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Walk the Talk: Shareholders' Soft Engagement at Annual General Meetings

Alix Auzepy* Christina E. Bannier[†] Fabio Martin[‡]

Abstract

The right to ask questions and voice their opinions at annual general meetings (AGMs) represents one of the few avenues for shareholders to communicate directly and publicly with the firm's management. Examining AGM transcripts of U.S. companies between 2007 and 2021, we find that shareholders actively express their concerns about environmental, social and governance (ESG) issues in accordance with their specific relationship with the company. Further, they are also demonstrably more vocal about ESG issues at AGMs of firms with poor sustainability performance. What is more, we show that this soft engagement translates into a more negative tone which, in turn, results in lower approval rates for management proposals. Shareholders' soft engagement at AGMs is hence an effective way to "walk the talk".

Keywords: shareholder engagement, annual general meeting, ESG, textual analysis

JEL codes: G03, G23, G34, G39

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1 Introduction

Annual general shareholder meetings (AGMs) at publicly listed companies are a key corporate governance ritual. Apart from voting on specific agenda topics, AGMs provide shareholders with the opportunity to discuss the company's past performance and future strategy with management, to ask questions and to express their views i.e. use their "voice" (Cuñat et al. 2015). Although AGMs have in the past been criticized for being highly scripted events, rehashing only "old news" to shareholders (Short & Keasey 1999), they also have a decisive advantage when actively employed: They offer all shareholders, irrespective of how many shares they own, the right to a direct, individual and therefore comparably nuanced dialogue with the management (Monks et al. 2004). Given that for all but the largest investors the usual engagement tools such as the filing of agenda proposals or private negotiations with management (Gillan & Starks 1998, Denes et al. 2015) are virtually impossible to enact,* this soft form of engagement may be seen as particularly relevant. This holds even more in an age when shareholders' interests have broadened considerably from pure financial aspects to non-financial considerations of sustainability (e.g., see Grewal et al. (2016), Flammer et al. (2021)) and where the publicity of this communication form can easily be used to strengthen the opinions put forward.

Against this background, it is surprising to find that only very few scholars, to the best of our knowledge, have investigated this soft form of engagement during AGMs (Levit 2018). We try to fill this gap and examine whether and in which way shareholders use the AGM dialogue as an engagement instrument with regard to environmental, social and governance (ESG) aspects. Apart from demonstrating the broad employment of this engagement tool, we are particularly interested in studying the effects of this specific type of public communication to influence corporate behavior. As any statement made on an AGM is witnessed by other shareholders as well as the business media (Benton & You 2018), this forum can be used to draw public attention to specific issues as well as for public shaming and reputational attacks (O'Rourke 2003, Cranenburgh et al. 2014, Gomez-Carrasco & Michelon 2017, Benton & You 2018, Flammer et al. 2021). We therefore examine specifically the tone of this engagement tool, based on its negativity, and the impact that this sentiment may have on the AGM.

To contribute to these issues, we study a large sample of AGM transcripts from S&P

*For instance, to file a proposal, shareholders are required to own at least \$2000 US in market value, or 1%, of the company's securities for at least one year. In addition, shareholders may submit only one proposal, which has to be worded as a request or a recommendation, and may only address specific topics (O'Rourke 2003). Hence, limitations on permitted topics in proposals are often used as arguments by the management to exclude these proposals. Furthermore, shareholders may have to hire legal expertise or reach to the company's other shareholders, which can be a hurdle for non-institutional shareholders who are typically more resource-constrained (Norli et al. 2014, Flammer et al. 2021).

500 companies over the time period 2007 to 2021, where we explicitly focus on shareholders' statements, questions and remarks. In our analyses, we employ several textual analysis techniques (Hillert et al. 2014, Tetlock 2007, Price et al. 2012) to measure the tone of shareholder communication. We draw on two established dictionaries: the dictionary of Loughran and McDonald ((Loughran & McDonald 2011)) and the Harvard IV-4 psychosocial dictionary ((Tetlock 2007)) to analyze sentiment in both a financial and sociological context. The latter is particularly well suited to capture the tone of non-institutional shareholders, e.g. NGOs and religious organizations, since they are less likely to employ financial jargon in their statements at AGMs than assets managers or financial analysts. In addition, we also add to the literature by developing a dictionary designed to capture the environmental, social and governance words in shareholders' communication.

Our analyses deliver the following five main results. First, based on our newly created dictionary, we calculate the share of words dedicated to sustainability issues in total, and to environmental, social and governance topics specifically, in shareholder communication. We show that soft ESG engagement at AGMs, i.e. the contribution to these word shares, is not specific to small activist shareholder groups, but driven by all shareholder types in our sample. In other words, institutional as well as non-institutional shareholders (e.g., individual shareholders, employees, religious organisations, trade unions or NGOs) are vocal about sustainability issues at AGMs. Nevertheless, shareholders seem to attach higher importance to certain ESG aspects depending on their individual relationship with the company. For example, religious asset managers and non-governmental organizations are among the shareholder groups that contribute most to the share of environmental words. Unions and employees, on the other hand, are the shareholder groups that are most vocal about social issues.

Shareholders not only appear to attach importance to ESG issues, sustainable investing has also become increasingly contentious, particularly among U.S. investors where both strong proponents and equally strict opponents of the trend can be found (e.g., Edmans (2022)). We therefore examine whether there is a relationship between the sustainability performance of a company, measured by its ESG rating, and the tone of shareholder communication at the AGM. We find evidence that firms with lower ESG ratings perceive more negative statements and comments from their shareholders. This result holds for all proxies for negative tone that we use in our analysis. Thus, shareholders appear to engage more strongly and negatively when they feel that the environmental, social or governance arrangements of the company are not aligned with their interests or preferences.

Our third set of results illustrates the relationship between the sustainability performance of a company and the share of sustainability-related words in shareholder communication at the AGM. Perhaps unsurprisingly, we observe that firms with lower ESG ratings see

higher shares of environmental, social and governance words in the communication of their shareholders at the respective AGM. When examining this relationship more closely, however, we find that there are also dimensional effects. Specifically, whenever the environmental, social or governance rating of a company is particularly low, shareholders talk more about environmental, social or governance issues. Our findings therefore suggest that shareholders who are dissatisfied with a company's sustainability record use the AGM to express their concerns by speaking in a negative tone about the sustainability issues at hand.

In our fourth set of results we show that it is not only the sustainability performance per se that drives the tone of shareholder communication at the AGM. Rather, we find that the ESG communication acts as a channel for the relationship between ESG performance and tone. Lower ESG ratings lead shareholders to engage more strongly in ESG communication at the respective AGM with a negative tone, in essence scolding the management for their poor sustainability performance. Hence, for firms with sufficiently strong sustainability performance, ESG engagement leads to less negative sentiment at AGMs.

However, shareholders' soft engagement at AGMs does not seem to be limited to verbal communication, as we observe more tangible effects of their negative tone directed at the firm's management. We examine the relationship between shareholders' negative tone at AGMs and voting support for management-sponsored executive compensation proposals. We find that approval rates for these proposals are lower at AGMs where shareholder tone is more negative. Given the highly symbolic nature of say-on-pay votes (Fisch et al. (2018), Cuñat et al. (2015)), this finding leads us to conclude that shareholders' soft engagement on AGMs is truly an instrument to express dissent and to "walk the talk". When pondering the potential impacts of the AGM debate on the firm, managers should therefore not underestimate the role of small retail investors and their sustainability concerns. It may have gone largely unnoticed so far, but for many companies ESG engagement has already become a much broader (and comparably more democratic) process than merely a few discussions with large institutional investors behind closed doors.

In our analyses, we also consider potential endogeneity of shareholder engagement. Because shareholders' soft engagement is not randomly assigned to companies, it might be correlated with unobserved firm characteristics that also affect shareholders' concerns and, therefore, their communication. To address this issue and to establish a causal link between environmental communication and tone, we exploit the fact that abnormal temperatures lead to exogenous variation in shareholders' ESG preferences, as shown in previous empirical research (e.g., (Myers et al. 2012, Akerlof et al. 2013, Zaval et al. 2014, Choi et al. 2018)). Thus, we employ instrumental variable regressions, which instrumentalize environmental communication with extreme weather conditions (Biggerstaff et al. (2017)). We show that our

results continue to hold when using the instrumented relative environmental communication by shareholders, suggesting that our findings are unlikely to be driven by endogeneity.

By addressing the role that shareholders play in shaping the ESG discourse on AGMs, this paper fills the research gap on soft engagement and makes several contributions to the existing literature. First, it extends perspectives on the relationship between shareholder engagement and sustainability issues. Sjöström (2009) describes shareholder activists as “norm entrepreneurs” or “norm promoters”, using their position of ownership to bring about change, not only in relation to traditional corporate governance issues, but also increasingly in the area of corporate social responsibility (CSR), which encompasses social and environmental concerns. This “norm entrepreneurship” may be motivated by financial or non-financial reasons, or a mixture of both (Sjöström 2009, Riedl & Smeets 2017). For example, recent literature shows that investors choose to invest in socially-responsible companies not only because they care about generating positive social and environmental impact (Heeb et al. 2022), but also because they expect these companies to provide higher financial returns or better manage associated risks (Krueger et al. 2020, Bolton & Kacperczyk 2021). Based on a survey of institutional investors, Krueger et al. (2020) report that three major motives that induce shareholder engagement on climate-related issues are the protection of reputation, moral and ethical considerations, as well as legal and fiduciary duties. Denes et al. (2015) note that shareholder activism appears to be motivated by attempts to improve the financial performance of poorly performing firms as indicated by prior stock returns, return to sales and market to book ratio. We extend this prior empirical evidence by demonstrating that targeted firms are also characterized by poor sustainability performance that large groups of shareholders, i.e. not only institutional investors, would like to raise out of their personal motivation to promote individual sustainability issues.

Our paper also highlights the different types of shareholders that engage and the various ESG concerns that they express during AGMs. We show that shareholders do not form a homogeneous group but rather display large heterogeneity in terms of their ESG objectives and preferences. In line with Flammer et al. (2021), Denes et al. (2015), Grewal et al. (2016), we provide evidence that social and environmental matters are truly moving to the center of shareholder engagement even for mainstream investors. Historically, endowment funds of religious organizations and political groups were the first to draw attention to social and environmental issues through the shareholder proposal process (Gillan & Starks 1998). Beginning in the mid-1980s, public pension funds and individual activist shareholders referred to as “corporate gadflies”, also became frequent filers of shareholder resolutions (Gillan & Starks 1998). In addition, NGOs began to buy shares with the aim of voting or launching lobbying campaigns on CSR issues (Subramanian 2020). As of today, there are numerous

examples of NGOs protesting outside the AGMs and disrupting the event. In recent years, an increasing number of traditional institutional investors joined networks and initiatives (e.g., the Principles for Responsible Investment) to promote the incorporation of social and environmental considerations in investment practices. Since institutional shareholders hold large stakes in their portfolio companies, this also makes them particularly vulnerable to social or environmental controversies that impact these companies. In 2019, companies faced a record number of climate-related proposals at their AGMs, several of which were supported by large investors such as BlackRock and Vanguard Group (Flammer et al. 2021). Our work adds to this strand of literature by analyzing in a granular way the different types of shareholders that make use of their voice at the AGM.

Finally, our paper is also related to a growing literature that explores the role of climate change on collective beliefs, emotions and financial decision-making (Choi et al. 2020, Heeb et al. 2022). Li et al. (2011) show that perceived deviations from normal temperature not only shape beliefs but also lead respondents to donate to climate charities. Choi et al. (2020) find that retail investors sell stocks of climate-unfriendly firms when they revise their beliefs about global warming. Riedl & Smeets (2017) provide evidence that social preferences and social signaling have an influence on investment decisions. Giuli et al. (2022) find that investors propensity to vote for climate proposals after experiencing hot temperatures is higher at firms with more overall climate change exposure. We add to the existing literature by analyzing sentiment and sustainability concerns expressed in shareholders' interaction with company management during AGMs.

The remainder of this paper proceeds as follows: Section 2 delineates the variables construction and outlines the sample construction. Section 3 presets our methodology. Section 4 presents our main results, while Section 5 discusses implications of our results and concludes.

2 Data

2.1 AGM transcripts and shareholder statements

We obtain a total of 1,987 AGM transcripts available for S&P 500 companies from the Refinitiv database. All firms in this sample were part of the S&P 500 universe at least once during the time period from 2003 until 2022.[†] These transcripts include the verbatim of speeches and presentations by the board of directors. They also contain the statements

[†]Refinitiv only began collecting AGM transcripts systematically in 2017, which is why our sample contains fewer transcripts during the early years of our collection period. As companies are not generally required to provide a written record of the AGM, we were not able to obtain transcripts from all S&P 500 companies in our sample period.

made by shareholders in the course of the AGM, and in particular, during the questions-and-answers session, which provides a textual record of the interaction between the company management and shareholders. In addition, the transcripts typically provide a short overview of the participants who intervened during the meeting. This information consists of the names of the members of the board of directors as well as the names of the shareholders who spoke and their affiliations. Some shareholders, however, are also listed as “unidentified participants”.

Since AGM transcripts are not mandatory, there is also no clear-cut content and format of textual data that we can automatically extract for our empirical analysis. As we are only interested in shareholder communication, we therefore manually remove all statements made by company representatives and make sure to keep only the comments, questions and remarks made by shareholders in the text files. As highlighted before, shareholders can intervene during AGMs in several ways and their statements are not limited to short questions. They can also make affirmative statements (such as suggestions) and comments on topics raised by the board of directors (Lafarre & der Elst 2018). We make sure to include these different pieces of communication in our analyses.

Moreover, as shareholders have the opportunity to submit written questions prior to the meetings, it is common practice for board members to respond to these questions by quoting and elaborating on them directly during the AGMs. These questions are also included in our analyses because they may reflect important concerns of shareholders, and we assume that board members do not materially change the wording of these questions by repeating them. For example, we collected the following statement: “*We received a question asking if we are considering a stock split, why or why not? And if yes, what timing or conditions would you like to see before taking that action?*”, which was read by the director of Investor Relations of PNC Financial Group during the AGM in 2021, in our shareholder communication. Further examples of the various types of shareholders’ statements are provided in Appendix B. As a final step, we drop all transcripts that do not comprise any comments, remarks or questions from shareholders. This leaves us with a final sample of 1,056 transcripts from 302 U.S. companies for which we also have complete financial information.

2.2 Shareholder types

A company’s shareholder base is composed of institutional and non-institutional investors, with considerable differences in terms of their resources, preferences and objectives (Flammer et al. 2021). To account for this heterogeneity in a more granular way, we manually classify each of the shareholder statements in our sample according to a predefined shareholder

category. We employ categories that appear in prior literature on shareholder activism: With respect to institutional investors, Flammer et al. (2021) distinguish between public pension funds, SRI funds, special interest investors, and asset management funds. In the case of non-institutional investors, the authors identify individual, union, religious, and other shareholders. In their investigation of shareholder-sponsored proposals, Grewal et al. (2016) use the categories individual, public pension fund, religious groups, SRI funds, special interest groups, union fund, and coalitions. Benton & You (2018) differentiate between investment funds (e.g., mutual funds), public pensions (e.g., California Public Employees Retirement System), religious and SRI funds, special interests, and union affiliated pension funds.

We complement this literature with a small number of additional, fine-grained shareholder categories identified in our sample. Since shareholders usually provide their identity before asking a question or making a statement, the shareholder type is determined based on the name, affiliation as well as the content of the statement. Appendix B provides an overview and examples for each shareholder type. In sum, our classification is based on the following eleven categories of shareholders: individual shareholder, employee, retiree, trade union, asset manager, public asset manager, religious asset manager, analyst, NGO, religious organisation, proxy. Furthermore, we also add the category “none” for sentences, which cannot be classified due to a lack of information.

Among institutional shareholders, we categorize portfolio managers asking questions on behalf of asset management funds, hedge funds and mutual funds that typically hold large stakes in their portfolio companies as “asset managers”. AGM participants from equity research departments and investment banking institutions are classified as “analysts”. We further create a separate category for large public sector investors, such as public pension funds, which we refer to as “public asset managers” (e.g., Illinois State Board of Investments). Finally, we add the category “religious asset manager” for church pension funds and faith-based investment firms.

Among non-institutional shareholders, we label small retail investors as “individual shareholders”. Employees may also own shares of their employer’s stock, making them shareholders as well. Given that employees owning shares possess both shareholder and employee rights, we add the shareholder category “employee”. By contrast, the category “retirees” includes former employees of a company, individual shareholders who introduce themselves as retirees before making a statement, as well as representatives of retiree associations. Questions and remarks from union representatives (e.g., AFL-CIO) and union affiliated pension funds (e.g., United Brotherhood of Carpenters Pension Fund) as “trade union”. In order to account for further types of shareholders, we classify all AGM statements from community-based associations and think tanks as “NGO”. Furthermore, we dedicate a specific category to “re-

ligious organisation” such as churches and faith-based organizations. Finally, we categorize all statements from shareholder advocacy and proxy advisory firms as “proxy”. We expect these various categories of shareholders to represent contrasted sustainability preferences, reflected in their communication on AGMs.

2.3 Measuring shareholder tone and ESG communication

We measure the tone of shareholder communication by applying the “bag of words” method introduced in previous empirical studies that employ textual analysis in a financial context (Tetlock 2007, Tetlock et al. 2008, Loughran & McDonald 2011, 2015, Hillert et al. 2014). The “bag of words” method collects words that express negativity or positivity, respectively, compiles them into a corresponding dictionary and uses this dictionary to systematically measure the tone of a text (Hillert et al. 2014). In our analyses, we primarily capture the negative tone, as the literature on textual analysis has demonstrated that it is easier to isolate and less ambiguous than positive statements (see e.g., Loughran & McDonald (2015)). We also run several auxiliary analyses that employ a measure of net positivity (or “net sentiment”) as in Price et al. (2012) and Henry & Leone (2015).

With regard to the word lists for positive and negative words, we rely on two widely-established dictionaries: the Loughran and McDonald (LMD) negativity dictionary developed by Loughran & McDonald (2011) and the Harvard IV-4 psycho-social dictionary by Tetlock (2007). While the first was developed to capture the sentiment in financial texts or communication, the Harvard IV-4 dictionary was designed for psychological and sociological contexts (Yang et al. 2019). Using the latter dictionary may be particularly appropriate in our context, as several categories of shareholders, e.g., nongovernmental organizations or religious organizations, may not employ financial jargon in their statements unlike asset managers or equity analysts. Since such shareholders may rather use everyday language than technical terms, the dictionary by Loughran & McDonald (2011) might not adequately or fully capture the tone expressed in their statements.

Based on these two dictionaries, we calculate two different measures of negative tone. First, we employ $LMD_{i,t}^-$ and $HAR_{i,t}^-$, which is the the negative tone for company i in year t , and calculated as the fraction of negative words in all shareholder communication:

$$LMD_{i,t}^- = \frac{Negative_{i,t}}{Total\ Words_{i,t}} \quad (1)$$

where the LMD dictionary is applied. Likewise, the Harvard IV-4 dictionary is employed to measure the fraction of negative words, which we label $HAR_{i,t}^-$.

Second, we employ a term frequency and inverse document frequency adjusted negativity measure, which we label $LMD_{tf.idf}^-$ and $HAR_{tf.idf}^-$. We use this measurement to mitigate concerns that some high-frequency words may dominate our first negativity measure. Following the approach in (Hillert et al. 2014), the weight of the negative word i in transcript j is defined as:

$$LMD_{tf.idf}^- = \frac{(1 + \log(tf_{i,j}))}{(1 + \log(tf_j))} * \log\left(\frac{N}{df_i}\right) \quad (2)$$

if negative word i occurs at least once in transcript j and is zero otherwise. $tf_{i,j}$ is the term frequency of word i in transcript j , tf_i is the average word frequency in transcript j , N is the total number of transcripts, and df_i is the number of transcripts containing word i . While the first term, the term frequency, attenuates the impact of high-frequency words by applying logs, the second term, the inverse document frequency, modifies a words weight based on its commonality. Again, the same calculation is used for $HAR_{tf.idf}^-$, where the Harvard IV-4 instead of the LMD dictionary is employed.

Finally, despite the fact that some positive words may have an ambiguous meaning, we do not want to leave them completely ignored and, hence, incorporate an additional measurement of net sentiment by following the approach used in Price et al. (2012) and Henry & Leone (2015). To do so, we calculate:

$$NSENT_{i,t} = \frac{Positive_{i,t} - Negative_{i,t}}{Positive_{i,t} + Negative_{i,t}} \quad (3)$$

where $Positive_{i,t}$ is the number of positive words in shareholder communication at the AGM of company i in year t and $Negative_{i,t}$ is the respective number of negative words as either measured by LMD ($NSENT_{i,t}^{LMD}$) or Harvard-IV ($NSENT_{i,t}^{HAR}$). $NSENT_{i,t}$ combines the information of the negative and the positive sentiment and is scaled between -1 and 1, so that a purely positive communication displays a score of 1, a purely negative communication a score of -1, and a neutral communication scores 0.

In addition to tone, we examine the ESG content of shareholder communication at AGMs. To do so, we develop a dictionary that allows us to capture the proportion of environmental, social and governance-related words in communication. We isolate these words in a staggered process: We first determine the relevant corporate sustainability keywords for the bag of words approach by considering several sources. First, we extract word lists found in the

finance literature related to climate change and corporate social responsibility (Sautner et al. 2020, Vaupel et al. 2022). Second, we complement these lists by manually collecting relevant keywords from the websites of the Global Reporting Initiative (GRI), the Climate Disclosure Project (CDP), the Task Force on Climate Related Financial Disclosures (TCFD) and the International Labour Organization (ILO). Appendix C provides an overview of the keywords used for our analysis.

We then construct several measures of ESG communication in shareholders' statements. $ESG\ Share_{i,t}$ measures the relative share of either environmental, social or governance words during the AGM of company i in year t , i.e. a combined proxy for ESG-related communication. We also focus on each ESG pillar individually. We label these $ENV\ Share$ for the share of environment-related words, $SOC\ Share$ for the share of social-related words and $GOV\ Share$ for the relative share of governance-related words. In addition to using the word shares, we also follow the approach as in equation (2) and take into account the word frequency. We label these measures as $ENV\ Share_{tf.idf}$, $SOC\ Share_{tf.idf}$ and $GOV\ Share_{tf.idf}$, respectively.

2.4 Votes on executive compensation proposals

We obtain data pertaining to management-sponsored proposals on executive compensation from Proxy Monitor (www.proxymonitor.org). Proxy Monitor is a publicly available database that collects vote results on executive compensation proposals for the largest 250 publicly traded companies in the United States. Proxy Monitor provides information on the company name, the date of the annual meeting, the sponsor of the proposal, the type of proposal and the percentage of votes in favor of the proposal.

Since the DoddFrank Wall Street Reform and Consumer Protection Act took effect in 2011, public US companies are required to hold a say-on-pay advisory vote at least once every three years (Cuñat et al. 2015). Furthermore, the DoddFrank Act requires an additional vote regarding the frequency of the compensation approval vote (Hemphill 2019). To date, this is the only mandatory governance instrument, along with the election of board members, that allows shareholders to directly and publicly vote on the link between pay and performance (Cuñat et al. 2015). Thus, votes on executive compensation often constitute a way for shareholders to express dissent and have been compared to a “referendum” or “votes of confidence” (Cuñat et al. 2015).

Although the outcomes of votes on executive compensation are non binding, they are a visible and highly symbolic metric of shareholder opinion (Ertimur, Ferri & Stubben 2010, Fisch et al. 2018). Since these votes reflect shareholders' opinion of firm performance, we

expect shareholders to express their dissent by “walking the talk”, i.e. casting less favorable votes for management-sponsored proposals on executive compensation.

2.5 Independent Variables

To examine whether the tone of shareholder communication at the AGM is affected by a firm’s sustainability performance, we gather ESG data for the companies in our sample from the MSCI database. To this end, we retrieve data on industry-adjusted ESG scores as well as non-adjusted scores for the E, S and G pillars. MSCI uses a scale from 0 to 10, with 10 representing the highest level of sustainability performance and 0 the lowest.

With regard to their methodology, MSCI ESG ratings capture a company’s exposure to key ESG risks based on a granular breakdown of company characteristics, including its core product or business segments, the location of its assets or revenues, and other relevant measures such as outsourced production. The analysis then takes into account the extent to which a company has developed robust strategies and demonstrated a strong track record of performance in managing its specific level of risks or opportunities. Ongoing or structural controversies occurring within the last three years lead to a deduction from the score.

For the purpose of our analyses, MSCI ESG ratings offer several advantages over other data providers. First, they cover a large number of U.S. companies over a long period of time (Grewal et al. 2016). Second, their ESG ratings provide a benchmark for quantifying a company’s environmental, social, and governance performance based on several criteria (or so-called key issues) that are relevant to the industry in question. For example, under the environmental pillar, MSCI tracks performance on carbon emissions, biodiversity & land use and raw material sourcing, among other issues. As such, these ratings capture many aspects that may be of concern to shareholders and are therefore relevant to their soft engagement at AGMs. Finally, MSCI ratings have proved to be widely used in the academic literature investigating the relationship between ESG and financial performance (see e.g. Pástor et al. (2022) and Tsai & Wu (2022)).

In our analyses, we control for confounding factors by including a battery of firm-specific variables using data from Refinitiv. We account for *firm size* by including log-transformed total assets. To account for profitability and growth opportunities, we add the *net income to total assets* and *market to book ratio*. Market to book is defined as the market value of the ordinary equity divided by the balance sheet value of the ordinary equity in the company. Finally, our set of control variables also comprises the *leverage ratio*, measured as long-term debt divided by total assets (Ng & Rezaee 2015), and *firm age* measured in quarters since

incorporation (Coad et al. 2016). We winsorize the control variables at the 1st and 99th percentiles.

2.6 Descriptive statistics

2.6.1 Sample composition

In a first step, we collect a total of 1,987 AGM transcripts from the S&P 500 companies from the Refinitiv database. After dropping the transcripts that do not contain any shareholder statements, we are left with 1,056 AGM transcripts from 2007 to 2021 for which we also obtain all the relevant ESG performance data and control variables. Table 1 shows the frequency of transcripts by year. We note that the largest number of transcripts is from 2020.[‡]

Insert Table 1 here.

Table 2 outlines the industry composition of the sampling firms according to the GICS classification. Our final sample covers a total of 302 companies. As can be seen, the largest fraction of firms in our sample (17,71%) belong to the Financials sector, followed by firms in the Health Care sector with 14,96%, the Consumer Discretionary sector with 14,20% and the Information Technology sector with 13,64%.

Insert Table 2 here.

2.6.2 Summary statistics

Table 3 presents the summary statistics of our sample. Panel A shows that the average AGM transcript includes about 1,073 words and an average of 16 words per sentence. As Table 1 already shows, the average number of words peaks in 2009 and remains relatively high until 2019. The drops in 2020 and 2021 may be explained by the COVID-19 crisis, as shareholders had fewer possibilities to actively participate in AGMs (U.S. Securities and Exchange Commission 2020).

Insert Table 3 here.

[‡]AGM transcripts for the year 2020 make up 17.33% of our overall sample. Interestingly, we also find that more recent transcripts are shorter on average in terms of total word count.

Panel A in Table 3 shows that the mean percentage of negative words in a given AGM transcript amounts to 3% according to the Harvard-IV dictionary and to 2,3% according to the LMD dictionary. This is in line with an average negativity of 1.57% for 10-K filings found in Loughran & McDonald (2011) as well as the mean percentage of negative words of 2.08% (according to LMD) found for shareholder letters in Hillert et al. (2014). The fraction of negative words in our sample varies between 0 and 7.5% (HAR-IV) or 12.3% (LMD). The net positivity in a given AGM transcript amounts to an average of 4.85% according to Harvard-IV dictionary. Interestingly, this net positivity is substantially more negative in a given transcript if it is measured according to the LMD dictionary, as illustrated by the average of -0.31%. In this form, the ratios are bounded between -1 and 1, consistent with the tone measures of Price et al. (2012) and Henry (2008). In a given AGM transcript, the mean percentage of environmental words is 2%, of social words 3% and of governance-related words 8%. The fact that the percentage of governance-related words is higher may be explained by the fact that governance topics (such as board compensation) are often mandatory agenda items at shareholder meetings.

Table 4 further expands on this aspect and displays the share of environment, social, and governance-related words for each shareholder type in our sample. As can be seen, the share of governance-related words is higher for all shareholder types compared to the share of environment and social words. The share of environment-related words is relatively higher for religious asset managers (4.3%), for religious organisations and and public asset managers (2.9%) and for NGOs (2.8%). The share of social words is relatively high for for religious organisations (4.0%), employees (3.8%), trade unions (3.7 %), public asset managers (3.4%), NGOs (3.3%) and retirees (3.2%).

Insert Table 4 here.

Panel B of Table 3 reports summary statistics of sustainability performance characteristics. The average company in our sample has an ESG score of 5.2. Looking at the individual pillars, the average environmental score of 5.9 is slightly higher than the average overall score. The average company has an average governance score of 5.4 and a comparably lower social score of 4.6. The control variables displayed in Panel C of Table 3 show that the average firm in our sample has a leverage close to 56% and a price-to-book ratio of 4,8%. In terms of age, the average company is about 166.9 months old, which corresponds to 13.9 years. Size is calculated as the natural logarithm of total assets and is on average 24.33.

3 Methodology

3.1 Baseline Regressions

Since a company's investor base consists of a variety of shareholder types, we include fine-grained categories to account for differences in sustainability preferences and objectives. Based on Grewal et al. (2016), Flammer et al. (2021) and Benton & You (2018), we identify eleven different categories of shareholder types: individual shareholders, employees, retirees, trade unions, asset manager, public asset manager, religious asset managers, analysts, NGOs, religious organisations, proxies. We expect the different types of shareholders to attach varying importance to sustainability dimensions. In a first step, we test this hypothesis by regressing the share of E, S and G words in each shareholder statement across all AGMs in our sample against the type of shareholder that made the respective statement:

$$ESG\ Share_{i,j,t} = \beta_1 * Shareholder\ Type_{i,j,t} + \gamma * Controls_{i,t} + \alpha_i + \alpha_t \quad (4)$$

where $ESG\ Share_{i,j,t}$ denotes the share of either E, S or G words in statement j made during the AGM of company i in year t . $Shareholder\ Type_{i,j,t}$ is a vector of dummy variables for each shareholder type with the individual shareholder being our baseline category.

Starting with the environmental pillar, we expect shareholder groups such as NGOs and asset managers, including religious asset managers, to be more vocal about environmental issues than the average individual investor. NGOs have social and/or environmental agenda and participate in AGMs to draw attention to corresponding issues (Subramanian 2020). Religious organisations, in particular religious asset managers, play a very active and sometimes overlooked role as investors Louche et al. (2012). This category of investors pioneered socially responsible investing (SRI) by being one of the first to incorporate both environmental and social factors into investment practices (Hong & Kacperczyk 2009). We therefore expect religious shareholders in our sample to be particularly vocal about environmental and social issues. Furthermore, a survey by Krueger et al. (2020) shows that many institutional investors consider corporate reporting on climate risks to be as important as traditional financial reporting. We therefore expect asset managers to engage on environmental issues, as they often represent financially material issues (Flammer et al. 2021, Sautner et al. 2020). Turning to the social pillar, we also expect that stakeholders which are or were directly involved with the company, i.e. retirees, unions and employees, to be particularly vocal about social matters since they encompass topics related to the work environment and hu-

man capital management. With regard to governance aspects, we expect all categories of shareholders to address these topics, as they are generally standard agenda items at general meetings (Ertimur, Ferri & Muslu 2010).

In a second step, we analyze whether a company's sustainability performance influences shareholder sentiment at AGMs. To do so, we use both the company's ESG score, as it reflects a company's overall sustainability performance, and the individual pillar scores to capture also a more granular perspective of the firm's environmental, social and governance performance. If shareholders particularly care about certain sustainability issues, we expect them to engage with a negative tone at the AGM if they feel that the company is not sufficiently addressing such issues. In contrast, their tone may be rather more positive if the firm fares well in the sustainability sphere. As especially a lack of sustainability performance could pose immediate reputational and financial risks, we predict that a lower ESG performance will be associated with a more negative tone of shareholder communication on AGMs. Formally, we test this by estimating an OLS panel regression in the following way:

$$TONE_{i,t} = \beta_1 * ESG_{i,t} + \beta_2 * Environmental_{i,t} + \beta_3 * Social_{i,t} + \beta_4 * Governance_{i,t} + \gamma * Controls_{i,t} + \alpha_i + \alpha_t \quad (5)$$

where we regress the tone on a company's ESG score controlling for the same firm controls and fixed effects as in equation (2). We use different measures of the dependent variable: the adjusted negativity measures based on the LMD or on the Harvard IV-4 dictionary, $LMD_{tf.idf}^-$ and $HAR_{tf.idf}^-$, and the net sentiment based on either of the two dictionaries, $NSENT_{i,t}^{LMD}$ and $NSENT_{i,t}^{HAR}$. We expect to find negative coefficients for all ESG measures when using the adjusted negativity measures as our dependent variable and a positive coefficient when we explain the net positivity.

In addition, we expect shareholders to engage more strongly with respect to sustainability issues at shareholder meetings of companies that perform relatively poorly in these areas. For example, if a company has a particularly poor track record on environmental issues, as measured by its ESG score, we would expect the number of questions and comments and the length of communication in this area to be significantly higher. However, if a company is an environmental leader, for example, shareholders should have little reason to ask a disproportionate number of questions or make critical statements about these issues. These assumptions are corroborated by empirical evidence showing that firms targeted by shareholder activism tend to be poor performers in specific areas, as indicated by

governance indicators, but also prior stock returns, sales growth or return to sales (Denes et al. (2015), Gillan & Starks (1998)). A similar argument should therefore hold for soft engagement as well. To estimate the statistical influence of the ESG performance on the share of sustainability-related communication by shareholders during an AGM, we conduct regressions in the form of the following equation:

$$ESG\ Share_{i,t} = \beta_1 * Environmental_{i,t} + \beta_2 * Social_{i,t} + \beta_3 * Governance_{i,t} + \gamma * Controls_{i,t} + \alpha_i + \alpha_t \quad (6)$$

where $ESG\ Share_{i,t}$ measures the relative share of either environmental, social or governance words during the AGM of company i in year t . As some of the ESG words in our dictionary might be used in an inflationary manner, we adjust the share by re-weighting it based on the term frequency and the inverse document frequency of the words as in Hillert et al. (2014). The variables $Environmental_{i,t}$, $Social_{i,t}$ and $Governance_{i,t}$ are the respective sustainability scores for company i in year t . $Controls_{i,t}$ describes a vector of further accounting and financial control variables. It includes the logarithm of firms total assets, its total debts to total assets, the market to book ratio and the firm age. α_t and α_i denote year fixed effects and industry fixed effects, respectively. In all regressions, we cluster the standard errors on both year and firm level.

We refine our analysis by considering the relationship between the sustainability concerns expressed by shareholders and their tone at AGMs. So far we have considered the effect of a firm's sustainability performance on both shareholder sentiment at the AGM and on the share of their ESG communication at the AGM. As a next step, we examine whether the previously observed effect of sustainability performance on shareholder sentiment is indeed channelled via their communication on sustainability topics. We test this by regressing the different measures of tone against both the ESG score, the share of environmental, social and governance words and an interaction between the ESG score and the word shares, while controlling for the same firm controls and fixed effects as in equation (2):

$$TONE_{i,t} = \beta_1 * ENV\ Share_{tf.idf} + \beta_2 * SOC\ Share_{tf.idf} + \beta_3 * GOV\ Share_{tf.idf} + \gamma * Controls_{i,t} + \alpha_i + \alpha_t \quad (7)$$

Since we expect shareholders to be more vocal at the AGMs of firms that are poor ESG performers, we also expect a greater share of ESG communication from shareholders

to result in a more negative tone. Hence, we expect positive coefficients for measures of environmental, social and governance words when explaining negativity of tone. Several empirical studies highlight the relevance of tone as a key communication feature. Price et al. (2012) underscore that relevant information is conveyed by managers in their words choices. Druz et al. (2020) find that the linguistic tone of company managers influence analysts' and investors' earnings forecasts. To test whether shareholders communication on environmental, social and governance topics acts as an channel for the relationship between ESG performance and negative tone, we interact $ENV Share_{tf.idf}$, $SOC Share_{tf.idf}$ and $GOV Share_{tf.idf}$ with the respective $Environmental_{i,t}$, $Social_{i,t}$ and $Governance_{i,t}$ score. We expect a negative sign for all three interaction terms as a higher ESG performance should result in less ESG communication and thus a more positive tone.

Finally, shareholders may voice their concerns in several ways at AGMs. We expect the negative tone expressed by shareholders to be associated with a lower support for management-sponsored proposals on executive compensation. Specifically, we expect that voting outcomes will be less favorable when the tone of shareholders expressed on AGMs is more negative. The say-on-pay rule gives shareholders an additional channel to express their view on how a firm is run and on whether executive pay is aligned with performance (Cuñat et al. 2015). Vote on executive compensation is advisory, i.e. nonbinding, and therefore highly symbolic (Hemphill 2019). Thus, engaged shareholders may express their disapproval by voting against proposed compensation packages for executives who they believe are significantly overpaid for their managerial performance, including on sustainability matters (Ertimur, Ferri & Stubben 2010). We predict that the more negative the tone of shareholders, the lower the approval rates for proposals on executive compensation due to the symbolic dimension of this vote. We test this hypothesis by regressing the votes in favor of management-sponsored proposals against the tone of shareholder as follow:

$$VOTES_{i,t} = \beta_1 * TONE_{i,t} + \gamma * Controls_{i,t} + \alpha_i + \alpha_t \quad (8)$$

where $VOTES_{i,t}$ describes the votes in favor of management-sponsored proposals for the AGM of company i in year t . $TONE_{i,t}$ describes the negativity of shareholder communication for the AGM of company i in year t . As our dependent variable, we employ the adjusted negativity measures $LMD_{tf.idf}^-$ and $HAR_{tf.idf}^-$, based on the LMD and Harvard IV-4 dictionary. α_t and α_i denote year fixed effects and industry fixed effects, respectively.

3.2 Two-stage least squares regression

Even though we include control variables and account for time fixed effects, unobservable time-varying firm characteristics might distort our results and lead to reverse causality issues. We therefore attempt to alleviate endogeneity concerns by applying a two-stage least squares instrumental variable regression.

We do so by empirically testing whether abnormal temperatures in the regions where a company is headquartered affect shareholder communication. Temperature data has been increasingly used by researchers to analyze the effect of temperature on different outcomes (e.g., Choi et al. (2020), Biggerstaff et al. (2017)). More specifically, we instrument the share of environment-related words in shareholders' questions and remarks with weather temperatures following the approach in Biggerstaff et al. (2017). We create a temperature anomaly variable, $Anomaly_{i,t}$ which denotes the mean between the actual temperature in state where company i is headquartered at the time of the AGM in in year t . Empirical evidence shows that personal exposure to abnormally hot temperature increases people's awareness about global warming and its consequences (e.g., Myers et al. (2012), Akerlof et al. (2013), Zaval et al. (2014), Choi et al. (2018)), Hence, extreme weather conditions can be used to create an exogenous variation in the sustainability-related preferences of shareholders. We obtain temperature data from the National Climatic Data Center (NCDC).

We hypothesize that in years when shareholders are exposed to abnormal temperatures, their awareness about global warming increases significantly, leading to a significant increase in concerns about environmental issues expressed at AGMs and in a more negative tone.

4 Results

4.1 Soft engagement by shareholder type

We first conduct an exploratory analysis of which environmental, social and governance terms are most common in our sample. We identify the words most frequently used by each type of shareholder to detect nuances in the sustainability concerns expressed by shareholders.

Table 5 provides an overview of the 30 most frequent environmental words used by each shareholder type. We observe that words such as "climate", "change", and "disclosure" are among the words most often used by institutional investors, in particular asset managers, public asset managers and religious asset managers, while analysts often employ the word "target". This observation is in line with earlier papers on the importance of climate change for institutional investors Krueger et al. (2020). Ilhan et al. (2019) document that insti-

tutional investors value climate-related disclosures and consider climate risk reporting as important as traditional financial reporting. Jung et al. (2018) and Subramaniam et al. (2015) provide evidence that firms are more likely to oversee risks associated to climate change and integrate them into their overall risk management when they disclose information about such risks. The word “future” is one of the most often used words by individual shareholders and trade unions. Finally, NGOs appear to be particularly vocal about biodiversity and pollution, especially topics related to “energy”, “climate”, “animals”, “water” and “coal”.

Insert Table 5 here.

Table 6 gives an overview of the 30 most common social words used by shareholders in our sample. We observe that trade unions intervening on AGMs appear to be primarily focusing on topics related to “pension”, “workers”, and “employees”, which is an intuitive result since unions are typically concerned with issues such as fair wages and equal opportunities (Sjöström 2009). Shareholders such as employees and retirees appear to address topics related to “job”, “safety” as well as “benefits” and “health”, “care”. At the same time, religious organisations often express concerns containing the words “people”, “rights”, “human”. NGOs appear to be particularly vocal on issues related to “community” or “health”. On the institutional investors’ side, asset managers often use the words “public”, “women”, and “rights”, but also “gender”, “equal” and “gap” whereas public asset managers appear to often make statements about “pension”, “trade”, and also “gender”. Finally, religious asset managers have rather similar concerns to religious organisations and appear to engage on issues related to “indigenous”, “people”, and “diversity”.

Insert Table 6 here.

Turning to the 30 most frequent employed governance words expressed by shareholders in Table 7, the results are more homogeneous, reflecting the fact that governance issues are often the main focus of AGMs. Thus, it is not a surprise that words such as “shareholders”, “question”, “proposal” or “board” are frequently used by almost all shareholder types in our sample.

Insert Table 7 here.

We refine our analysis by investigating whether some types of shareholders are particularly inclined to ask more questions about environmental, social or governance topics by

estimating equation (4). Table 8 reports coefficients for the dummy variables *Analyst*, *Asset Manager*, *Employee*, *NGO*, *Proxy*, *Public Asset Manager*, *Religious Asset Manager*, *Religious Organisation*, *Retiree* and *Trade Union* and *Individual Shareholder*. The shareholder category *Individual Shareholder* constitutes our baseline group.

The results for the regressions of the share of environmental words against the different shareholder types in column (1) suggest that, compared to the social dimension in column (2), religious asset managers, asset managers, proxies and analysts are more vocal about environmental matters than individual shareholders. This observation is also in line with prior literature. Krueger et al. (2020) find that institutional investors believe climate risks have financial implications for their portfolio firms and that these risks, in particular regulatory risks, have already begun to materialize. Hence, it is reasonable to find that those investors are particularly inclined to raise a question or make a comment about environmental topics at AGMs.

In addition, religious organisations were, historically, the first investors to integrate sustainability considerations into their investment process (Gillan & Starks 1998). Hong & Kacperczyk (2009) show that religious investors, amongst others, are less willing than other types of investors to hold sin stocks due to the public nature of their investments. Louche et al. (2012) investigate religious organisations' attitudes towards responsible investment and find that religious investors are pioneering impact investing. Hence, it is plausible that we find positive coefficients for the dummy variable *Religious Asset Manager*.

While our results suggest that these types of investors are more engaged with regard to environmental issues, we also find that employees, trade unions, retirees, public asset managers and NGOs tend to focus more on the social dimension (column (2)). This is intuitive, since social issues include, among other things, the way a company treats its employees. In terms of magnitude, employees appear to be the shareholder type that is the most vocal on social issues relative to individual shareholders. They are most concerned with a company's work environment, i.e. wages, working conditions, or their own personal development. Since trade unions usually represent the collective interests of workers, it is also likely that they focus more on social matters. Anderson et al. (2007) show that unions have resorted to shareholder activism in the face of labour law changes. Marens (2004) find that efforts by union shareholder activists have made it legally and organizationally easier to successfully put forward proposals. In addition, since many NGOs are primarily active on social and environmental topics, it seems reasonable that those investors have a higher share of social and a relatively higher share environment-related words in their communication.

Compared to environmental and social topics, governance issues such as directors' composition or board compensation are often key (mandatory) agenda points of AGMs. Thus,

the results for the governance dimension (column (3)) require cautious interpretation. Nevertheless, our results suggest that institutional investors, in particular investments funds and public asset managers, are particularly vocal on these issues relative to individual shareholders.

Altogether, our results show that ESG concerns are not only expressed by a single group of shareholders. Rather, all types of shareholders engage on at least one of the three dimensions depending on their personal relationship with the firm. While previous literature show that institutional investors increasingly address their ESG concerns through proposals, we provide evidence that also smaller groups of shareholders pursue a soft form of ESG engagement.

Insert Table 8 here.

4.2 Tone and ESG content of soft engagement

After having shown that sustainability topics are an integral part of shareholders' questions and comments during AGMs, and that virtually all shareholder types do engage on these issues, we analyze the tone and ESG content of this form of soft engagement. We present cross-sectional evidence suggesting that sustainability concerns expressed by shareholders and their tone at AGMs are related to the ESG performance of a company. In Table 9, we estimate equation (5) by regressing the tone of shareholders on the overall ESG score along with firm controls as well as year and industry fixed effects. We do so by using several measurements of tone as our dependent variable. In columns (1) and (2), we measure the adjusted negativity using the Harvard-IV dictionary in Panel A and the LMD dictionary in panel B. In columns (3) and (4), we employ the net sentiment, which also takes the share of positive words into account, using the Harvard-IV dictionary in panel A and the LMD dictionary in Panel B.

Insert Table 9 here.

The coefficients for the regression specifications in columns (1) and (2) are significant at the 1% level. We find that the overall ESG score as well as the E, S and G pillars are significantly negatively related to shareholders' negative tone. These results so far support our previous assumptions and suggest that the higher the ESG performance of a company, the lower the soft engagement of shareholders in the form of negative statements, questions and comments at the respective AGM. This lower form of soft engagement is reflected in a lower proportion of negative words in shareholder communication during AGMs. Thus,

shareholders might engage on sustainability issues in order to express their discontent with a company's poor sustainability performance.

Comparing the magnitudes of the results in columns (1) and (2) for Panel A and Panel B, we find that the coefficients for the environmental, social, and governance ratings in Panel A are slightly higher but overall of similar magnitude to those in Panel B. The results suggest that the governance score, followed by the environmental score have the largest impact on the negativity of the shareholders' overall tone on AGMs. The higher coefficients in Panel A may also suggest that the Harvard IV-4 psycho-social dictionary is particularly well-suited to capture negativity in shareholders' tone. These results are consistent with our assumption that several types of shareholders do not use a purely financial jargon in their communication at AGMs.

We employ the net positivity measurement to add further robustness to this finding. Our results in columns (3) and (4) indicate a significant positive relationship between a firm's ESG score and net shareholder sentiment. The coefficients in Panel A related to overall ESG score as well as the environmental and governance scores are significant at the 5% level. Overall, these results suggest that the better a company's sustainability performance, the lower the level of shareholder engagement at AGMs, based on the proportion of negative words. Regarding the results for columns (3) and (4) in Panel B, since a positive tone can have ambiguous meanings and is more difficult to extract (Loughran & McDonald 2011, Price et al. 2012), this could explain why we do not have conclusive results for all regression coefficients. On the contrary, the adjusted negativity measurements $HAR_{t.f.idf}^-$ and $LMD_{t.f.idf}^-$ as in Hillert et al. (2014) are particularly well-suited to capture shareholders' negative tone.

In a next step, we refine our analysis of shareholder soft engagement at AGMs by looking more closely at the relationship between a company's ESG performance and the proportion of environmental, social and governance words in shareholders' statements, questions and remarks during AGMs. The goal of this analysis is to examine whether the ESG performance influences not only shareholders' *tone of engagement*, but also the *content of engagement*, as measured by how much they talk about ESG issues at shareholder meetings. Table 10 reports the results from regressions of equation (6), in which we regress the share of environmental, social and governance words in shareholder communication on the ESG score and on the different E, S and G pillar scores along with firm controls as well as year and industry fixed effects.

Consistent with our expectations, we find that a company's ESG performance influences the prevalence of ESG issues in shareholder communication during AGMs. The coefficients in columns (1) to (6) are significant at the 5% level. More specifically, our results show that the higher the environmental performance of a company, the lower the share of environmental

words in shareholders' statements. These results also hold for the social and governance dimensions. One possible interpretation for these results could be that shareholders are less likely to ask a question or make a remark regarding an environmental, social or governance issue if they perceive the company as already well-performing in the respective dimension. In contrast, shareholders are more likely to engage and voice their concerns about such issues if they believe that the environmental, social or governance arrangements of the company are not aligned with their interests or preferences.

Overall, the results indicate that the sustainability performance of a company affects the ESG communication of shareholders' soft engagement at AGMs. These results are also consistent with existing literature on shareholder activism. Gillan & Starks (1998) and Huson (1997) report that the targets of large public institutional investors are characterized by poor governance structures. Empirical evidence also indicates that firms with abnormal CEO compensation and limited shareholder voting rights are more likely to be the target of shareholder resolutions (Ertimur, Ferri & Muslu 2010, Renneboog & Szilagyi 2011). Johnson & Shackell (1997) examine executive compensation proposals and observe that the probability of filing such a proposal is higher for firms that face negative financial press coverage. Denes et al. (2015) find that firms targeted by shareholder activism tend to be poor performers as indicated by prior stock returns, sales growth or return to sales.

Insert Table 10 here.

We have established the relationship between corporate ESG performance and shareholders' tone of engagement on the one hand, and the relationship between corporate ESG performance and the ESG communication of shareholders at AGMs on the other. We now turn to the impact of shareholders' ESG communication on the negativity of tone. Our previous results could simply mean that shareholders are particularly interested in environmental and social issues and therefore ask many questions on these topics. So far, we do not show that shareholders' soft engagement on ESG issues has an explicitly negative tone. Their statements, questions and remarks on ESG issues could have a positive or negative connotation, but could also be neutral. Thus, we refine our analysis by explicitly examining the link between the sustainability topics raised by shareholders and their tone on AGMs. This way, isolating the tone allows us to go beyond the analysis of *what* is being said to *how* it is being said (Price et al. 2012).

Table 11 reports the results from regressions of equation (7) where we regress the tone for each AGM on the share of environmental, social and governance words by shareholders

along with firm controls as well as firm and industry fixed effects. Explaining the adjusted negativity using the Harvard-IV dictionary $HAR_{tf.idf}^-$ and the LMD dictionary $LMD_{tf.idf}^-$ via the environmental, social and governance communication, all three coefficients in columns (1) and (3) are positive and significant at the 1% level.

The results in columns (1) and (3) indicate that the higher the share of environmental, social and governance words used by shareholders, the higher the negativity of tone. This supports the idea that shareholders' statements, questions and comments regarding sustainability issues are not made in a neutral way, but rather contribute to the negative tone. That is, the more shareholders talk about ESG issues at AGMs, the more negative their overall tone. Comparing the magnitudes of the coefficients, our results suggest that the share of social words has the strongest influence on the negative tone. Similarly, the higher the share of environmental words, the more negative the tone according to our results in columns (1) and (3). Therefore, these words appear to be used by shareholders in the context of statements with a negative connotation.

In columns (2) and (4), we analyze whether shareholders' ESG communication acts as a channel for the relationship between ESG performance and tone. We therefore interact the share of environmental, social and governance words with corporate sustainability performance. We observe that the coefficients of E, S and G words shares remain significant at the 1% level in column (2) and that their size slightly increases compared to the baseline specification in column (1). Furthermore, the interaction terms are also all significant at the 1% level, both in columns (2) and (4). These results suggest that the relationship between ESG performance and negative tone is channeled through shareholders' communication regarding ESG topics. Specifically, a higher sustainability performance reduces the proportion of words from the environmental, social and corporate governance areas, which leads to a weakening of the negative tone. Overall, our results corroborate our previous findings showing that a higher ESG score attenuates the negativity of tone.

Insert Table 11 here.

4.3 Instrumenting soft engagement with temperature

In our analyses, we also consider potential endogeneity of shareholder engagement. It is possible that the correlations we have identified do not reflect a causal impact of shareholder ESG communication on tone. Since the sustainability concerns expressed by shareholders are not randomly assigned to companies, they could potentially be linked to other unobservable firm characteristics that may also affect the negativity of tone.

Following the approach in Giuli et al. (2022) and Biggerstaff et al. (2017), we use extreme weather conditions that lead to an exogenous variation in ESG preferences of shareholders. This based on the findings of various studies providing evidence that personal exposure to abnormally hot temperature increases peoples awareness about global warming and its consequences (Akerlof et al. 2013, Myers et al. 2012, Zaval et al. 2014). Hence, we argue that shareholders’ concerns regarding environmental issues should be lower when temperatures are normal. We also argue that this variable satisfies the exclusion criteria, since it is unlikely that the abnormal temperatures would affect the negativity of tone directly.

Table 12 reports the results of the first- and second-stage regressions from the 2SLS approach. Columns (1) and (2) show the results for the first and second-stage regressions based on the Harvard-IV dictionary where the relative share of environment-related communication by shareholders is instrumented using abnormal temperatures in the state of the companies’ headquarters. Columns (3) and (4) estimate the same regression but with the LMD dictionary.

As expected, the temperature anomaly coefficient is statistically significant at the 1% level and positively related to the share of environmental communication in the first-stage regressions (columns 1 and 3). These results indicate that shareholders are more likely to talk more about environmental issues if temperatures in the state of the firm show abnormalities. The results of the second-stage regressions, which include the instrumented relative environmental communication, i.e. $ENVShare_{t,idf}$ (IV), on the right-hand side confirm our previous results (in columns 2 and 4). The coefficient on environmental communication (IV) is significant at the 1% level in both second-stage regressions and is positive. Hence, the coefficients demonstrate that a higher share of shareholders engaging about environmental topics causes the overall tone on an AGM to be more negative.

Insert Table 12 here.

4.4 Soft engagement and executive compensation proposals

In a final step, we turn to the implications of shareholders’ soft engagement at AGMs for company management. To voice their opinions, shareholders may not only engage through negative statements at AGMs. Instead, shareholders may also “walk the talk”, i.e. their negative tone may also translate into lower support for management-sponsored proposals as a way of putting pressure on the company (Gillan & Starks 2000, Cuñat et al. 2015).

Table 13 presents evidence for the relationship between the negative tone of shareholders and voting outcomes of proposals on executive compensation. In columns (1), (2) and (3),

we measure the adjusted negativity in shareholder tone using the Harvard IV-4, while in columns (4), (5) and (6) we employ the LMD dictionary. We test the relationship between negative tone and approval rates by including both industry and year fixed effects (columns 3 and 6). We reiterate this analysis by excluding industry fixed effects (columns 2 and 5) as in Ertimur, Ferri & Muslu (2010).

The coefficients in columns (2) and (4) are significantly negative at the 1% level and in column (6) at the 10% level, suggesting that a more negative tone by shareholders at AGMs is associated with lower approval rates for executive compensation proposals. We interpret these results as possibly reflecting the fact that shareholders are seeking to exert pressure on management to better align corporate behavior with their sustainability preferences. The interpretation is also consistent with the fact that AGMs enable smaller shareholders to exert their voice (Schwartz-Ziv & Wermers 2014). In sum, these findings are further evidence that the negative tone at AGMs is a reflection of shareholder dissent and an “early warning indicator” for management.

Insert Table 13 here.

5 Conclusion

Although shareholders’ right to speak at AGMs is a public and cost-effective avenue for shareholder engagement, little is known about the tone and content of their questions and remarks. In particular, the relationship between this form of soft engagement and corporate sustainability has not yet been explored.

Using a large sample of S&P 500 AGM transcripts, we show that sustainability topics are an integral part of shareholder communication at AGMs. While shareholders actively express their opinions about sustainability issues during such meetings, our results also indicate that the ESG issues raised and their tone of shareholders on AGMs are both related to the sustainability performance of a company. In addition, our study provides robust evidence of the relationship between the proportion of words on sustainability issues and the negative tone at shareholder meetings, suggesting that shareholders who address sustainability issues do so by adopting a negative tone. Finally, we show that shareholder discontent is not only expressed through verbal communication, but also by low support for management-sponsored proposals on executive compensation.

These findings are consistent with theory and evidence indicating that shareholders play a role in promoting social norms and serving as “norm promoters” (Sjöström 2009) on

capital markets. This study improves our understanding of the different forms of shareholder engagement and also have important implications for practice. First, they underscore the importance of shareholder sentiment at AGMs. Second, they highlight the need for companies to carefully assess their sustainability priorities of their shareholders and integrate them into their strategy, as failing to do so may lead to disrupted AGMs and a lack of support for management-sponsored resolutions. As “norm promoters”, shareholders’ questions and comments may reflect how a company is currently perceived and how successfully it is managing societal expectations.

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Appendices

A First Appendix

Table 1: Frequency by year. This table presents the frequency of AGM transcripts by year and the mean of total words per year in our sample.

Frequency by year				
Year	N transcripts	N transcripts with shareholder statements	% of sample	Mean total words
2003	4	-	-	-
2004	25	-	-	-
2005	34	-	-	-
2006	51	-	-	-
2007	65	34	3.22%	1153.147
2008	73	38	3.60%	1197.299
2009	70	45	4.26%	2345.289
2010	66	42	3.98%	2268.429
2011	57	38	3.60%	1999.500
2012	69	45	4.26%	1502.867
2013	61	38	3.60%	1505.868
2014	57	37	3.50%	1462.189
2015	53	37	3.50%	1649.487
2016	48	29	2.75%	1438.724
2017	148	96	9.10%	1167.479
2018	168	104	9.85%	915.558
2019	173	124	11.74%	1067.403
2020	404	183	17.33%	396.415
2021	341	166	15.72%	473.000
2022	20	-	-	-
Total	1,987	1,056	100	

Table 2: Frequency by sector. This table presents the frequency of AGM transcripts to GICS classification sector codes.

Frequency by sector		
GICS Sector	N	%
Communication Services	53	5.01%
Consumer Discretionary	150	14.20%
Consumer Staples	126	11.93%
Energy	42	4.00%
Financials	187	17.71%
Health Care	158	14.96%
Industrials	91	8.62%
Information Technology	144	13.64%
Materials	37	3.50%
Real Estate	10	0.95%
Utilities	58	5.49%
Total	1,056	100%

Table 3: Descriptive statistics. This table presents the descriptive statistics of our sample. *Panel A* provides descriptive statistics for the tone and shareholders' communication measures. *Panel B* for the sustainability performance variables and *Panel C* for the control variables.

	N	Mean	Median	Std. dev.	Min.	Max.
<i>Panel A: Shareholders' tone and communication measures</i>						
Words per sentence	1,056	16.393	15.8123	5.053	6.286	86.000
Number of words	1,056	1,073.788	509.500	1,605.844	22.000	18,378
HAR ⁻	1,056	0.030	0.030	0.013	0.000	0.075
LMD ⁻	1,056	0.023	0.025	0.015	0.000	0.123
HAR _{tf.idf} ⁻	1,056	13.404	3.327	27.763	-0.538	294.751
LMD _{tf.idf} ⁻	1,056	10.466	1.759	24.574	-0.401	237.609
NSENT ^{HAR}	1,056	0.485	0.486	0.227	-1.000	1.000
NSENT ^{LMD}	1,056	-0.307	-0.333	0.430	-1.000	1.000
ENV Share	1,056	0.020	0.014	0.020	0.000	0.137
SOC Share	1,056	0.025	0.022	0.017	0.000	0.124
GOV Share	1,056	0.080	0.069	0.046	0.000	0.255
ENV Share _{tf.idf}	1,056		0.795	16.555	-0.473	164.776
SOC Share _{tf.idf}	1,056	8.964	1.847	16.911	-0.486	127.847
GOV Share _{tf.idf}	1,056	13.747	6.326	19.500	-0.333	153.215
<i>Panel B: Sustainability performance variables</i>						
ESG Score	1,056	5.193	5.200	2.329	0.000	10.000
Environmental Score	1,056	5.932	5.800	2.251	0.000	10.000
Social Score	1,056	4.556	4.600	1.611	0.000	9.700
Governance Score	1,056	5.429	5.400	1.590	0.000	10.000
<i>Panel C: Control variables</i>						
Ln(Total assets)	1,056	24.335	24.150	1.491	21.593	28.475
Leverage	1,056	0.559	0.552	0.284	0.029	1.271
Market to book	1,056	4.847	2.960	12.489	-47.291	78.960
Firm Age	1,056	166.905	128.000	125.224	12.000	537.800

Table 4: Share of ESG Words per Shareholder Type. This table presents the share words related to environment, social and governance matters for each shareholder type.

Shareholder Type	ENV Share	SOC Share	GOV Share	Total
Analyst	0.012	0.010	0.031	0.052
Asset Manager	0.022	0.023	0.065	0.109
Employee	0.009	0.038	0.046	0.093
Individual Shareholder	0.011	0.014	0.048	0.073
NGO	0.028	0.033	0.039	0.100
Proxy	0.022	0.022	0.062	0.105
Public Asset Manager	0.029	0.034	0.101	0.164
Religious Asset Manager	0.043	0.029	0.066	0.138
Religious Organisation	0.029	0.040	0.062	0.130
Retiree	0.012	0.032	0.029	0.073
Trade Union	0.013	0.037	0.095	0.146
None	0.015	0.018	0.056	0.090

Table 5: Top 30 Environment Words by Frequency. This table reports the 30 most frequent environment-related words used by each shareholder type.

Top 30 Environmental Words																					
Analyst	freq.	Asset Manager	freq.	Employee	freq.	Indiv.	freq.	NGO	freq.	Proxy	freq.	Pub. Asset Mg.	freq.	Rel. Asset Mg.	freq.	Rel. Org.	freq.	Retiree	freq.	Union	freq.
target	59	climate	205	refinery	29	future	337	energy	213	packaging	41	disclosure	90	climate	57	climate	142	electric	35	disclosure	117
change	51	change	168	refineries	27	energy	312	climate	202	plastic	34	climate	58	disclosure	52	disclosure	98	future	16	future	43
impact	41	disclosure	148	future	17	change	279	animals	176	change	17	energy	44	change	48	change	96	change	12	impact	39
future	33	impact	69	building	12	power	267	water	173	disclosure	17	change	40	energy	46	food	73	technology	8	change	39
targets	32	commitment	65	agreement	8	climate	207	change	164	water	15	goals	24	future	43	land	68	aware	8	supply	36
climate	29	future	62	change	8	coal	205	coal	160	recycling	15	resources	18	gas	37	goals	59	production	6	commitment	34
energy	29	environmental	59	power	8	action	173	animal	136	environmental	14	carbon	17	coal	36	emissions	58	resources	6	climate	32
water	23	energy	58	impact	7	gas	144	environmental	115	action	14	reputational	16	emissions	34	impact	54	quality	6	chain	31
oil	20	oil	58	climate	7	water	125	carbon	112	energy	13	emissions	15	carbon	32	gas	54	commitment	6	power	25
environmental	20	gas	48	electric	7	technology	112	research	109	gas	12	future	14	goals	27	energy	52	chemical	5	alternative	24
agreement	19	action	48	water	7	oil	110	commitment	107	climate	11	reduce	13	oil	25	future	51	energy	5	oil	24
disclosure	19	supply	46	resource	6	impact	109	action	102	deforestation	11	paris	12	greenhouse	22	environmental	44	food	5	agreement	23
positive	17	environment	40	oil	6	research	105	power	102	coal	10	agreement	11	impact	22	commitment	42	research	5	protect	22
power	17	chain	40	sustainability	5	disclosure	105	future	93	food	10	gas	11	water	22	supply	41	transition	5	action	21
technology	17	power	35	supply	5	car	94	fossil	85	supply	9	impact	11	environmental	20	action	39	fuel	5	reputational	20
net	16	sustainability	35	clean	5	carbon	92	oil	84	impact	9	greenhouse	10	waste	20	reduce	36	oil	5	building	19
gas	16	goals	34	food	5	environment	91	disclosure	82	waste	9	action	10	power	18	chain	36	generation	5	resources	19
emissions	16	carbon	34	environmental	5	electric	89	impact	82	pollution	9	efficient	10	reduce	18	greenhouse	36	reduction	5	environmental	16
production	16	protect	34	protection	4	nuclear	87	gas	68	environment	8	transition	9	nuclear	17	oil	34	savings	4	sustainability	16
environment	14	emissions	31	fight	4	commitment	85	reduce	66	sustainability	8	oil	9	impacts	15	water	33	building	4	sustainable	15
fuel	13	reduce	31	energy	4	negative	79	environment	61	chemicals	8	technology	9	sustainability	15	carbon	28	buildings	4	quality	15
research	13	water	31	aware	4	fuel	77	arctic	56	reduce	8	commitment	8	commitment	14	sustainability	26	transportation	4	water	15
carbon	12	research	30	cars	4	building	76	fuels	56	impacts	7	ghg	7	wetlands	14	planet	25	agreement	4	positive	15
supply	11	impacts	24	petroleum	4	reduce	76	sustainability	56	target	7	sustainability	7	warming	13	agreement	23	air	4	energy	14
reduction	10	greenhouse	24	protect	3	clean	75	technology	54	reputational	7	reduction	6	targets	12	impacts	22	car	4	refineries	14
resources	10	target	23	sustainable	3	renewable	75	protect	53	commitment	7	protection	6	agreement	11	power	21	reduce	3	protection	13
generation	9	resources	22	research	3	protect	75	emissions	52	agriculture	7	research	6	paris	10	targets	21	impact	3	negative	13
air	9	aware	22	action	3	aware	74	food	51	emissions	7	rise	5	air	10	sustainable	20	cars	3	refinery	13
savings	9	technology	21	paris	3	waste	72	goals	50	zero	7	power	5	reduction	10	reduction	20	environment	3	align	12
chain	9	quality	21	quality	3	air	70	renewable	49	research	6	electric	5	environment	10	protect	19	produce	3	goals	12

Table 6: Top 30 Social Words by Frequency. This table reports the 30 most frequent social-related words used by each shareholder type.

Top 30 Social Words																					
Analyst	freq.	Asset Manager	freq.	Employee	freq.	Indiv.	freq.	NGO	freq.	Proxy	freq.	Pub. Asset Mg.	freq.	Rel. Asset Mg.	freq.	Rel. Org.	freq.	Retiree	freq.	Union	freq.
data	60	public	121	employee	100	people	1199	people	450	people	35	public	66	public	52	people	132	people	118	pension	224
people	55	women	112	employees	75	employees	370	public	325	human	24	pension	46	rights	45	rights	131	retiree	80	workers	193
impact	41	rights	103	union	71	access	281	community	220	public	20	access	35	trade	38	human	122	employee	48	union	181
public	33	employees	97	people	64	public	275	health	207	data	18	trade	33	indigenous	36	workers	97	benefits	42	employees	151
opportunities	30	trade	95	workers	56	job	242	rights	144	diversity	17	gender	33	people	31	health	95	employees	41	labor	104
trade	27	gender	92	safety	32	family	192	human	137	health	16	employees	27	diversity	31	public	61	health	38	rights	98
working	25	social	83	job	32	community	179	communities	136	labor	15	data	26	human	31	impact	54	care	36	trade	92
balance	23	equal	82	working	24	health	178	trade	124	employee	14	sexual	21	social	27	labor	54	pension	27	public	91
employees	22	gap	80	fair	21	working	155	working	121	access	14	discrimination	21	impact	22	communities	53	job	23	safety	85
diversity	21	pension	77	diversity	17	employee	144	diversity	117	employees	12	diversity	20	data	20	employment	52	life	20	health	85
life	20	impact	69	public	16	care	142	foundation	106	rights	11	orientation	16	health	18	fair	47	union	19	human	62
human	18	data	68	local	16	rights	136	employees	102	gap	11	employee	14	drug	16	discrimination	46	working	18	working	59
respect	17	people	64	human	15	life	112	workers	97	impact	9	human	12	access	15	diversity	46	family	17	people	52
contract	16	human	56	contract	15	impact	109	children	96	social	9	benefits	12	benefit	14	community	45	workers	15	employee	47
rights	16	labor	53	benefits	15	benefits	109	care	86	inclusion	9	gap	12	pension	13	data	42	jobs	14	care	44
fair	15	health	49	jobs	14	benefit	103	impact	82	gender	8	impact	11	nations	13	trade	42	security	11	collective	43
access	15	diversity	48	health	14	income	101	social	73	communities	7	rights	10	respect	12	working	40	income	10	local	43
benefit	15	indigenous	48	family	14	fair	95	population	73	job	7	women	9	community	10	social	40	data	9	impact	39
women	15	workers	41	care	14	children	92	women	65	working	7	job	8	healthcare	10	employees	38	public	9	job	34
income	15	jobs	41	labor	13	workers	92	fair	64	equal	7	social	8	pandemic	9	equal	36	safety	9	benefits	34
care	14	job	36	women	13	young	88	religious	63	fair	7	workforce	8	communities	8	indigenous	33	women	8	benefit	33
restructuring	13	communities	35	community	12	social	87	drug	63	safe	6	conflict	7	opportunities	8	moral	29	sick	8	balance	28
equal	12	racial	33	wages	12	human	85	family	62	workers	6	health	7	socially	8	families	28	drug	8	pandemic	28
benefits	11	benefit	33	contractors	11	safety	80	refuge	60	child	6	inclusion	7	women	7	children	26	benefit	8	contract	28
health	11	working	31	inclusion	11	women	79	life	58	respect	6	equal	7	employees	7	religious	26	medicare	8	freedom	28
safety	11	union	31	trade	11	respect	78	jobs	58	life	5	opportunities	6	care	7	income	26	social	8	social	23
gender	11	safety	28	healthcare	11	jobs	76	youth	57	quality	5	respect	6	safe	7	access	25	death	8	community	22
communities	10	employee	28	communities	11	security	76	access	56	sexual	5	race	6	protection	6	union	25	fair	8	worker	22
job	10	citizens	28	bargaining	11	local	76	families	53	workplace	5	skills	6	engagement	6	gender	24	females	8	child	22
community	9	benefits	27	rights	10	profits	75	treatment	51	workforce	5	protection	6	gender	6	society	23	healthcare	7	treatment	21

Table 7: Top 30 Governance Words by Frequency. This table reports the 30 most frequent governance-related words used by each shareholder type.

Top 30 Governance Words																					
Analyst	freq.	Asset Manager	freq.	Employee	freq.	Indiv.	freq.	NGO	freq.	Proxy	freq.	Pub. Asset Mg.	freq.	Rel. Asset Mg.	freq.	Rel. Org.	freq.	Retiree	freq.	Union	freq.
question	302	board	459	shareholder	51	shareholders	1947	shareholders	398	proposal	105	board	146	shareholders	137	shareholders	295	question	93	board	478
right	91	shareholders	430	proposal	50	shareholder	1870	board	357	shareholders	82	proposal	141	board	104	board	255	board	86	shareholders	369
management	90	proposal	330	question	48	board	1596	proposal	312	board	81	shareholders	131	proposal	91	proposal	228	shareholder	39	proposal	329
board	90	pay	306	board	42	question	1563	corporate	274	vote	65	disclosure	90	lobbying	71	corporate	148	right	38	compensation	276
shareholders	75	management	282	management	41	meeting	1205	question	271	shareholder	49	corporate	77	report	55	shareholder	139	meeting	34	pension	224
proposal	59	shareholder	253	shareholders	40	proposal	1188	shareholder	234	question	47	retirement	73	disclosure	52	rights	131	money	33	question	214
ceo	48	vote	182	compensation	34	right	768	right	189	management	36	report	53	management	49	report	125	pension	27	corporate	214
revenue	44	corporate	179	money	33	management	740	report	148	pay	28	management	53	shareholder	48	principles	112	compensation	21	vote	200
corporate	42	lobbying	163	statement	30	vote	716	rights	144	meeting	23	lobbying	53	rights	45	responsibility	109	statement	20	lobbying	177
shares	42	question	148	pay	29	shares	704	vote	134	corporate	23	shares	47	question	41	disclosure	98	retirement	19	shares	171
meeting	41	disclosure	148	right	28	money	546	diversity	117	report	22	spending	47	corporate	39	management	83	pay	19	committee	164
pay	39	shares	147	meeting	27	pay	468	meeting	116	statement	21	pension	46	vote	37	question	75	corporate	19	shareholder	164
shareholder	35	report	143	vote	23	ceo	381	ceo	102	ceo	21	pay	42	diversity	31	lobbying	75	management	18	ceo	150
report	34	governance	123	lobbying	21	independent	377	management	100	votes	18	independent	40	spending	26	right	68	proposal	18	pay	148
lobbying	33	compensation	123	diversity	17	corporate	376	accountability	99	disclosure	17	ceo	39	responsible	22	meeting	64	shareholders	17	independent	124
equity	32	voting	118	corporate	16	consent	319	money	96	diversity	17	vote	36	compensation	21	vote	64	shares	16	disclosure	117
performance	29	rights	103	independent	15	report	289	pay	94	responsibility	16	transparency	33	leadership	21	independent	51	performance	16	performance	117
tax	26	meeting	97	leadership	15	compensation	277	responsibility	88	shares	16	accountability	33	member	20	statement	49	committee	12	governance	101
investor	24	independent	88	committee	14	voting	270	control	86	governance	15	performance	32	statement	19	diversity	46	announced	12	rights	98
vote	23	leadership	86	ceo	13	statement	245	statement	85	audit	12	governance	31	shares	17	transparency	45	report	10	meeting	94
spending	22	committee	81	approve	11	governance	236	leadership	85	committee	12	disclose	27	right	16	responsible	43	ceo	9	right	87
diversity	21	spending	79	approved	11	votes	218	tax	84	money	12	shareholder	23	transparency	15	pay	38	vote	8	management	84
money	20	ceo	77	rights	10	performance	207	lobbying	84	leadership	12	statement	21	responsibility	15	oversight	36	equity	8	ownership	81
independent	20	pension	77	report	10	committee	206	disclosure	82	rights	11	diversity	20	reporting	14	leadership	35	award	6	report	81
compensation	19	right	72	tax	8	leadership	158	responsible	72	right	11	oversight	20	regulatory	14	governance	35	diversity	6	voting	71
disclosure	19	equity	71	member	8	rights	136	compensation	68	independent	11	committee	19	pension	13	ceo	31	leadership	6	spending	69
leadership	18	performance	68	accounting	7	proposals	134	transparency	65	compensation	10	review	19	pay	13	spending	30	voted	5	audit	68
governance	18	statement	68	retirement	7	investor	130	committee	57	equity	9	compensation	19	principles	13	shares	28	meet	5	accountability	67
transparency	18	oversight	60	paying	7	tax	126	independent	51	voting	9	disclosures	18	disclosed	11	member	28	bonus	5	equity	67
presentation	17	investor	58	lobby	6	fees	121	member	47	material	9	evaluate	18	oversight	11	regulatory	27	compensated	5	tax	67

Table 8: Heterogeneity of shareholders' ESG communication. This table reports the coefficients from OLS regressions of the share of ESG communication on dummy variables proxying the type of shareholder. ENV Share, SOC Share and GOV Share denote the share of E, S and G words in shareholder communication, respectively. The variables *Analyst*, *Employee*, *Retiree*, *Trade Union*, *Religious Organisation*, *Religious Asset Manager*, *Public Asset Manager*, *NGOs* and *Proxy* are dummy variables which are 1 if the statement was made by a shareholder that belongs to the respective category. The baseline group are *individual shareholders*. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regression include a constant (not reported). All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by year. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Dependent variable	ENV Share	SOC Share	GOV Share
	(1)	(2)	(3)
Analyst	0.004*** (2.94)	-0.004*** (-3.53)	-0.018*** (-7.72)
Asset Manager	0.010*** (5.42)	0.009*** (5.26)	0.016*** (5.76)
Employee	-0.004*** (-2.76)	0.025*** (7.11)	-0.010** (-2.45)
NGO	0.015*** (9.99)	0.018*** (14.17)	-0.012*** (-5.59)
Proxy	0.017*** (3.59)	0.007* (1.97)	0.014** (2.43)
Public Asset Manager	0.008** (2.27)	0.018*** (4.60)	0.052*** (10.31)
Religious Asset Manager	0.019*** (3.86)	0.012*** (3.64)	0.016*** (3.37)
Religious Organisation	0.012*** (6.09)	0.020*** (8.03)	0.012*** (4.08)
Retiree	-0.008*** (-4.88)	0.012*** (4.80)	-0.017*** (-4.50)
Trade Union	-0.002 (-1.43)	0.021*** (11.22)	0.040*** (12.86)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	9839	9839	9839
Adjusted R-squared	0.132	0.077	0.138

Table 9: Effect of ESG Performance on HAR & LMD Tone. This table reports coefficients from OLS regressions of different measures of shareholder tone on ESG scores and company characteristics. $LMD_{tf.idf}^-$ is the negativity of a transcript according to the Loughran and McDonald (2011) dictionary weighted by their term frequency and inverse document frequency. $HAR_{tf.idf}^-$ is the negativity of a transcript according to the Harvard IV-4 psychosocial dictionary weighted by their term frequency and inverse document frequency. $NSENT^{HAR}$ is the net sentiment of each transcript according to the Harvard IV-4 psychosocial dictionary. $NSENT^{LMD}$ is the net sentiment of each transcript according to the Loughran and McDonald (2011) dictionary. They are calculated as the difference between positive and negative words divided by the sum of positive and negative words. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regression include a constant (not reported). All variables are defined in Appendix X. All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by both year and firm. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Panel A: Harvard-IV Dictionary				
	$HAR_{tf.idf}^-$	$HAR_{tf.idf}^-$	$NSENT^{HAR}$	$NSENT^{HAR}$
	(1)	(2)	(3)	(4)
ESG Score _t	-1.486*** (-4.73)		0.008** (2.65)	
Environmental Score _t		-1.530*** (-4.48)		0.007** (2.01)
Social Score _t		-1.455*** (-3.07)		0.004 (0.86)
Governance Score _t		-1.898*** (-3.90)		0.010** (2.04)
Controls	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1056	1056	1056	1056
Adjusted R-squared	0.357	0.376	0.003	0.003
Panel B: LMD Dictionary				
	$LMD_{tf.idf}^-$	$LMD_{tf.idf}^-$	$NSENT^{LMD}$	$NSENT^{LMD}$
ESG Score _t	-1.256*** (-4.41)		-0.002 (-0.40)	
Environmental Score _t		-1.432*** (-4.63)		0.003 (0.55)
Social Score _t		-1.322*** (-3.08)		-0.001 (-0.61)
Governance Score _t		-1.625*** (-3.70)		-0.002 (-0.19)
Controls	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1056	1056	1056	1024
Adjusted R-squared	0.325	0.346	0.176	0.175

Table 10: Effect of sustainability performance on ESG communication. This table reports coefficients from OLS regressions of different measures of the share of ESG communication by shareholders on ESG scores and company characteristics. $ENV Share_{t,f,idf}$, $SOC Share_{t,f,idf}$ and $GOV Share_{t,f,idf}$ denote the share of E, S and G words in shareholder communication, respectively. All three measures are adjusted by their term frequency and their inverse document frequency. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regression include a constant (not reported). All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by both year and firm. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Dependent variable	ENV Share _{t,f,idf}	SOC Share _{t,f,idf}	GOV Share _{t,f,idf}	ENV Share _{t,f,idf}	SOC Share _{t,f,idf}	GOV Share _{t,f,idf}	ENV Share _{t,f,idf}	SOC Share _{t,f,idf}	GOV Share _{t,f,idf}
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ESG Score _t	-0.454** (-2.56)	-0.592*** (-3.13)	-0.528** (-2.45)						
Environmental Score _t				-0.483** (-2.48)			-0.395** (-2.04)	-0.763*** (-3.69)	-0.636** (-2.69)
Social Score _t					-0.966*** (-3.38)		0.079 (-0.300)	-0.793*** (-2.76)	-0.516 (-1.57)
Governance Score _t						-0.984*** (-3.35)	-1.333*** (-4.84)	-0.585** (-1.99)	-0.835** (-2.48)
ESG Score _t									
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1056	1056	1056	1056	1056	1056	1056	1056	1056
Adjusted R-squared	0.423	0.371	0.384	0.423	0.371	0.386	0.435	0.382	0.391

Table 11: Effect of Share of ESG words on Tone . This table reports coefficients from OLS regressions of Tone on the share of ESG communication by shareholders and company characteristics. LMD^- is the fraction of negative words in the transcript according to the Loughran and McDonald (2011) dictionary. HAR^- is the fraction of negative words in the transcript according to Harvard IV-4 psychosocial dictionary. $LMD_{tf.idf}^-$ $HAR_{tf.idf}^-$ are the negativities of a transcript according to the respective dictionary weighted by their term frequency and inverse document frequency. $ENV Share_{tf.idf}$, $SOC Share_{tf.idf}$ and $GOV Share_{tf.idf}$ denote the share of E, S and G words in shareholder communication, respectively. All three measures are adjusted by their term frequency and their inverse document frequency. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regression include a constant (not reported). All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by both year and firm. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Dependent variable	$HAR_{tf.idf}^-$ (1)	$HAR_{tf.idf}^-$ (2)	$LMD_{tf.idf}^-$ (3)	$LMD_{tf.idf}^-$ (4)
ENV $Share_{tf.idf}$	0.297*** (8.81)	0.589*** (8.41)	0.249*** (7.55)	0.000 (0.24)
SOC $Share_{tf.idf}$	0.756*** (19.02)	0.901*** (15.77)	0.722*** (18.57)	0.002** (2.18)
GOV $Share_{tf.idf}$	0.540*** (16.28)	0.814*** (16.65)	0.440*** (13.56)	0.002 (-1.43)
Environmental Score _t		-0.058 (-0.38)		0.009 (0.06)
Social Score _t		-0.006 (-0.03)		0.000 (0.69)
Governance Score _t		0.413* (1.65)		0.001 (1.43)
$ENV Share_{tf.idf} \times Environmental Score_t$		-0.061*** (-4.97)		-0.085*** (-7.19)
$SOC Share_{tf.idf} \times Social Score_t$		-0.052*** (-4.68)		-0.037*** (-3.94)
$GOV Share_{tf.idf} \times Governance Score_t$		-0.058*** (-6.66)		-0.055*** (-6.39)
Controls	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1056	1056	1056	1056
Adjusted R-squared	0.868	0.888	0.838	0.865

Table 12: Instrumental variable (IV) regressions. This table reports the coefficients from instrumental variable regressions. We instrument the environmental share of shareholder communication for each transcript with weather anomalies. $ENV\ Share_{tf.idf}$ denote the share of environmental words in shareholder communication adjusted by its term frequency and its inverse document frequency. $LMD_{tf.idf}^-$ is the negativity of a transcript according to the Loughran and McDonald (2011) dictionary weighted by its term frequency and inverse document frequency. $HAR_{tf.idf}^-$ is the negativity of a transcript according to the Harvard IV-4 psychosocial dictionary weighted its term frequency and inverse document frequency. $Anomaly$ is the abnormal temperature in the state where the respective company is headquartered. It is the difference between the actual temperature at the time of the AGM and the historic mean. Specifications (1) and (3) show the results from the first-stage regressions. Specifications (2) and (4) report the second-stage results. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regressions include a constant (not reported). All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by both year and firm. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Dependent variable	(1)	(2)	(3)	(4)
	First Stage ENV Share _{tf.idf}	Second Stage HAR _{tf.idf} ⁻	First Stage ENV Share _{tf.idf}	Second Stage LMD _{tf.idf} ⁻
Anomaly	0.324*** (2.82)		0.323*** (2.79)	
ENV Share _{tf.idf} (IV)		1.533*** (3.18)		1.426*** (3.23)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	1036	1036	1056	1056
Adjusted R-squared		0.477		0.448

Table 13: Effect of Tone on Shareholder Approval. This table reports the coefficients from OLS regressions. Votes for management proposals denotes the shareholder support for management-sponsored proposals. $HAR_{tf.idf}^-$ is the negativity of a transcript according to the Harvard IV-4 psychosocial dictionary weighted its term frequency and inverse document frequency. $LMD_{tf.idf}^-$ is the negativity of a transcript according to the Loughran and McDonald (2011) dictionary weighted by its term frequency and inverse document frequency. Control variables is a vector of firm-specific variables controlling for *firm size*, *total assets*, *market-to-book ratio* and *firm age*. All regressions include a constant (not reported). All specifications include time and industry fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by both year and firm. ***, **, * denote statistical significance at the 1%, 5% and 10% level, respectively.

Dependent variable	Votes for %					
	(1)	(2)	(3)	(4)	(5)	(6)
HAR _{tf.idf} ⁻	-0.318 (-0.87)	-1.040*** (-3.69)	-0.539 (-1.47)			
LMD _{tf.idf} ⁻				-0.698 (-1.05)	-1.813*** (-3.85)	-1.114* (-1.67)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	No	Yes	Yes	No	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Observations	848	848	848	848	848	848
Adjusted R-squared	0.100	0.115	0.146	0.102	0.120	0.149

B Second Appendix

- **Individual Shareholder:** Hi. My name is David Sims. I own 15 shares. And as has been mentioned before we've had a good last three or four years and made about \$8.8 billion profit since 2008. And, yes, as you have said before, Mr. Hay, you have paid taxes. This company has paid taxes in accordance with the law. Everything you have done has been in accordance with federal tax policy, yet even though we have I think the fact that this company has had a net remittance from the government of \$174 million in taxes, not only didn't we pay anything, but the government has paid, I think that's against the intent of federal tax policy. And even though you didn't break the law and even though you have invested a lot of money to build new plants and that's why you have written off taxes, had a tax write off, I think that's not – that's against the intent and it's really not right. A company with this large earnings should pay its fair share and you should not, we should not ask for a rate hike from the rate payers, from the electricity users until we start paying a reasonable share of taxes. Thank you.
- **Employee:** I'm Gary Patton. I'm a 21-year employee with The Home Depot out of Greenville, South Carolina. I appreciate the last question that was asked, and I wanted to ask you something specific also. I'm having a hard time figuring it out completely. How is the implementation of the Affordable Care Act which should be fully implemented in January I believe of next year affecting us employees here with The Home Depot in our deductions, our medical coverage, and all of that, can you foresee or share with me in layman's terms how that might be affecting us?
- **Retiree:** My name is Len Corky. I'm a Baxter retiree and I have Baxter stock. I was with Baxter from 1955 to 1986. I have a suggestion that Baxter consider the use of solar panels and we can – it would be good PR because we can boast that we can save the lives of people, but we're also improving the environment by using a less contaminating source of energy. Thank you.
- **Trade Union:** Good morning. My name's Michael Hogan. I'm a labor organizer for the International Brotherhood of Teamsters. I work in Boston, Massachusetts. And I have two questions, Mr. Chairman. My first question - and if I can pose it this way - I've met with some of your front-line workers in my home state and there's a problem when some of the workers are afraid to organize because they're afraid that your supervisors or your managers, through their intimidation and the fear that the make their employees feel, they're afraid that they'll lose their job. So, what I'd like to

see today is a commitment from you, that you'd sit down with our general president, James P. Hoffa and negotiate a neutrality agreement so that, in the future, any workers that may feel suppressed or angered or that they have some problems, that if they come to a labor organization such as ours, that they may organize without fear of losing their jobs.

- **Asset Manager:** Luke Berman, portfolio manager and shareholder, just some brief comments and questions. First, congratulations to your move to a new high-tech HQ, for the hands-down number one premium quantitative financial company in the world. As compared to other stocks, our stock, MHFI, have outperformed the general broad spectrum of stocks in the averages and then in our peer category group. In fact, MHFI is one of the only iconic companies which has not had revenue or earnings problems this year and has fully recovered its momentum moving now to higher highs up to the general market malaise in February and this deep decline that we had. You stated that we are primarily finished with restructuring the move up to the J.D. Power sales completed later in the fall. As we now seem to be at an inflection point in the economy and the stock market, it will be harder to achieve double-digit earnings gains unless the extrapolate – extrapolated economic expansion by the Federal Reserve continues which has two different interest rate increases projected for 2016. Now that you have a firm handle on the pulse of the Company, do you – how do you expect the organic growth to materialize that it'd be very difficult over the next few years?
- **Analyst:** All right, Mike Mayo, Wall Street analyst. What a difference a year makes. Again, I come to these Annual Meetings, it's the only chance – once a year chance so I can ask questions of the Independent Directors, and have the Independent Directors be publicly held accountable. So James hopefully, you can give an answer to my question. If Erskine Bowles can also respond, that would be great too. But my question is, what is the degree of confidence that Morgan Stanley can transition from restructuring to growth and why? And on the one hand the good news, since last year, you mentioned, revenue is flat, profits of \$1 billion. That's good. Consensus Wall Street estimates have you meeting your financial target – your ROE target, this year. That's good. And certainly the stock price has gone from \$26 to over \$40 since last year's Annual Meeting. But the issue is, the restructuring seems to be in the later stages. Company-specific factors propel growth. They seem to be in the later stages. And there are some headwinds that you know about in terms of fixed revenues way above your target range, it'll probably be coming down. Your equity market share, you're a victim of your success. How much more share can you get? And then your wealth management

assets have been showing kind of sluggish growth over time. You've made it work through the restructuring, but the restructuring is in late stages. How do you get that revenue growth to propel your earnings growth going forward? And how confident can you be in getting that?

- **Public Asset Manager:** My name is Cindy Ernberg and I'm here as the deputy to California State Controller, John Chiang. I'd like to speak briefly to the election of board of directors, which I didn't have an opportunity to speak on earlier. The controller does support the election of directors this year, but with reservations, as he has some concerns regarding the company's long-term strategy to sustain its performance and the board's role in improving the Company's image with the public, with its own investors, and with regulators. Controller Chiang is a trustee of the California Public Employees' Retirement System and the California State Teachers' Retirement System, the nation's first and second largest public pension funds, with over \$400 billion in assets. Together, these funds own \$4 billion of Exxon Mobil. So many Californians have a substantial financial stake in the Company's long-term success. The board's most important role to provide independent oversight of management is compromised, we believe, when the CEO serves as chairman of the board. Combining these two roles has interfered with effective communications between shareowners and directors and has likely affected the Company's at least former positions in statements on climate change. Shareholders are happy today, but, frankly, until Mr. Tillerson's presentation, we hadn't seen the Company having a sustainable strategy for maintaining its high earnings. As Mr. Tillerson's presently surprising remarks acknowledge, the Company is under pressure like no other time in its history to meet growing global energy demands, but to do it in a less carbon intensive way. While we support the candidates this year, by next year, the controller hopes to see evidence that the board is improving relationships with its shareholders, really positioning itself to reduce emissions, and earning our support by overseeing management. And as you continue to think about new members, are you seeking expertise with these challenges that I mentioned? Thank you for your time.

- **Religious Asset Manager:** My name is John Wilson. I'm with Christian Brothers Investment Services we're a shareholder of ExxonMobil. I want to follow-up on the question that was just asked and point to the fact that the Sarbanes-Oxley law strengthens requirements, the corporation has disclosed to shareholders in Securities filings, risk controls for material issues. Now our company has acknowledged that greenhouse gases cause global warming and that action is needed to prevent harm to

the ecosystem. We differ with you in that we believe that it is a material risk to our business. In fact there are many uncertainties surrounding the future of an energy demand. Every day in the news we hear of new [inaudible] for new laws, regulations and technologies designed to reduce our reliance on oil and gas. Our ability to predict future demand for oil is clearly in doubt. Surely this is a material issue for shareholders of an oil company. Yet the company confidently predicts that oil and gas will continue to supply 60% of the world energy needs up until 2030, even as demand grows, and derives all of its strategic decisions from this particular prediction. No where does the company explain to shareholders what it plans to do if the future does not turn out exactly as it expects. In contrast, many of our competitors have reported their strategies to respond to climate change. Nowhere has ExxonMobil reported on any scenario planning to manage these risks. So my question is for Mr. Houghton and for the auditors, what risk controls has the company established to mitigate the risk of climate change and how can shareholders evaluate the effectiveness of these controls? Thank you.

- **NGO:** Hello. My name is Susan Okie, and I'm here on behalf of People for the Ethical Treatment of Animals, and our more than 2 million members and supporters worldwide. Our members are all consumers who strongly object to the cruel treatment of animals. ExxonMobil has worked well with PETA on animal testing issues over the past few years and I hope we'll have the same cooperative and productive relationship on this animal and entertainment issue. Last year, ExxonMobil pledged \$1.25 million in funding over the next five years for educational materials that promote the Iditarod to school children. The Iditarod, as many of you know, is a 1,150 mile course over which dogs are forced to run more than 100 miles per day for almost two weeks straight. The dogs must pull heavy sleds through some of the worst weather conditions on the planet and, as a result, they routinely die on the course. Many dogs used in the Iditarod suffer from pulled muscles, stress fractures, diarrhea, dehydration, intestinal viruses, or bleeding stomach ulcers. Musher's ride, eat, and sleep on the sleds while the dogs continue to run. One dog collapsed and died from gastric ulcers during this year's Junior Iditarod. And in 2009, six dogs died, including two who were believed to have frozen to death. The Iditarod Trail Committee rarely punishes abusive mushers, even those who have been caught beating exhausted dogs in order to keep them running. Musher's participate in the race because of the prize money, not because they believe the dogs enjoy it. Dogs used in the Iditarod are treated as if they are outdoor equipment. They aren't allowed inside the house with the family and then never get to play a game of catch. The vast majority of dogs who are used to pull sleds live at the end of

a very short chain. Their entire world can be measured in a few muddy feet. Iditarod sponsorship and prize money has declined over the past few years and, in an attempt to increase support, event organizers have shamelessly marketed this punishing ordeal as an event that benefits dogs. And now, one that benefits students as well. ExxonMobil could easily fund educational materials for students across the country that excludes the Iditarod. My question is this. Can consumers hear that ExxonMobil will commit to refusing to renew its sponsorship of the Iditarod, a dwindling industry that promotes and causes egregious animal suffering?

- **Religious Organisation:** Yes, it is. My name is Michael Crosby. I'm an Capuchin Franciscan Friar from Milwaukee. And I wasn't planning on asking the question, just presenting a resolution. But there was a young man that raised a question that has been a question with us, I know you're international and not domestic, but our ministries are highly invested among poor people in Detroit and Milwaukee through the most economically depressed areas. And the data does show that in economically depressed less educated communities, there's a higher rate of smoking. I think his question was related to that on a global basis and I don't think you were able – I was not able – but you didn't answer another element of his question. How do you deal with that fact if it is a fact globally, are less educated, poor people tend to be outside, I know data for the United States, it is, but what is it for outside in your market, are the majority of your smokers, less educated, poor, I just would like to know the data that's all? Would you have data on it?.
- **Proxy:** Mark Nickerson, proxy holder. With the growth you've seen in retail volume, do you anticipate rolling out more weekly options, for example, Tuesday and Thursday S&P option? Or making the universal settlement times for C, B options for buy options instead of different – Wednesdays, Fridays?

C Third Appendix

- **ENV:** align, alignment, atmosphere, aware, awareness, batteries, battery, biodiversity, biofuel, biofuels, biomass, biphenyls, capture, car, carbon, disclosure, carbon-related, cars, catastrophe, circular, footprint, catastrophic, CDP, celsius, chain, change, chemical, chemicals, chronic, clean, cleaner, cleanup, climate, climate-related, coal, COP21, combustion, consumption, contamination, conservancy, conservation, curb, curbing, cyclones, deforestation, degradation, degrade, diesel, disasters, disposal, ecosystem, ecosystems, efficiency, efficient, electric, electricity, emission, emissions, emit, energy, energy-efficiency, environment, environmental, epa, erosion, ETS, EV, fire, fires, flood, floods, food, forest, fossil, freshwater, fuel, fuels, gas, gases, geothermal , ghg, ghgs, green, greenhouse, greenpeace, GRI, grid, groundwater, hazardous, heat, heatwave, heatwaves, householding, hurricane, hurricanes, hydro, hydroelectric, IEA, impact, impacts, innovation, intensity, Kyoto, land, low-carbon, metals, minerals, mitigate, mitigation, mobility, natural, negative, neutral, neutrality, nitrogen, non-renewable, nuclear, oil, packaging, Paris, pesticide, pesticides, petrol, planet, pollutants, pollution, positive, precipitation, prevention, produce, production, PV, rain , recycle, recycling, reduce , reduction, renewable, reputation , reputational, research, resilience, resource, resources, saving, savings, SBTI, scarce, scarcity, scenario, SDG, sea, snow, soil, solar, sourcing, species, storage, storm, storms, superfund, supply, sustainability, sustainable, target, targets, taxonomy, TCFD, technology, temperature, temperatures, threat, threatened, tidal, toxic, traceability , transformation, transition, transport, transportation, UN, utilities, vehicles, vulnerability, vulnerable , warming, waste, wastes, water, wave, waves, weather-related, weee, wetlands, wetland, wilderness, wildlife, wind, wood, zero, methane, reforestation, carbon-neutral, climate-friendly, CO2-footprint, fuel-efficient, zero-carbon, carbon-free, clean-energy, water-saving, climate-change, biological , carbonneutral, clean air, climate action, climate activities, climate change, protection, conserve, COP, contaminat, eco-activis, eco-friendly, ecological, energy-efficient, externalities, fuel-eficien, generations, generation, global warming, building, buildings, green , technologies, greener, habitat, natural , ocean, acidification, ozone, pollut, preservation, protect, rainforest, recycl, dioxide, CO2, reduce, reducing, future, plants , upcycl, waste-reduced, waste-to-energy, animal, animals, welfare, resource-efficient, net, green-tech, protecting, responsible , fight, degrees, action, drill, drilling, petroleum, exploration, leak, goal, goas, resource-saving, align , aligning, planetary, transitioning, extraction, coastal, arctic, dirty, poisoned, poison, burn, burning, polluted, nature, global , goals, rise, below, panels, commitment, power, net-zero, refinery,

refineries, catastrophes, drought, snowmelt, storm-related, flooding, pollute, annihilation, plastic, PRI, smoke-free, contaminated, hydraulic, fracturing

- **SOC:** accident, accidents, anti-union, assistance, bargaining, care, charitable, charities, charity, childbirth, children, citizen, citizens, citizenship, collective, communities, community, conflict, conflicts, conformance, contractor, contractors, courses, CSR, data, decent, demographic, departure, departures, dignity, disabilities, disability, disabled, discriminate, discriminated, discriminating, discrimination, dismissal, dismissals, diversity, donate, donated, donates, donating, donation, donations, donors, drug, educate, educated, educates, educating, education, educational, employ, employee, employees, employer, employment, endowment, endowments, epidemic, equal, equality, ethnic, ethnically, ethnicities, ethnicity, exploitation, expression, fair, fairness, female, females, foundation, foundations, freedom, fundamental, gap, gay, gays, gender, genders, gift, gifts, harassment, health, healthcare, healthy, hire, hired, hires, hiring, hiv, homosexual, human, humanity, ill, illness, ilo, immigration, income, unequal, inequality, injuries, injury, inspection, inspections, intoxication, intoxications, job, jobs, justice, labor, labour, layoff, layoffs, learning, lesbian, lesbians, lgbt, low-income, marriage, maternity, medicaid, medicare, medicine, medicines, mentoring, migrant, migrants, migration, minorities, minority, nations, nondiscrimination, nonprofit, occupational, pandemic, peace, people, philanthropic, philanthropy, population, populations, poverty, privacy, protection, protest, protests, quality, race, racial, religion, religious, respect, restructure, restructuring, rights, robotization, safe, safety, scholarships, security, servitude, sex, sexual, sick, sickness, slavery, social, socially, societal, society, staffing, standardization, strike, strikes, teaching, training, transgender, unemployment, union, unrest, veteran, veterans, vocational, vulnerable, wage, wages, warranty, welfare, woman, women, worker, workers, workforce, workplace, young, affordable, caring, child, civic, youth, well-being, underrepresented, underprivileged, teamwork, profit-sharing, literacy, pro-social, livelihood, lives, life-transforming, integrity, indigent, inclusive, inclusion, humankind, homeless, healthier, compassion, abus, bribe, affordable, beneficial, benevolent, caregiver, charit, child education, civil society, communit, aid, disadvantaged, diverse , empathy, benefit, benefits, participation, empower, opportunities, ethic, treatment, for society, genero, cause, harmony, human needs, human rights, humanit, immigra, improve education, living conditions, malnutrition, mankind, microcredit, microfnance, minorit, nourish, occupation, colleagues, paid , pension, philanthropy, poorest, proft sharing, profits, promote, access, public, life, refugees, immigrant, immigrants, refuge, orientation, engagement, impact, responsibilities, responsibility , local, family, unfair, volunteer, wellbeing, womens health, work-

ing conditions, working, conditions, workplace , work-life, rights , non-profit, moral, trade, balance, families, blue-collar, contract, lgbtq, stress, exhausted, exhaustion, employee-friendly, worker-friendly, hate, prevention, addiction, violate, slave, slaves, retiree, racist, racism, second-class, abuse, die, died, death, deaths, suicide, suicides, low-paying, veteran-owned, skill, skilled, skills

- **GOV:** accounting, announce, announced, announcement, announcements, announces, announcing, appreciation, approval, approvals, approve, approved, approves, approving, assess, assessed, assesses, assessing, assessment, assessments, attract, attracting, attracts, audit, audited, auditing, auditor, auditors, audits, award, awarded, awarding, awards, backgrounds, ballot, ballots, behavior, behaviors, board, body, bonus, bonuses, bribery, bylaw, bylaws, cast, CEO, CFO, charter, charters, clawback, committee, communicate, communicated, communicates, communicating, compact, compensate, compensated, compensates, compensating, compensation, compliance, conduct, conflict, conflicts, conformity, consent, control, controlling, controls, corporate, corrupt, corruption, coso, crimes, crime, CSR, culture, detect, detected, detecting, detection, disclose, disclosed, discloses, disclosing, disclosure, disclosures, diverse, diversity, effectiveness, elect, elected, electing, election , elections, elects, embezzlement, engagement, engagements, equity, ethic, ethical, ethically, ethics, evaluate, evaluated, evaluates, evaluating, evaluation, evaluations, examination, examinations, examine, examined, examines, examining, expert, expertise, fee, feedback, fees, financial , fraud, governance, governing, grassroots, hotline, incentive, incentives, independence, independent, influence, influences, influencing, inform, insider, insiders, inspector, inspectors, instability , integrity, interlocks, interview, interviews, investor, knowledge, laundering, leadership, liaison, lobbied, lobbies, lobby, lobbying, lobbyist, lobbyists, long-term, mail, mailed, mailing, mailings, malus , management, material, meet, meeting, member, misconduct, money, monitor, monitoring, nominate, nominated, nomination, nominations, nominee, nominees, non-financial, notice, objectivity, oversee, overseeing, oversees, oversight, ownership, parachute, parachutes, pay, payout, payouts, pension, performance, perquisites, perspectives, planning, plurality, presentation, presentations, press, principles, procedure, proponent, proponents, proposal, proposals, proxies, qualifications, question, quorum, quota, recoupment, recruit, recruiting, recruitment, regulation, regulatory, relations, remuneration, report, reporting, resign, resignation, responsibility, responsible, retain, retainer, retainers, retaining, retention, retirement, revenue, review, reviewed, reviewing, reviews, reward, rewarding, rewards, right, rights, rotation, rules, shareholder, shareholders, shares, short-term, spending, stakeholder, stakeholders, standards, statement, statements, succession, supervision, supervisory, sustain-

able, talent, talented, talents, tax, tenure, training, transparency, transparent, vacancies, vacancy, vested, vesting, vests, vote, voted, votes, voting, whistleblower, women, taxes, evasion, say-on-pay, paying, reputation, reputational, fraudulent, extortion, anti-competitive, litigation, litigations, cuts, accountability

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