	2	1	4	4	3	1	2		7	9	14	3	1	53	61.11%	
Chemical Safety			1		1	4	4	1			3	11	4		29	83.54%	
Controversial Sourcing					3	5			1	3	1		9	1	23	45.37%	
Human Capital Development						1		1			1		3	3	9	59.00%	
Access To Finance	1			1							2			2	6	91.76%	
Access To Communications	3														3	73.98%	
Insuring Health & Demographic Risk						1									1	69.88%	
<b>Governance</b>	<b>88</b>	<b>100</b>	<b>99</b>	<b>127</b>	<b>215</b>	<b>182</b>	<b>270</b>	<b>306</b>	<b>387</b>	<b>154</b>	<b>281</b>	<b>278</b>	<b>224</b>	<b>222</b>	<b>2,933</b>	<b>100.00%</b>	
<b>Total</b>	<b>297</b>	<b>204</b>	<b>509</b>	<b>376</b>	<b>705</b>	<b>562</b>	<b>426</b>	<b>505</b>	<b>984</b>	<b>390</b>	<b>577</b>	<b>565</b>	<b>641</b>	<b>674</b>	<b>7,415</b>	<b>86.69%</b>	

**Table 3: Engagement Success by Topic and Materiality**

The table presents the percentage of successful engagements by topic and SASB/MSCI materiality. The *Dif.* column displays the difference in success rates between material and immaterial engagements in percentage points. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is based on a t-test of equal means (average success rate). The table does not include an examination of material versus immaterial governance engagements based on the MSCI materiality map because all governance engagements are considered material by MSCI.

	<b>Total</b>	<b>SASB</b>			<b>MSCI</b>		
		<b>Material</b>	<b>Immat.</b>	<b>Dif.</b>	<b>Material</b>	<b>Immat.</b>	<b>Dif.</b>
<b>Environment</b>	21.86%	23.35%	18.21%	5.15%***	21.23%	25.00%	-3.77%*
<b>Governance</b>	20.90%	22.02%	11.96%	10.05%***			
<b>Social</b>	15.61%	17.17%	13.47%	3.71%**	17.36%	11.43%	5.93%***
<b>Total</b>	19.91%	21.52%	15.13%	6.39%***	19.77%	17.43%	2.34%***

**Table 4: Engagement Success by Year, Industry, Characteristics, and Topic.**

The table presents (1) the number of engagements, (2) the percentage of engagements that led to a milestone, and (3) the average time in months between the engagement start and the day a milestone was reached (for successful engagements). In Panel (A), these success descriptives are split up by year. In Panel (B), the success descriptives are split up by SASB industry groups, while Panel (C) is divided by engagement characteristic. *One-Time Engagement* contains sequences that only include one engagement, while *Repeated Engagements* contains sequences with two or more engagements. *Non-Intense Method* contains sequences with below-median intensity based on the average method used (e.g., meeting > call > letter), while *Intense Method* contains sequences with above-median average method intensity. *Alone* contains non-collaborative sequences, while *Collaborative* contains sequences with engagements in which the asset manager collaborated with other investors and/or stakeholders. Panel (D) is divided by engagement topic.

	N	Success	Time (m)		N	Success	Time (m)
<b>(A) Year</b>				<b>(B) SASB Industry Group</b>			
2007	297	35.69%	32.04	Extractives & Minerals	1,447	26.40%	20.12
2008	204	34.31%	27.79	Financials	943	20.78%	22.66
2009	509	34.18%	22.34	Food & Beverage	934	17.67%	21.55
2010	376	33.51%	23.95	Infrastructure	928	15.84%	23.32
2011	705	24.96%	32.44	Resource Transformation	708	15.11%	23.88
2012	562	20.11%	26.85	Consumer Goods	703	19.35%	29.76
2013	426	24.65%	23.47	Technology & Communications	606	20.79%	23.02
2014	505	24.75%	20.10	Health Care	488	23.16%	21.70
2015	984	14.84%	21.64	Transportation	339	14.75%	22.81
2016	390	12.82%	16.14	Services	275	16.36%	15.18
2017	577	15.42%	15.18	Renewable Resources	44	20.45%	16.54
2018	565	13.45%	12.26				
2019	641	12.95%	8.48				
2020	674	5.49%	3.22				
<b>(C) Engagement Characteristics</b>				<b>(D) Engagement Topic</b>			
One Contact	4211	1.45%	0.00	Governance	2,273	23.32%	18.27
Multiple Contacts	3204	44.16%	23.35	Environment	2,146	20.22%	24.93
Non-Intense Method	5119	15.04%	21.24	Business Model & Innovation	1018	21.51%	27.04
Intense Method	2294	30.69%	23.62	Leadership & Governance	693	13.85%	24.77
Alone	3602	14.08%	23.56	Social Capital	687	19.36%	23.28
Collaborative	1663	22.13%	26.19	Human Capital	598	10.70%	17.82
				<b>Total</b>	<b>7,415</b>	<b>19.91%</b>	<b>22.38</b>

**Table 5: The Characteristics of Target Firms and their Peers.**

The table displays the firm characteristics of targeted and peer firms that are measured in the year before the engagement start at the target firm. Peer firms are in the same industry, country, and within-industry market size quartile. For each set of peer firms matched to a target firm we calculate the average firm characteristics. The *Dif.* column gives the average difference between target and peer firms. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is based on a t-test of equal means.

	Target		Peer		T-C
	Mean ( <i>Count</i> )	SD	Mean ( <i>Count</i> )	SD	Diff.
MSCI <sub>ESG</sub>	5.219 (3894)	2.476	5.121 (3286)	2.103	0.098
MSCI <sub>KI</sub>	5.444 (2712)	2.281	5.439 (2712)	2.009	0.005
KI <sub>GOV</sub>	6.008 (1139)	2.182	6.048 (1139)	1.932	-0.040
KI <sub>SOC</sub>	4.494 (520)	2.336	4.942 (520)	2.002	-0.448***
KI <sub>ENV</sub>	5.218 (1016)	2.322	4.989 (1016)	2.030	0.228*
ln(CO <sub>2</sub> Total)	13.238 (2903)	2.436	12.655 (2726)	2.294	0.583***
ln(CO <sub>2</sub> Relative)	3.976 (2895)	2.076	3.806 (2696)	1.959	0.170**
Cumulative Return	10.601 (4038)	31.847	9.951 (3669)	31.440	0.650
log(size)	9.215 (4306)	1.348	8.863 (4306)	1.183	0.352***
log(assets)	9.552 (4301)	1.703	9.036 (3963)	1.566	0.517***
log(sales)	8.836 (4290)	1.591	8.224 (3953)	1.510	0.612***
Sales Growth	8.395 (4288)	26.299	15.140 (3949)	38.885	-6.745***
Tobin's Q	1.856 (4301)	1.333	1.931 (3963)	1.211	-0.075**
Tangibility	27.270 (4278)	24.574	26.525 (3949)	22.725	0.745
SGA/Assets	15.586 (3708)	16.589	14.060 (3673)	13.264	1.526***
ROE	15.016 (4250)	19.239	12.382 (3910)	16.680	2.634***
ROIC	10.029 (4289)	12.331	8.514 (3981)	9.993	1.515***
R&D / Sales	5.334 (2036)	33.341	5.257 (2408)	18.571	0.077
Profit Margin	10.018 (4291)	29.891	6.267 (3955)	43.101	3.751***
P/E Ratio	25.489 (3908)	38.050	36.548 (4029)	48.921	-11.059***
Opex/Assets	65.471 (4298)	60.183	58.083 (3961)	45.943	7.388***
Net Income/Employees	0.102 (3381)	0.346	0.090 (3511)	0.301	0.012
Market-To-Book Ratio	3.125 (4301)	3.638	3.129 (3963)	3.275	-0.004
Leverage	41.084 (4301)	25.561	42.097 (3963)	23.290	-1.013
EPS	2.421 (4300)	4.854	1.821 (4273)	3.807	0.600***
Dividend per Share	0.916 (4298)	1.456	0.753 (4275)	1.242	0.163***
Capex/Sales	0.110 (4287)	0.203	0.155 (3944)	0.315	-0.045***
Asset Turnover	74.786 (4301)	63.383	66.054 (3963)	48.785	8.732***
Client Ownership	0.325 (4272)	0.527	0.219 (3954)	0.365	0.106***
Institutional Ownership	52.565 (4272)	28.370	51.613 (3954)	29.668	0.952
Inside Ownership	19.714 (4134)	22.984	24.533 (3896)	23.119	-4.819***

**Table 6: The Effect of Engagements on Cumulative Excess Returns**

The table presents the cumulative excess returns ( $R_{TargetFirm} - R_{PeerFirm}$ ) for intervals (in months) [0], [0,6], and [0,14]. Month 0 is defined as the month of the first contact within an engagement. The *Difference* rows report the differences in means between columns (2)/(3), (4)/(5), (5)/(6), and (7)/(8) that comprise: success vs. no success, material vs. immaterial, material success vs. immaterial success, and material no success vs. immaterial no success, respectively. Significance stars indicate whether an average cumulative excess return or difference in means is different from zero. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

		(1) All	(2) Success	(3) No Success	(4) Material	(5) Immaterial	(6) Mat. Success	(7) Immat. Success	(8) Mat. No Success	(9) Immat.No Success	
<b>ESG</b>	[0]	Mean	0.097	0.344	0.035	0.231	-0.157	0.335	0.450	0.202	-0.282
		Difference		0.309		0.388		-0.115		0.484	
	[0,6]	Mean	0.441	0.790	0.355	0.445	-0.265	0.472	2.380	0.438	-0.808
		Difference		0.435		0.710		-1.908		1.247	
	[0,14]	Mean	0.344	1.870*	-0.032	0.695	-2.159*	2.543**	0.926	0.186	-2.793**
		Difference		1.902*		2.854**		1.617		2.979**	
	Observations	5478	1085	4393	3810	786	823	134	2987	652	
<b>E</b>	[0]	Mean	0.387	0.505	0.357	0.394	0.214	0.137	1.986	0.464	-0.387
		Difference		0.148		0.180		-1.849		0.850	
	[0,6]	Mean	1.693***	1.320	1.788***	1.744**	1.228	0.823	4.473*	1.992**	0.127
		Difference		-0.468		0.516		-3.650		1.865	
	[0,14]	Mean	1.211	1.503	1.136	0.718	0.557	1.679	1.275	0.459	0.314
		Difference		0.367		0.160		0.404		0.144	
	Observations	1866	380	1486	1186	237	252	60	934	177	
<b>S</b>	[0]	Mean	-0.341	-0.038	-0.406	0.104	-0.437	0.369	-1.449	0.032	-0.269
		Difference		0.368		0.542		1.817		0.301	
	[0,6]	Mean	0.180	1.963	-0.199	0.081	0.245	1.927	1.960	-0.421	-0.041
		Difference		2.162		-0.164		-0.033		-0.380	
	[0,14]	Mean	-0.684	0.370	-0.908	-0.072	-1.933	2.997	-2.116	-0.907	-1.902
		Difference		1.278		1.860		5.112		0.995	
	Observations	1444	253	1191	697	308	149	44	548	264	
<b>G</b>	[0]	Mean	0.138	0.423	0.063	0.176	-0.164	0.441	0.164	0.102	-0.210
		Difference		0.359		0.340		0.278		0.312	
	[0,6]	Mean	-0.462	-0.313	-0.501	-0.222	-2.384	-0.251	-1.190	-0.214	-2.554
		Difference		0.188		2.162		0.939		2.340	
	[0,14]	Mean	0.284	3.017**	-0.436	0.959	-5.119**	2.899*	4.688	0.416	-6.513***
		Difference		3.454***		6.078**		-1.790		6.929***	
	Observations	2168	452	1716	1927	241	422	30	1505	211	

**Table 7: The Effect of Engagements on Cumulative Excess Abnormal Returns**

The table reports cumulative excess abnormal returns ( $AR_{TargetFirm} - AR_{PeerFirm}$ ) for intervals (in months) [0], [0,6], and [0,14]. The abnormal return is calculated by deducting the predicted return based on the CAPM model from the realized return. Month 0 is defined as the month of the first contact within an engagement sequence. The *Difference* rows present the differences in means between columns (2)/(3), (4)/(5), (5)/(6), and (7)/(8) that comprise: success vs. no success, material vs. immaterial, material success vs. immaterial success, and material no success vs. immaterial no success, respectively. Significance stars indicate whether an average cumulative excess abnormal return or difference in means is different from zero. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively..

		(1) All	(2) Success	(3) No Success	(4) Material	(5) Immaterial	(6) Mat. Success	(7) Immat. Success	(8) Mat. No Success	(9) Immat.No Success	
ESG	[0]	Mean	0.387**	0.440	0.374**	0.449**	0.087	0.305	0.627	0.489**	-0.023
		Difference		0.066		0.362		-0.322		0.512	
	[0,6]	Mean	1.844***	1.491**	1.932***	1.483***	1.574*	1.056	3.111*	1.601***	1.258
		Difference		-0.441		-0.091		-2.056		0.342	
	[0,14]	Mean	3.240***	3.495***	3.177***	3.003***	1.480	3.809***	4.217	2.781***	0.917
		Difference		0.318		1.524		-0.408		1.865	
	<i>Observations</i>	5478	1085	4393	3810	786	823	134	2987	652	
E	[0]	Mean	0.629**	0.291	0.716**	0.680**	-0.365	-0.101	0.952	0.891**	-0.812
		Difference		-0.425		1.045		-1.053		1.702*	
	[0,6]	Mean	2.697***	1.224	3.073***	2.250***	1.185	0.875	2.483	2.620***	0.745
		Difference		-1.849		1.065		-1.608		1.876	
	[0,14]	Mean	3.643***	1.698	4.141***	2.430*	0.175	1.622	-0.018	2.647*	0.241
		Difference		-2.443		2.254		1.640		2.406	
	<i>Observations</i>	1866	380	1486	1186	237	252	60	934	177	
S	[0]	Mean	0.263	0.664	0.178	0.702	0.013	0.774	-0.260	0.683	0.058
		Difference		0.486		0.690		1.035		0.625	
	[0,6]	Mean	2.622***	3.915**	2.347***	2.832***	2.207	3.634*	4.843	2.614**	1.768
		Difference		1.568		0.625		-1.209		0.846	
	[0,14]	Mean	4.153***	4.533*	4.072***	6.015***	1.748	6.937**	5.877	5.764***	1.060
		Difference		0.461		4.267		1.060		4.704	
	<i>Observations</i>	1444	253	1191	697	308	149	44	548	264	
G	[0]	Mean	0.261	0.441	0.214	0.215	0.628	0.381	1.277	0.169	0.535
		Difference		0.227		-0.412		-0.896		-0.367	
	[0,6]	Mean	0.593	0.358	0.655	0.523	1.148	0.253	1.829	0.599	1.051
		Difference		-0.297		-0.625		-1.576		-0.452	
	[0,14]	Mean	2.284***	4.425**	1.720*	2.267**	2.419	4.010**	10.253	1.779*	1.305
		Difference		2.705		-0.151		-6.243		0.474	
	<i>Observations</i>	2168	452	1716	1927	241	422	30	1505	211	

**Table 8: The Effect of Being Targeted on Subsequent Firm Accounting Performance**

The table displays the effect of being targeted on accounting performance relative to peer firms using a difference-in-differences model. The outcome variables are ROE, ROIC, opex/assets, log(sales), capex/sales, and R&D/sales. *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm's event year. For each firm, we keep the five years before and after the event year. All models include time-varying firm controls and firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust..

	(1)	(2)	(3)	(4)	(5)	(6)
	ROE	ROIC	Opex/Assets	log(Sales)	Capex/Sales	R&D/Sales
<i>After</i> <sub>ESG</sub>	-0.734 (0.464)	-0.732*** (0.229)	0.603 (0.509)	-0.024** (0.009)	0.085 (0.537)	0.508* (0.276)
<i>Target</i> <sub>ESG</sub> × <i>After</i> <sub>ESG</sub>	1.335*** (0.514)	0.772*** (0.280)	-0.648 (0.695)	0.011 (0.013)	0.302 (0.615)	-0.812*** (0.301)
<i>N</i>	27171	27358	27422	27391	27385	14287
<i>After</i> <sub>GOV</sub>	-1.406** (0.574)	-0.726** (0.283)	1.634*** (0.565)	-0.022* (0.011)	0.336 (0.507)	0.314 (0.375)
<i>Target</i> <sub>GOV</sub> × <i>After</i> <sub>GOV</sub>	1.719*** (0.623)	0.913*** (0.339)	-2.209*** (0.779)	0.018 (0.016)	0.279 (0.622)	-1.000** (0.417)
<i>N</i>	19144	19287	19344	19315	19312	9833
<i>After</i> <sub>SOC</sub>	-1.261 (0.876)	-0.595 (0.435)	1.799 (1.238)	-0.038*** (0.014)	0.625 (0.743)	0.933** (0.411)
<i>Target</i> <sub>SOC</sub> × <i>After</i> <sub>SOC</sub>	2.847*** (0.984)	0.453 (0.534)	-0.477 (1.470)	0.055*** (0.018)	-1.555* (0.867)	-1.035** (0.407)
<i>N</i>	9738	9836	9854	9840	9840	6121
<i>After</i> <sub>ENV</sub>	-0.862 (0.648)	-0.859** (0.368)	-1.327* (0.735)	-0.003 (0.014)	-1.456 (0.911)	-0.219 (0.192)
<i>Target</i> <sub>ENV</sub> × <i>After</i> <sub>ENV</sub>	0.158 (0.677)	0.338 (0.401)	-0.495 (0.986)	-0.003 (0.018)	1.649* (0.924)	0.379* (0.201)
<i>N</i>	14617	14713	14745	14727	14724	8272
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes

**Table 9: The Effect of Being Targeted by an (Im)Material Engagement on Subsequent Firm Accounting Performance**

The table displays the effect of being targeted on accounting performance relative to peer firms using a difference-in-differences model. To distinguish between material and immaterial engagements, we include a triple interaction term ( $Target \times After \times Material$ ) and an interaction term  $After \times Material$ . In this table, we present the estimated treatment (targeting) effects by materiality. The outcome variables are ROE, ROIC, opex/assets, log(sales), capex/sales, and R&D/sales.  $Target$  equals one for target firms and zero for peer firms.  $After$  equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm's event year. For each firm, we keep the five years before and after the event year. All models include time-varying firm controls and firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	(1)	(2)	(3)	(4)	(5)	(6)
	ROE	ROIC	Opex/Assets	log(Sales)	Capex/Sales	R&D/Sales
Target <sub>ESG</sub> × After <sub>ESG</sub> (Material = 0)	4.871 (3.052)	1.137 (1.428)	1.123 (2.713)	0.028 (0.054)	-0.459 (3.643)	-0.267 (0.316)
Target <sub>ESG</sub> × After <sub>ESG</sub> (Material = 1)	0.717 (0.567)	0.444 (0.306)	-1.429* (0.761)	0.008 (0.014)	0.595 (0.705)	-0.623* (0.362)
<i>N</i>	23449	23626	23664	23650	23641	12218
Target <sub>GOV</sub> × After <sub>GOV</sub> (Material = 0)	1.337 (2.000)	1.976* (1.182)	2.985 (3.547)	0.011 (0.058)	1.379 (1.439)	-2.264*** (0.830)
Target <sub>GOV</sub> × After <sub>GOV</sub> (Material = 1)	1.764*** (0.655)	0.827** (0.354)	-2.673** (0.787)	0.018 (0.016)	0.182 (0.665)	-0.883* (0.453)
<i>N</i>	19144	19287	19344	19315	19312	9833
Target <sub>SOC</sub> × After <sub>SOC</sub> (Material = 0)	3.988 (2.531)	0.833 (1.122)	0.518 (2.635)	0.062 (0.041)	0.580 (1.693)	0.442 (0.676)
Target <sub>SOC</sub> × After <sub>SOC</sub> (Material = 1)	2.779** (1.403)	0.463 (0.787)	2.174 (1.904)	0.050* (0.028)	-2.486* (1.374)	-1.444** (0.621)
<i>N</i>	6681	6746	6754	6749	6748	3966
Target <sub>ENV</sub> × After <sub>ENV</sub> (Material = 0)	3.989 (2.735)	1.654 (1.405)	-0.820 (2.754)	0.080 (0.054)	-0.681 (3.268)	1.239* (0.744)
Target <sub>ENV</sub> × After <sub>ENV</sub> (Material = 1)	-0.941 (0.808)	-0.216 (0.484)	-1.055 (1.256)	-0.018 (0.022)	2.795** (1.178)	0.612*** (0.229)
<i>N</i>	11386	11477	11491	11487	11484	6583
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes

**Table 10: The Effect of Being Targeted on MSCI ESG Scores**

The table displays the effect of being targeted on MSCI ESG scores relative to peer firms using a difference-in-differences model. The outcome variables are the MSCI subcategory scores based on the engagement topic. *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm's event year. For each firm, we keep the five years before and after the event year. All models include firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	ESG (1)	GOV (2)	SOC (3)	ENV (4)	MSCI <sub>KI</sub> (5)	KI <sub>GOV</sub> (6)	KI <sub>SOC</sub> (7)	KI <sub>ENV</sub> (8)
After <sub>ESG</sub>	-0.084** (0.037)				-0.136** (0.057)			
Target <sub>ESG</sub> × After <sub>ESG</sub>	0.188*** (0.055)				0.077 (0.078)			
After <sub>GOV</sub>		0.018 (0.053)				-0.013 (0.064)		
Target <sub>GOV</sub> × After <sub>GOV</sub>		0.011 (0.064)				-0.007 (0.088)		
After <sub>SOC</sub>			0.012 (0.052)				0.178* (0.098)	
Target <sub>SOC</sub> × After <sub>SOC</sub>			-0.039 (0.071)				-0.095 (0.142)	
After <sub>ENV</sub>				0.018 (0.053)				-0.115 (0.071)
Target <sub>ENV</sub> × After <sub>ENV</sub>				0.169** (0.072)				0.169* (0.102)
log(size)	0.176*** (0.040)	0.033 (0.047)	0.253*** (0.060)	0.234*** (0.046)	0.089 (0.059)	0.021 (0.069)	0.211* (0.116)	0.249*** (0.070)
Tobin's Q	-0.051* (0.028)	-0.036 (0.030)	-0.009 (0.028)	0.062* (0.032)	-0.001 (0.034)	-0.087** (0.041)	-0.007 (0.050)	0.057 (0.043)
Sales Growth	-0.000 (0.000)	-0.000 (0.000)	-0.001 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.001 (0.001)	0.002** (0.001)	-0.001 (0.001)
ROE	0.001 (0.001)	0.003*** (0.001)	-0.003*** (0.001)	-0.001 (0.001)	-0.000 (0.001)	0.004*** (0.001)	-0.003* (0.001)	-0.002 (0.001)
Leverage	-0.001 (0.001)	-0.002 (0.002)	0.000 (0.001)	0.002 (0.002)	-0.001 (0.002)	-0.002 (0.002)	-0.002 (0.003)	0.000 (0.002)
Dividend per Share	0.015** (0.007)	0.008 (0.011)	-0.010 (0.020)	-0.003 (0.014)	-0.027 (0.023)	-0.079*** (0.016)	0.093 (0.074)	-0.001 (0.040)
Capex/sales	-0.000 (0.001)	-0.000 (0.001)	-0.002* (0.001)	0.001 (0.001)	-0.001 (0.001)	-0.002* (0.001)	-0.001 (0.002)	-0.000 (0.001)
Client Ownership	0.010 (0.049)	-0.030 (0.054)	0.084 (0.065)	-0.083 (0.065)	-0.044 (0.069)	-0.043 (0.080)	0.136 (0.113)	0.016 (0.109)
Institutional Ownership	0.005** (0.002)	0.003 (0.002)	0.004* (0.002)	0.001 (0.002)	0.000 (0.003)	-0.006* (0.003)	0.005 (0.005)	-0.000 (0.003)
Inside Ownership	-0.005*** (0.002)	-0.009*** (0.002)	0.005* (0.002)	-0.004 (0.003)	-0.005* (0.003)	-0.011*** (0.003)	0.003 (0.005)	-0.003 (0.004)
Institutional Block	-0.019 (0.036)	-0.077* (0.046)	0.053 (0.048)	-0.057 (0.047)	-0.050 (0.053)	-0.048 (0.066)	0.018 (0.100)	-0.073 (0.062)
Constant	3.367*** (0.344)	5.636*** (0.421)	2.895*** (0.545)	2.545*** (0.429)	4.330*** (0.523)	7.179*** (0.589)	2.443** (1.161)	2.212*** (0.644)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Adjusted- <i>R</i> <sup>2</sup>	0.712	0.454	0.645	0.682	0.617	0.592	0.721	0.680
<i>N</i>	27204	19160	9752	14627	18254	12739	4324	10769

**Table 11: The Effect of Being Targeted by an Environmental Engagement on Corporate Emissions**

The table displays the effect of being targeted by an environmental engagement on corporate emissions relative to peer firms using a difference-in-difference model. The outcome variables are the log transformations of total/scope one/scope two CO<sub>2</sub>e emissions or their intensity (CO<sub>2</sub>e emissions divided by last year's sales). *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm's event year. For each firm, we keep the five years before and after the event year. All models include firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	$\ln(\text{CO}_2\text{Total})$ (1)	$\ln(\text{CO}_2\text{Scope1})$ (2)	$\ln(\text{CO}_2\text{Scope2})$ (3)	$\ln(\text{CO}_2\text{Intensity})$ (4)	$\ln(\text{CO}_2\text{Int.SC1})$ (5)	$\ln(\text{CO}_2\text{Int.SC2})$ (6)
<i>After<sub>ENV</sub></i>	0.003 (0.028)	-0.025 (0.040)	-0.050 (0.044)	0.093*** (0.026)	0.047 (0.039)	0.007 (0.042)
<i>Target<sub>ENV</sub> × After<sub>ENV</sub></i>	0.022 (0.037)	0.021 (0.050)	0.091 (0.056)	-0.117*** (0.033)	-0.090* (0.047)	-0.023 (0.053)
log(size)	0.130*** (0.028)	0.236*** (0.038)	0.178*** (0.041)	-0.158*** (0.025)	-0.058 (0.036)	-0.120*** (0.038)
Tobin's Q	-0.071*** (0.019)	-0.121*** (0.023)	-0.113*** (0.026)	0.006 (0.016)	-0.036* (0.021)	-0.025 (0.024)
Sales Growth	-0.000 (0.000)	-0.000 (0.000)	-0.001** (0.000)	-0.001*** (0.000)	-0.001** (0.000)	-0.001*** (0.000)
ROE	-0.000 (0.001)	-0.001* (0.001)	-0.000 (0.001)	0.001* (0.001)	-0.000 (0.001)	0.001 (0.001)
Leverage	0.004*** (0.001)	0.004*** (0.001)	0.006*** (0.002)	0.002** (0.001)	0.002** (0.001)	0.002 (0.002)
Dividend per Share	0.003 (0.002)	0.005 (0.004)	-0.005 (0.005)	-0.011 (0.008)	-0.014* (0.008)	-0.028** (0.012)
Capex/sales	-0.003*** (0.001)	-0.003*** (0.001)	-0.004*** (0.001)	0.002** (0.001)	0.002* (0.001)	0.001 (0.001)
Client Ownership	0.105*** (0.037)	0.062** (0.031)	0.098** (0.042)	0.075* (0.039)	0.044 (0.032)	0.084* (0.045)
Institutional Ownership	-0.002 (0.001)	-0.004** (0.002)	-0.001 (0.002)	0.002 (0.001)	-0.001 (0.002)	0.002 (0.002)
Inside Ownership	-0.003 (0.002)	-0.000 (0.003)	0.003 (0.004)	0.000 (0.002)	0.003 (0.003)	0.007* (0.003)
Institutional Block	0.018 (0.021)	0.056* (0.032)	-0.004 (0.036)	0.028 (0.021)	0.069** (0.033)	0.023 (0.035)
Constant	12.341*** (0.256)	10.517*** (0.355)	10.692*** (0.411)	5.871*** (0.232)	4.051*** (0.341)	4.272*** (0.378)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted- <i>R</i> <sup>2</sup>	0.949	0.948	0.890	0.947	0.945	0.859
<i>N</i>	11099	9498	9216	11095	9493	9213

**Table 12: The Effect of Being Targeted by an Emission Engagement on Corporate Emissions**

The table displays the effect of being targeted by an emission engagement on corporate emissions relative to peer firms using a difference-in-difference model. We define emission engagements as engagements that we mapped to the MSCI categories “Carbon Emissions”, “Product Carbon Footprint”, and “Toxic Emissions & Waste”. The outcome variables are the log transformations of total/scope one/scope two CO<sub>2</sub>e emissions or their intensity (CO<sub>2</sub>e emissions divided by last year’s sales). *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm’s event year. For each firm, we keep the five years before and after the event year. All models include firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	$\ln(\text{CO}_2\text{Total})$ (1)	$\ln(\text{CO}_2\text{Scope1})$ (2)	$\ln(\text{CO}_2\text{Scope2})$ (3)	$\ln(\text{CO}_2\text{Intensity})$ (4)	$\ln(\text{CO}_2\text{Int.SC1})$ (5)	$\ln(\text{CO}_2\text{Int.SC2})$ (6)
After <sub>ENV</sub>	0.000 (0.052)	0.019 (0.072)	-0.010 (0.071)	0.203*** (0.051)	0.211*** (0.072)	0.161** (0.070)
Target <sub>ENV</sub> × After <sub>ENV</sub>	-0.003 (0.064)	-0.063 (0.089)	-0.040 (0.094)	-0.220*** (0.055)	-0.266*** (0.082)	-0.229*** (0.088)
log(size)	0.121*** (0.043)	0.177*** (0.055)	0.248*** (0.059)	-0.114*** (0.039)	-0.070 (0.054)	-0.011 (0.055)
Tobin’s Q	-0.107*** (0.030)	-0.138*** (0.034)	-0.186*** (0.047)	-0.026 (0.031)	-0.047 (0.033)	-0.107** (0.043)
Sales Growth	-0.000 (0.000)	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.000)	-0.001 (0.001)	-0.001 (0.001)
ROE	-0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.002* (0.001)
Leverage	0.003*** (0.001)	0.004** (0.002)	0.003 (0.002)	0.001 (0.001)	0.001 (0.002)	-0.000 (0.002)
Dividend per Share	0.014 (0.009)	0.027** (0.012)	0.008 (0.022)	-0.028** (0.011)	-0.008 (0.015)	-0.042** (0.019)
Capex/sales	-0.003*** (0.001)	-0.004*** (0.001)	-0.005*** (0.001)	0.002** (0.001)	0.002 (0.001)	0.001 (0.001)
Client Ownership	0.115* (0.065)	0.039 (0.041)	0.133* (0.070)	0.089 (0.068)	0.010 (0.044)	0.095 (0.070)
Institutional Ownership	-0.003 (0.002)	-0.003 (0.003)	-0.006 (0.004)	0.001 (0.002)	0.002 (0.003)	-0.003 (0.004)
Inside Ownership	-0.006 (0.004)	-0.001 (0.006)	-0.002 (0.007)	-0.001 (0.003)	0.005 (0.005)	0.002 (0.006)
Institutional Block	0.051 (0.043)	0.075 (0.061)	-0.014 (0.069)	0.058 (0.038)	0.086 (0.056)	0.020 (0.069)
Constant	13.038*** (0.375)	11.723*** (0.502)	10.776*** (0.576)	6.144*** (0.354)	4.783*** (0.515)	4.094*** (0.569)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted-R <sup>2</sup>	0.943	0.937	0.874	0.945	0.940	0.844
N	4545	3900	3683	4542	3898	3681

**Table A1. The Determinants of Success**

The table displays the determinants of reaching a milestone based on target firm and engagement characteristics in the year before the sequence start. The dependent variable of all models is *Success* that equals one for engagements that ended with a milestone and zero for engagements that did not (yet) lead to a milestone. *MSCI<sub>KI</sub>* is the relevant key issue environment, social, or governance score. Columns (1), (3), (5), and (7) hold the results for non linear (logit) models, while columns (2), (4), (6), and (8) display the average marginal effects resulting from the logit models. At the bottom of the table, we present the average marginal effect of an engagement being material on success that is separated by the framework used (SASB or MSCI). The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	ESG		ENV		SOC		GOV	
	(1) Logit	(2) AME	(3) Logit	(4) AME	(5) Logit	(6) AME	(7) Logit	(8) AME
Material <sub>MSCI</sub>	-0.273 (0.230)	0.030* (0.018)	-0.734* (0.389)	-0.059* (0.031)	0.076 (0.471)	0.073** (0.030)		
Material <sub>SASB</sub>	-0.243 (0.321)	0.040*** (0.012)	0.436 (0.508)	0.048** (0.022)	-1.355** (0.666)	-0.013 (0.025)	0.909*** (0.328)	0.075*** (0.027)
Material <sub>MSCI</sub> × Material <sub>SASB</sub>	0.789** (0.352)		0.127 (0.585)		1.499* (0.773)			
Multiple Engagements	4.577*** (0.182)	0.418*** (0.013)	4.843*** (0.299)	0.439*** (0.019)	6.177*** (0.778)	0.488*** (0.053)	5.255*** (0.361)	0.433*** (0.020)
Number of Engagements	-0.321*** (0.048)	-0.029*** (0.004)	-0.485*** (0.107)	-0.044*** (0.009)	-0.221*** (0.058)	-0.017*** (0.004)	-0.445*** (0.104)	-0.037*** (0.008)
Average Method Intensity	0.646*** (0.121)	0.059*** (0.011)	1.107*** (0.246)	0.100*** (0.022)	0.454 (0.315)	0.036 (0.025)	0.736*** (0.199)	0.061*** (0.016)
Previous Success	0.052** (0.026)	0.005** (0.002)	0.078 (0.054)	0.007 (0.005)	-0.013 (0.048)	-0.001 (0.004)	0.049 (0.056)	0.004 (0.005)
MSCI <sub>KI</sub>	0.002 (0.027)	0.000 (0.002)	0.060 (0.058)	0.005 (0.005)	-0.142 (0.091)	-0.011 (0.007)	-0.059 (0.048)	-0.005 (0.004)
log(size)	0.133** (0.053)	0.012** (0.005)	0.053 (0.114)	0.005 (0.010)	0.467*** (0.130)	0.037*** (0.010)	0.161* (0.091)	0.013* (0.007)
Tobin's Q	-0.041 (0.061)	-0.004 (0.006)	-0.027 (0.129)	-0.002 (0.012)	0.067 (0.134)	0.005 (0.011)	-0.084 (0.095)	-0.007 (0.008)
Sales Growth	0.001 (0.003)	0.000 (0.000)	0.000 (0.005)	0.000 (0.000)	0.011 (0.007)	0.001 (0.001)	-0.001 (0.004)	-0.000 (0.000)
Cumulative Return	0.340** (0.169)	0.031** (0.015)	0.882*** (0.329)	0.080*** (0.030)	0.066 (0.389)	0.005 (0.031)	-0.220 (0.305)	-0.018 (0.025)
ROE	-0.003 (0.003)	-0.000 (0.000)	-0.009 (0.008)	-0.001 (0.001)	-0.007 (0.007)	-0.001 (0.001)	0.001 (0.005)	0.000 (0.000)
Leverage	-0.004 (0.003)	-0.000 (0.000)	0.005 (0.006)	0.000 (0.001)	0.007 (0.007)	0.001 (0.001)	-0.011** (0.004)	-0.001** (0.000)
Dividend per Share	-0.056* (0.033)	-0.005* (0.003)	0.041 (0.063)	0.004 (0.006)	-0.088 (0.093)	-0.007 (0.007)	-0.155*** (0.047)	-0.013*** (0.004)
Capex/Sales	-0.003 (0.005)	-0.000 (0.000)	-0.010 (0.008)	-0.001 (0.001)	-0.007 (0.012)	-0.001 (0.001)	-0.001 (0.008)	-0.000 (0.001)
Client Ownership	0.070 (0.101)	0.006 (0.009)	-0.016 (0.242)	-0.001 (0.022)	0.399 (0.257)	0.031 (0.020)	0.088 (0.139)	0.007 (0.011)
Institutional Ownership	0.007 (0.005)	0.001 (0.000)	-0.000 (0.009)	-0.000 (0.001)	0.008 (0.011)	0.001 (0.001)	0.014 (0.009)	0.001 (0.001)
Inside Ownership	0.005 (0.004)	0.000 (0.000)	0.010 (0.008)	0.001 (0.001)	-0.007 (0.012)	-0.001 (0.001)	0.004 (0.007)	0.000 (0.001)
Institutional Block	-0.265** (0.127)	-0.024** (0.012)	-0.232 (0.246)	-0.021 (0.022)	-0.629** (0.321)	-0.050** (0.025)	-0.116 (0.226)	-0.010 (0.019)
Constant	-4.362*** (1.151)		-7.470*** (2.026)		-9.478*** (2.398)		-4.195** (1.764)	
Material <sub>MSCI</sub> (Material <sub>SASB</sub> = 0)		-0.024 (0.020)		-0.065 (0.035)		0.006 (0.038)		
Material <sub>MSCI</sub> (Material <sub>SASB</sub> = 1)		0.046** (0.023)		-0.057 (0.042)		0.110*** (0.039)		
Material <sub>SASB</sub> (Material <sub>MSCI</sub> = 0)		-0.021 (0.028)		0.042 (0.049)		-0.093** (0.041)		
Material <sub>SASB</sub> (Material <sub>MSCI</sub> = 1)		0.049*** (0.013)		0.049** (0.025)		0.012 (0.030)		
Year/Industry/Country Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R <sup>2</sup>	0.429		0.464		0.512		0.500	
N	5281	5281	1655	1655	1188	1188	2027	2027

**Table A2. The Determinants of Success - Participant and Leadership Intensity**

The table displays the determinants of reaching a milestone based on engagement characteristics, including participant and leadership intensity. The dependent variable of all models is *Success* that equals one for engagements that ended with a milestone and zero for engagements that did not (yet) lead to a milestone.  $MSCI_{KI}$  is the relevant key issue environment, social, or governance score. Columns (1), (3), (5), and (7) hold the results for non linear (logit) models, while columns (2), (4), (6), and (8) display the average marginal effects resulting from the logit models. At the bottom of the table, we present the average marginal effect of an engagement being material on success that is separated by the framework used (SASB or MSCI). The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	ESG		ENV		SOC		GOV	
	(1) Logit	(2) AME	(3) Logit	(4) AME	(5) Logit	(6) AME	(7) Logit	(8) AME
Average Method Intensity	0.562*** (0.186)	0.047*** (0.015)	0.586** (0.280)	0.068** (0.032)	0.610 (0.554)	0.046 (0.041)	0.655* (0.357)	0.051* (0.027)
Average Participant Intensity	0.269*** (0.087)	0.023*** (0.007)	0.412*** (0.146)	0.048*** (0.017)	0.650** (0.256)	0.049*** (0.019)	-0.067 (0.159)	-0.005 (0.012)
Average Leadership Intensity	0.120 (0.088)	0.010 (0.007)	0.191 (0.168)	0.022 (0.019)	0.294 (0.274)	0.022 (0.020)	0.084 (0.165)	0.007 (0.013)
Multiple Engagements	5.879*** (0.446)	0.492*** (0.034)			6.910*** (1.559)	0.522*** (0.109)	5.844*** (0.585)	0.458*** (0.036)
Number of Engagements	-0.236*** (0.057)	-0.020*** (0.005)	0.164** (0.081)	0.019** (0.009)	-0.227*** (0.086)	-0.017*** (0.006)	-0.275** (0.107)	-0.022*** (0.008)
Previous Success	0.051* (0.030)	0.004* (0.002)	0.081* (0.045)	0.009* (0.005)	-0.054 (0.056)	-0.004 (0.004)	0.040 (0.058)	0.003 (0.005)
$MSCI_{KI}$	0.027 (0.032)	0.002 (0.003)	0.086 (0.070)	0.010 (0.008)	-0.063 (0.148)	-0.005 (0.011)	-0.094 (0.059)	-0.007 (0.005)
$Material_{MSCI}$	-0.215 (0.333)	0.000 (0.025)	-0.491 (0.576)	-0.054 (0.049)	0.271 (0.588)	0.058* (0.033)		
$Material_{SASB}$	0.465 (0.419)	0.056*** (0.014)	0.775 (0.583)	0.086*** (0.031)	-0.555 (0.717)	0.011 (0.031)	0.370 (0.418)	0.029 (0.033)
$Material_{MSCI} \times Material_{SASB}$	0.258 (0.468)		0.056 (0.667)		0.899 (0.867)			
log(size)	0.124* (0.068)	0.010* (0.006)	0.326*** (0.124)	0.038*** (0.014)	0.533*** (0.180)	0.040*** (0.013)	0.150 (0.110)	0.012 (0.009)
Tobin's Q	0.041 (0.071)	0.003 (0.006)	0.085 (0.159)	0.010 (0.018)	0.210 (0.159)	0.016 (0.012)	0.033 (0.120)	0.003 (0.009)
Sales Growth	0.001 (0.004)	0.000 (0.000)	0.001 (0.006)	0.000 (0.001)	0.001 (0.012)	0.000 (0.001)	0.001 (0.006)	0.000 (0.000)
Cumulative Return	0.482** (0.216)	0.040** (0.018)	1.237*** (0.420)	0.143*** (0.047)	0.828 (0.562)	0.063 (0.042)	-0.368 (0.398)	-0.029 (0.031)
ROE	-0.003 (0.004)	-0.000 (0.000)	-0.009 (0.009)	-0.001 (0.001)	-0.018* (0.010)	-0.001* (0.001)	0.000 (0.007)	0.000 (0.001)
Leverage	-0.001 (0.003)	-0.000 (0.000)	0.012* (0.007)	0.001* (0.001)	0.023** (0.009)	0.002*** (0.001)	-0.010** (0.005)	-0.001** (0.000)
Dividend per Share	-0.094* (0.052)	-0.008* (0.004)	0.045 (0.089)	0.005 (0.010)	-0.188 (0.171)	-0.014 (0.013)	-0.236*** (0.083)	-0.019*** (0.006)
Capex/Sales	-0.001 (0.006)	-0.000 (0.000)	-0.007 (0.008)	-0.001 (0.001)	0.123** (0.056)	0.009** (0.004)	-0.008 (0.009)	-0.001 (0.001)
Client Ownership	0.046 (0.120)	0.004 (0.010)	0.254 (0.269)	0.029 (0.031)	0.556 (0.481)	0.042 (0.036)	0.072 (0.181)	0.006 (0.014)
Institutional Ownership	0.007 (0.006)	0.001 (0.001)	0.003 (0.011)	0.000 (0.001)	0.024 (0.016)	0.002 (0.001)	0.006 (0.010)	0.000 (0.001)
Inside Ownership	-0.000 (0.005)	-0.000 (0.000)	0.009 (0.011)	0.001 (0.001)	0.000 (0.014)	0.000 (0.001)	-0.009 (0.009)	-0.001 (0.001)
Institutional block	-0.314* (0.169)	-0.026* (0.014)	0.259 (0.320)	0.030 (0.037)	-1.147*** (0.444)	-0.087*** (0.033)	-0.225 (0.290)	-0.018 (0.023)
Constant	-7.458*** (1.878)		-10.616*** (2.136)		-20.657*** (4.358)		-5.077* (2.737)	
$Material_{MSCI}$ ( $Material_{SASB} = 0$ )		-0.016 (0.025)		-0.047 (0.057)		0.020 (0.043)		
$Material_{MSCI}$ ( $Material_{SASB} = 1$ )		0.004 (0.029)		-0.056 (0.059)		0.082* (0.044)		
$Material_{SASB}$ ( $Material_{MSCI} = 0$ )		0.038 (0.034)		0.094 (0.070)		-0.036 (0.045)		
$Material_{SASB}$ ( $Material_{MSCI} = 1$ )		0.058*** (0.015)		0.085** (0.034)		0.027 (0.038)		
Year/Industry/Country Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo $R^2$	0.437		0.277		0.502		0.495	
N	3711	3711	942	942	719	719	1524	1524

**Table A3. The Probability of Being Targeted**

The table displays the determinants of being targeted relative to peer firms based on firm characteristics in the year before the engagement start. The dependent variable in all models is *Targeted* that equals one for targeted firms and zero for non-targeted peer firms.  $MSCI_{KI}$  is the relevant key-issue score based on MSCI's materiality map. All columns display the average marginal effects resulting from a logit regression. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	(1) <b>ESG</b> <i>AME</i>	(2) <b>ESG<sub>Cat</sub></b> <i>AME</i>	(3) <b>GOV</b> <i>AME</i>	(4) <b>SOC</b> <i>AME</i>	(5) <b>ENV</b> <i>AME</i>
$MSCI_{ESG}$	-0.003 (0.003)				
$MSCI_{KI}$		-0.008** (0.004)			
$KI_{GOV}$			-0.010* (0.005)		
$KI_{SOC}$				-0.023*** (0.007)	
$KI_{ENV}$					-0.005 (0.006)
log(size)	0.041*** (0.006)	0.039*** (0.006)	0.037*** (0.009)	0.044*** (0.015)	0.062*** (0.011)
Tobin's Q	-0.014** (0.007)	-0.018** (0.008)	-0.000 (0.010)	-0.030* (0.016)	-0.036** (0.014)
Sales Growth	-0.002*** (0.000)	-0.002*** (0.000)	-0.001* (0.001)	-0.002** (0.001)	-0.002*** (0.000)
ROE	0.002*** (0.001)	0.002*** (0.001)	0.002** (0.001)	0.004*** (0.001)	0.002* (0.001)
Leverage	-0.002*** (0.000)	-0.002*** (0.000)	-0.001** (0.001)	-0.002** (0.001)	-0.003*** (0.001)
Dividend per Share	0.009* (0.005)	0.010* (0.006)	0.010 (0.008)	0.007 (0.012)	0.001 (0.011)
Capex/Sales	-0.105*** (0.033)	-0.096*** (0.036)	-0.101 (0.063)	-0.173 (0.133)	-0.081* (0.047)
Client Ownership	0.125*** (0.016)	0.124*** (0.018)	0.201*** (0.026)	0.105** (0.051)	0.027 (0.028)
Institutional Ownership	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.001)	-0.002* (0.001)	-0.001* (0.001)
Inside Ownership	-0.004*** (0.000)	-0.004*** (0.001)	-0.004*** (0.001)	-0.006*** (0.001)	-0.004*** (0.001)
Institutional Block	-0.039** (0.019)	-0.037* (0.022)	-0.008 (0.032)	-0.060 (0.048)	-0.064* (0.033)
Pseudo $R^2$	0.052	0.058	0.055	0.088	0.072
$N$	5702	4374	2076	918	1820

**Table A4. The Effect of Being Targeted on Refinitiv ESG Scores**

The table displays the effect of being targeted on Refinitiv ESG scores relative to peer firms using a difference-in-difference model. The outcome variables are the Refinitiv ESG<sub>CB</sub> ESG, GOV, SOC, and ENV scores. The ESG<sub>CB</sub> score is the “combined” score which equals the ESG score with an ESG controversies overlay. *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm’s event year. For each firm, we keep the five years before and after the event year. All models include firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	<b>ESG<sub>CB</sub></b>	<b>ESG</b>	<b>GOV</b>	<b>SOC</b>	<b>ENV</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>
<i>After</i> <sub>ESG</sub>	-0.306 (0.243)	-0.662*** (0.229)			
<i>Target</i> <sub>ESG</sub> × <i>After</i> <sub>ESG</sub>	1.625*** (0.358)	2.281*** (0.350)			
<i>After</i> <sub>GOV</sub>			-0.438 (0.427)		
<i>Target</i> <sub>GOV</sub> × <i>After</i> <sub>GOV</sub>			2.637*** (0.603)		
<i>After</i> <sub>SOC</sub>				0.918 (0.573)	
<i>Target</i> <sub>SOC</sub> × <i>After</i> <sub>SOC</sub>				0.146 (0.815)	
<i>After</i> <sub>ENV</sub>					-1.016** (0.417)
<i>Target</i> <sub>ENV</sub> × <i>After</i> <sub>ENV</sub>					1.309** (0.619)
log(size)	2.829*** (0.255)	2.944*** (0.249)	2.660*** (0.462)	2.170*** (0.620)	3.079*** (0.437)
Tobin’s Q	-0.940*** (0.149)	-1.116*** (0.151)	-1.171*** (0.276)	-1.448*** (0.292)	-1.230*** (0.307)
Sales Growth	-0.009*** (0.002)	-0.010*** (0.002)	-0.011*** (0.004)	-0.010* (0.005)	-0.016*** (0.003)
ROE	0.012** (0.005)	0.003 (0.005)	0.006 (0.008)	-0.001 (0.010)	0.005 (0.008)
Leverage	0.037*** (0.008)	0.036*** (0.008)	0.047*** (0.014)	0.010 (0.019)	0.054*** (0.014)
Dividend per Share	0.072 (0.051)	0.052 (0.045)	0.044 (0.056)	-0.162 (0.198)	0.051 (0.117)
Capex/sales	-0.022*** (0.005)	-0.021*** (0.005)	-0.020*** (0.008)	-0.014 (0.009)	-0.022*** (0.007)
Client Ownership	0.002 (0.283)	-0.007 (0.273)	-0.416 (0.559)	1.536* (0.871)	0.832 (0.660)
Institutional Ownership	0.031** (0.012)	0.025** (0.012)	0.074*** (0.022)	0.031 (0.028)	0.027 (0.021)
Inside Ownership	-0.050*** (0.014)	-0.068*** (0.014)	-0.094*** (0.026)	-0.121*** (0.036)	-0.098*** (0.027)
Institutional Blockholder	-0.125 (0.255)	-0.144 (0.233)	0.336 (0.413)	-0.536 (0.556)	-0.546 (0.423)
Constant	11.214*** (2.231)	11.491*** (2.170)	23.060*** (4.161)	32.423*** (6.041)	4.888 (3.946)
Firm FE	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes
Adjusted <i>R</i> <sup>2</sup>	0.789	0.861	0.701	0.716	0.871
<i>N</i>	28133	28133	19588	10013	15247

**Table A5: The Effect of Being Targeted by an Engagement on Emission Intensity**

The table displays the effect of being targeted on corporate emissions relative to peer firms using a difference-in-differences model. In this table, we distinguish between ESG, governance, social, and environmental engagements. The outcome variable is the log transformation of CO<sub>2</sub>e emission intensity (CO<sub>2</sub>e emissions divided by last year's sales). *Target* equals one for target firms and zero for peer firms. *After* equals one in all years after the event year (i.e., the first year a firm is targeted). For peer firms, it equals one in all years after the matched target firm's event year. For each firm, we keep the five years before and after the event year. All models include firm and year fixed effects. The \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are robust.

	<b>ESG</b> ln(CO <sub>2</sub> Intensity) (1)	<b>GOV</b> ln(CO <sub>2</sub> Intensity) (2)	<b>SOC</b> ln(CO <sub>2</sub> Intensity) (3)	<b>ENV</b> ln(CO <sub>2</sub> Intensity) (4)
After <sub>ESG</sub>	0.070*** (0.020)			
Target <sub>ESG</sub> × After <sub>ESG</sub>	-0.086*** (0.027)			
After <sub>GOV</sub>		0.065*** (0.022)		
Target <sub>GOV</sub> × After <sub>GOV</sub>		-0.071** (0.030)		
After <sub>SOC</sub>			-0.021 (0.032)	
Target <sub>SOC</sub> × After <sub>SOC</sub>			0.016 (0.043)	
After <sub>ENV</sub>				0.093*** (0.026)
Target <sub>ENV</sub> × After <sub>ENV</sub>				-0.117*** (0.033)
log(size)	-0.130*** (0.021)	-0.074*** (0.022)	-0.125*** (0.033)	-0.158*** (0.025)
Tobin's Q	0.026* (0.014)	-0.004 (0.016)	0.043** (0.020)	0.006 (0.016)
Sales Growth	-0.001*** (0.000)	-0.002*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
ROE	0.001** (0.000)	0.001** (0.001)	-0.000 (0.001)	0.001* (0.001)
Leverage	0.000 (0.001)	-0.000 (0.001)	0.001 (0.001)	0.002** (0.001)
Dividend per Share	-0.004 (0.003)	-0.008* (0.004)	-0.019* (0.010)	-0.011 (0.008)
Capex/Sales	0.002*** (0.001)	0.002*** (0.001)	0.002* (0.001)	0.002** (0.001)
Client Ownership	0.046* (0.024)	0.032 (0.022)	0.037 (0.034)	0.075* (0.039)
Institutional Ownership	0.001 (0.001)	0.002 (0.001)	0.001 (0.002)	0.002 (0.001)
Inside Ownership	0.003*** (0.001)	0.002* (0.001)	0.004** (0.002)	0.000 (0.002)
Institutional Block	0.042*** (0.016)	0.019 (0.017)	0.069*** (0.024)	0.028 (0.021)
Constant	5.088*** (0.185)	4.364*** (0.200)	4.916*** (0.312)	5.871*** (0.232)
Firm FE	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.943	0.945	0.939	0.947
N	19566	14198	7568	11095