

# Culture Matters: Corporate Culture and Environmental Rating Disagreement

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**Abstract:** This study examines whether corporate culture is associated with environmental rating disagreement. Using established cultural dimensions, I find that firms with stronger people-oriented cultures are associated with higher environmental rating disagreement, whereas firms with stronger technology-oriented cultures are associated with lower environmental rating disagreement. The results suggest that this divergence may arise from differences in disclosure and reporting practices. Firms with stronger people-oriented cultures tend to provide less extensive environmental information and less standardized ESG disclosures, while firms with stronger technology-oriented cultures tend to adopt more extensive disclosures and more standardized ESG reporting practices. Consistent with this mechanism, additional analyses show that environmental policies and larger ESG reports weaken the positive association between people-oriented culture and environmental rating disagreement, suggesting that more standardized environmental disclosure practices and more extensive information mitigate the cultural effect on rating divergence. Robustness tests further indicate that rating disagreement is not explained by differences in underlying environmental performance. Overall, the findings suggest that environmental rating disagreement is associated with culturally driven differences in disclosure and transparency practices.

**Keywords:** corporate culture; environmental disclosure; environmental rating disagreement; ESG disclosure; environmental performance

**JEL Classifications:** M14, M41, Q56, G24

## 1. Introduction

Environmental, social, and governance (ESG) ratings are increasingly used by investors to assess firms' performance and incorporate sustainability considerations into investment decisions and capital allocation. The importance of ESG information in capital markets has grown rapidly with global ESG assets predicted to reach \$40 trillion by 2030, representing over 25% of projected global assets under management (Bloomberg Intelligence, 2024). As ESG ratings become more critical to investors, regulators, and other stakeholders, questions regarding their reliability have received increasing attention. Substantial disagreement frequently arises across rating agencies when evaluating the same firm on the same ESG dimension.

Prior research shows that ESG ratings diverge across agencies and investigates the reasons for this disagreement. Berg et al. (2022) show that ESG rating divergence arises from differences in scope, measurement, and weighting. Rating agencies may evaluate different ESG attributes, use different indicators to measure the same attribute, and assign different weights to those attributes. Because ESG analysis is a relatively new and less formalized field, common conventions are still developing. As a result, analysts have greater discretion in how they select, interpret, and weight sustainability information, leading to greater rating disagreement across agencies (Christensen et al. 2022). Christensen et al. (2022) further show that, unlike financial information, where greater disclosure typically reduces information asymmetry and rating disagreement, greater ESG disclosure can increase rating disagreement. A larger volume of information creates greater scope for interpretation by agencies.

Overall prior studies mainly explain ESG rating divergence through methodological variation and differences in the information available to rating agencies. These include differences in rating methodologies (Berg et al. 2022), variation in the amount and clarity of ESG disclosure and its interpretation (Christensen et al. 2022), and differences in how ESG

performance is defined or conceptualized (Chatterji et al., 2016). Moreover, Tang et al. (2026) show that institutional factors, such as ownership structure, can influence ESG ratings and contribute to rating disagreement across agencies.

Despite this evidence, relatively little is known about whether organizational characteristics influence the extent of disagreement across ratings. In particular, corporate culture, referring to shared values and norms that guide employees' behavior and shape how they feel (O'Reilly and Chatman, 1996), may influence firms' disclosure and communication practices in ways that affect how external evaluators interpret their ESG information. This study examines whether corporate culture and its underlying orientations are associated with environmental rating disagreement across rating agencies.

Corporate culture has been shown to affect firm outcomes, such as efficiency of operations, risk-taking, earnings management, incentive structures for executives, company value, and deal making (Li et al. 2021b). Further, prior research shows that corporate culture is associated with financial reporting quality, with some orientations linked to lower reporting quality and others to higher reporting quality (Bhandari et al., 2022). These findings suggest that cultural orientation can influence how information is produced, communicated, and reported.

Building on this, I propose that corporate culture shapes environmental disclosure and reporting practices, which in turn affect environmental rating disagreement across agencies. Specifically, I examine whether firms with different cultural orientations systematically differ in their environmental reporting practices and resulting consistency of environmental ratings. I measure corporate culture using the people-oriented and technology-oriented cultural dimensions developed by Li et al. (2021a; 2021b). The people-oriented cultural measure consists of integrity, respect, and teamwork, whereas the technology-oriented measure consists

of innovation and quality. The dimensions are derived from machine-learning analysis of earnings call transcripts.

Choosing the measures by Li et al. (2021a; 2021b) offers several advantages over more traditional survey-based or static culture proxies. First, earnings calls capture managers' interactions with analysts, providing a more timely, spontaneous, and less standardized reflection of firms' values compared to survey-based measures or highly structured 10-K filings. In the latter cases, the language is likely to be carefully considered and strategically optimized. Second, the measure captures how cultural values are reflected in firms' external communication, which is relevant to ESG ratings that rely on publicly available information and managerial disclosures. Third, the machine learning approach enables the analysis of a large volume of textual data using systematic and scalable methods.

I study the association between cultural orientations and environmental rating disagreement using environmental pillar scores from two major rating agencies MSCI and LSEG for U.S. firms over the period 2014-2021. While most prior literature focuses on ESG ratings more broadly, I concentrate on environmental ratings. Environmental disclosures often relate to firms' externalities, such as greenhouse gas emissions or resource use, which extend beyond the firms' organizational boundaries and are often not directly captured in traditional accounting systems or other internal databases. Measuring these characteristics is difficult and costly, which creates substantial scope for variation in disclosure practices.

The empirical results show that firms with stronger people-oriented cultures are associated with higher environmental rating disagreement, whereas firms with stronger technology-oriented cultures are associated with lower disagreement across agencies. Additional analysis suggests that these differences arise from variation in disclosure and reporting practices. Firms with stronger people-oriented cultures are negatively associated with environmental disclosure scores, whereas technology-oriented firms are positively associated

with these scores, indicating that environmental disclosures are less extensive among people-oriented firms.

Further analysis shows that firms with stronger people-oriented cultures are associated with less standardized ESG reporting, while firms with stronger technology-oriented cultures are associated with more standardized ESG reporting practices, including the adoption of stand-alone ESG reports and established frameworks. In addition, people-oriented firms are associated with less extensive and less positively framed climate communication in earnings calls, whereas technology-oriented firms are related to more extensive climate discourse and a more positive tone. Cross-sectional tests provide evidence consistent with the proposed mechanism. Formal environmental policies and larger ESG reports weaken the positive association between people-oriented culture and environmental rating disagreement, suggesting that more standardized disclosure practices mitigate the cultural effect on rating divergence.

As a robustness test, I show that environmental rating disagreement is not driven by underlying performance differences. Evidence from environmental violations, environmental fines, and emission intensity suggests that the main findings are not driven by underlying environmental performance differences. I also show that the results remain consistent when focusing on firms in the top quartile of each cultural orientation and when employing alternative measures of corporate culture. Overall, this evidence supports the proposed mechanism of culturally driven disclosure and reporting practices.

This study makes several contributions to literature. First, it contributes to the growing literature on the drivers of ESG rating disagreement (e.g. Chatterji et al., 2016; Christensen et al., 2022; Berg et al., 2022; Tang et al., 2026) by identifying corporate culture as an organizational characteristic associated with variation in environmental ratings. In contrast to Christensen et al. (2022), who show that ESG disagreement increases with greater ESG

disclosure, this study highlights that the structure and extent of environmental disclosure and ESG reports interact with cultural orientation, such that more formalized and extensive reporting is associated with lower environmental rating disagreement for firms with stronger people-oriented cultures.

Second, this study contributes to the corporate culture literature by providing further evidence on the impact of people-oriented and technology-oriented cultural dimensions introduced by Li et al. (2021b). Prior research shows that corporate culture shapes firms' information environments by documenting that cultural orientations are associated with financial reporting quality (Bhandari et al., 2022). Building on this literature, this study suggests that cultural orientation is also linked to firms' ESG information environments, as reflected in environmental disclosure practices and communication style, as well as ultimately in the consistency of environmental ratings.

Finally, more broadly, the findings contribute to the discussion on ESG ratings by showing that culturally driven differences in disclosure practices are associated with variation in how rating agencies assess firms' environmental performance. This suggests that variation in ESG ratings may be rooted in deeper organizational factors, beyond methodological differences, with implications for standard-setters and regulators designing reporting frameworks and mandates.

## 2. Theory and hypothesis development

ESG rating agencies are key information intermediaries in capital markets, providing non-financial signals that investors use in their decision-making (Christensen et al., 2022; Tang et al., 2026). The agencies evaluate firms' environmental, social, and governance performance and provide aggregate pillar scores intended to capture how effectively firms manage ESG-related risks and opportunities. In the environmental dimension, which is the focus of this study, rating agencies, such as MSCI and LSEG, assess heterogeneous issues such as climate risk, emissions, resource use, pollution, waste, and environmental innovation. Although agencies conceptually evaluate similar themes, they differ in scope, indicator selection, weighting schemes, and data aggregation procedures, leading to a substantial disagreement across agencies (Chatterji et al. 2016; Gibson et al., 2021; Berg et al., 2022; Christensen et al. 2022).

Rating disagreement thus arises from differences in how agencies translate firm-level environmental information into standardized scores. Christensen et al. (2022) show that, unlike in traditional financial settings where greater disclosure decreases information asymmetry and reduces disagreement, greater ESG disclosure increases rating disagreement. They argue that ESG assessment is inherently subjective and lacks shared benchmarks, so additional disclosure extends opportunities for divergent interpretations. Consistent with this view, they find that raters disagree more on ESG outcomes (e.g., the number of women in the workforce) than on inputs (e.g., the existence of diversity policies), and that increased disclosure amplifies disagreement particularly for outcomes.

Importantly, in addition to differences in rating methodologies, ESG information production itself is heterogeneous and partly discretionary, particularly in the absence of a reporting mandate. Prior research shows that the readability and complexity of ESG disclosures vary significantly across firms, affecting how stakeholders process sustainability information (Bajaj et al., 2023). In contrast to financial reporting, environmental reporting guidelines

remain less standardized, less institutionalized, and largely voluntary in the context of this study. U.S. firms retain substantial discretion over which environmental activities to undertake, and how to measure and communicate them. Consequently, there is more room for internal organizational characteristics, such as corporate culture, to systematically shape how environmental information is generated and conveyed, and how firms engage with environmental issues more broadly.

According to O'Reilly and Chatman (1996), corporate culture is a system of shared values that define what members of an organization consider important, and shared norms that guide appropriate attitudes and behaviors, shaping how employees feel and behave. Corporate culture plays a particularly important role in settings where formal rules and contracts are incomplete, because it helps guide behavior when desired actions cannot be fully specified or enforced through formal mechanisms (O'Reilly 1989; Kreps 1990; Guiso et al., 2015). In this way, culture functions as an internal governance mechanism that influences firms' behavior and decision-making. Corporate culture can also influence ethical decision-making and compliance (Graham et al., 2022).

Consistent with this view, Bhandari et al. (2022) document that corporate culture is associated with financial reporting quality, showing that different cultural orientations are associated with opposite effects on financial reporting quality. These findings suggest that cultural norms within organizations influence how information is produced, communicated, and reported. Similarly, Li et al. (2021b) show that corporate culture is associated with economically meaningful outcomes, including greater operational efficiency, increased risk-taking, less earnings management, higher firm value, and executive compensation designs that promote long-term orientation and risk-taking.

Building on this literature and highlighting the influence of corporate culture on disclosure practices and broader organizational behavior, corporate culture may shape both

firms' substantive environmental engagement and the structure and extent of environmental disclosures. As a first step, I examine whether these effects extend to how environmental information is evaluated by rating agencies. According to this, I predict:

***H1:** Corporate culture is associated with environmental rating disagreement*

While corporate culture may influence rating disagreement in general, the direction of this association is likely to depend on cultural orientation rather than the overall strength of the culture alone. Bhandari et al. (2022) show that different cultural orientations are associated with opposite effects on financial reporting quality. Specifically, collaboration-oriented cultures are associated with lower reporting quality, whereas competition-oriented cultures report higher financial reporting quality. This evidence suggests that cultural orientation is linked to how firms produce and communicate information.

To capture these differences, I adopt the cultural framework developed by Li et al. (2021b), which identifies five cultural value dimensions —innovation, integrity, quality, respect, and teamwork—that can be further aggregated into two broader orientations by Li et al. (2021a). The first is people-oriented culture, which comprises integrity, respect, and teamwork dimensions, whereas technology-oriented culture consists of innovation and quality.

These two orientations reflect different approaches to organizational decision-making and communication. Firms with stronger people-oriented culture emphasize stakeholder relationships, ethical norms, and collaboration. Firms with this orientation may rely more on relational governance and narrative communication when discussing organizational activities. As a result, environmental initiatives may be communicated through more qualitative explanations and less formalized measurement systems, potentially increasing interpretive discretion for rating agencies.

In contrast, technology-oriented culture emphasizes innovation, process optimization, and technical sophistication (Li et al. 2021a). These firms are more likely to invest in structured

monitoring systems, standardized environmental metrics, and data-driven management practices. This approach may reduce the ambiguity in environmental information and provide more consistent signals to external evaluators. Accordingly, I hypothesize opposing effects across cultural orientations:

***H2:** Firms with stronger people-oriented culture are associated with higher environmental rating disagreement, whereas firms with stronger technology-oriented culture are associated with lower environmental rating disagreement.*

Prior research primarily explains ESG rating divergence through methodological differences and variation in the information available to rating agencies (Berg et al., 2022; Christensen et al., 2022; Chatterji et al., 2016). Building on this literature, a key mechanism through which cultural orientation may influence environmental rating disagreement is environmental disclosure and reporting practices.

Corporate culture may shape how environmental information is structured, measured, and communicated to external stakeholders. Christensen et al. (2022) show that ESG disagreement increases with the amount and type of disclosed information, particularly when disclosures introduce interpretive ambiguity. Cultural orientation is also associated with reporting quality (Bhandari et al., 2022), suggesting that it may influence how environmental information is constructed and presented, thereby affecting the comparability of disclosures across agencies.

Drawing on the cultural framework of Li et al. (2021a; 2021b), firms with stronger people-oriented cultures may rely more on qualitative information and less structured reporting practices, providing less extensive environmental disclosure and being less likely to adopt established frameworks. In contrast, firms with technology-oriented cultures may produce more standardized environmental reports and adopt established reporting practices, thereby reducing ambiguity in the information available to rating agencies. Accordingly, I hypothesize:

***H3: Firms with stronger people-oriented cultures are associated with lower environmental reporting standardization and transparency, whereas firms with stronger technology-oriented cultures are associated with higher environmental reporting standardization and transparency.***

An alternative explanation for environmental rating disagreement is that it reflects differences in underlying environmental performance rather than differences in disclosure practices. To address this possibility, I conduct additional analyses using environmental violations and emission intensity as proxies for environmental performance. Emission intensity is included to ensure that the observed disagreement effects are not driven by firms with inherently high environmental footprints rather than differences in disclosure practices. Finally, As an additional robustness test, I employ alternative corporate culture measures from prior literature that capture distinct organizational value orientations.

Together, these hypotheses and additional tests examine whether corporate culture is associated with environmental rating disagreement and whether this relationship differs across cultural orientations. Further tests assess whether the effects operate through differences in disclosure practices rather than underlying environmental performance.

### **3. Research design and sample selection**

#### **3.1 Data sample and variables**

This paper examines U.S. public firms with available financial data from Compustat and ESG performance data from LSEG and MSCI, from 2014 to 2021. Table 1, Panel A describes descriptive statistics for the sample selection. I first discard observations without environmental rating scores that are used to calculate the main outcome variable of environmental disagreement. I further exclude firms that do not have corporate culture data available to obtain the main independent variables. Finally, I remove firm-years that are missing the necessary data for the control variables used in the analysis. After these exclusions, the final sample consists of 10,137 firm-years.

The sample descriptives in Table 1, Panel B present the sample distribution across years. Panels C-E provide the distribution of firms by sector (Fama–French 12 industry groups). Firms with strong people-oriented cultures are more prevalent in consumer-oriented and service industries, whereas firms with strong technology-oriented cultures are concentrated in business equipment and technology-related industries.

[Table 1]

This study focuses on environmental ratings rather than aggregated ESG ratings. Environmental disclosures often relate to firms' externalities, such as emissions and resources that extend beyond firms' organizational boundaries and are not fully captured in traditional accounting systems (Christensen et al., 2021). As a result, environmental metrics are difficult and costly to measure and report consistently, creating variation in disclosure practices.

Environmental rating disagreement is calculated following Christensen et al. (2022), as the standard deviation of the environmental ratings a firm receives in a given year. I apply environmental scores from two major ESG rating agencies: MSCI and LSEG. MSCI is

considered one of the largest data providers to the investment community among the existing ESG rating agencies. LSEG is another major provider of ESG ratings. Its dataset originates from ASSET4, which was developed by Thomson Reuters, later transferred to Refinitiv, and later acquired by the London Stock Exchange Group. MSCI environmental themes consist of climate change, natural capital, pollution and waste, and environmental opportunities, whereas LSEG themes are emissions, innovation, and resource use.

To measure corporate culture, this paper applies the text-based culture measures developed by Li et al. (2021a; 2021b). These measures are constructed from earnings call transcripts and capture the cultural values expressed by firms' management. The construction of the cultural value scores builds on Guiso et al. (2015), who identify the most often-mentioned values by the S&P 500 firms on their websites. This leads to five culture dimensions: innovation, integrity, quality, respect, and teamwork, which together create the total culture score. For each firm-year observation, a culture score is computed using a weighted frequency count of value-related words appearing in the question-and-answer section of earnings calls.

The main independent variables are derived from the aggregate culture measures of People Culture and Tech Culture developed by Li et al. (2021a). People Culture consists of Integrity, Respect, and Teamwork, whereas Tech Culture combines Innovation and Quality. Together, these dimensions form the Total Culture score. I construct the main independent variables, People Culture Ratio and Tech Culture Ratio, by scaling People Culture and Tech Culture by Total Culture, respectively. These ratio measures capture the relative emphasis placed on people-oriented and technology-oriented values within a firm's overall culture. In addition, I examine the continuous aggregate culture measures and the five underlying cultural dimensions separately to identify the specific cultural values driving the results. To capture firms with particularly strong cultural orientations, I define Strong People Culture and Strong

Tech Culture indicators equal to one for firms in the highest quartile of the respective culture measures and zero otherwise.

Entropy balancing is performed separately for the People Culture and Tech Culture analyses. Specifically, entropy-balancing weights are estimated using the respective treatment indicator to ensure that treated and control firms are comparable across observable firm characteristics. This procedure improves covariate balance while preserving the original sample.

Table 2 reports descriptive statistics for the main variables used in the analysis. Firms with strong people-oriented cultures exhibit higher environmental rating disagreement than other firms, whereas firms with strong technology-oriented cultures display lower disagreement. The descriptive statistics further indicate differences in environmental performance, disclosure practices, and reporting characteristics across cultural orientations. Panels F and G report firm characteristics before entropy balancing and demonstrate that the balancing procedure substantially improves covariate comparability between treatment and control firms in both the Strong People Culture and Strong Tech Culture samples.

[Table 2]

### 3.2 Empirical model

To examine whether cultural orientation is associated with environmental rating disagreement, I estimate the following ordinary least squares (OLS) regression model:

$$\mathbf{ENV\ Disagreement} = \beta_0 + \beta_1(\mathbf{Culture\ variable}_{it}) + \sum \gamma \mathbf{Controls}_{it} + \mathbf{Year\ fixed\ effect} + \mathbf{Industry\ fixed\ effect} + \epsilon_{it}. \quad (1)$$

*ENV Disagreement* is the standard deviation of environmental ratings from MSCI and LSEG using the latest rating available for each firm in each year. The primary independent variables are *People Culture Ratio* and *Tech Culture Ratio*, which measure the relative

emphasis placed on people-oriented and technology-oriented values within a firm's overall culture. Specifically, the ratio measures are constructed by scaling *People Culture* and *Tech Culture* by *Total Culture*, respectively.

To provide a more comprehensive assessment of the role of corporate culture, I also estimate alternative specifications using different aggregation levels of the culture measures. These specifications include the continuous People Culture and Tech Culture measures, the five underlying cultural dimensions (*Integrity, Respect, Teamwork, Innovation, and Quality*), and indicator variables for *Strong People Culture* and *Strong Tech Culture*. The strong culture indicators equal one for firms whose People Culture or Tech Culture scores are in the highest quartile of the respective distribution and zero otherwise.

I include the following controls for firm characteristics: firm size ( $LN(TA)$ ), firm performance ( $ROA$ ), capital structure (*Leverage*), cash from operations (CFO), asset turnover (ATO), dividends per share (DPS), asset structure (PPE), the number of analysts following the firm ( $LN(AF)$ ), and the percentage of shares held by institutional investors ( $IO$ ). The Appendix provides further details on how each variable is measured. I also include industry and year fixed effects. Standard errors are clustered by firm.

I employ entropy balancing to improve the comparability of firms with different cultural orientations. Entropy balancing reweights control group observations so that the mean, variance, and skewness of their covariates are balanced across the two groups. The balancing procedure is performed on the control variables mentioned above, as well as industry membership (Fama–French 12 industry groups). All analyses are conducted using samples constructed with entropy balancing weights.

## 4. Empirical results

### 4.1 Corporate culture and environmental rating disagreement

To examine Hypotheses 1 and 2, which assess whether corporate culture and its orientations are associated with environmental rating disagreement across ESG agencies, I estimate Equation (1). Table 3 reports the baseline results using the entropy-balanced sample with control variables, as well as industry and year fixed effects. The analyses employ *People Culture Ratio* and *Tech Culture Ratio*, which capture whether a firm's culture is more people-oriented or technology-oriented. Table 4 complements these results by examining the continuous culture measures and their underlying dimensions, as well as indicator variables for firms in the top quartile of each cultural orientation.

The results in Table 3 provide evidence that cultural orientation is associated with environmental rating disagreement. Column (1) shows that firms with a strong overall culture (*Strong Total Culture*) are associated with higher environmental rating disagreement (coefficient = 0.95,  $t = 1.77$ ), significant at the 10% level. Column (2) shows that People Culture Ratio is positively associated with environmental rating disagreement (coefficient = 15.07,  $t = 5.44$ ), significant at the 1% level. In contrast, Column (3) shows that Tech Culture Ratio is negatively associated with environmental rating disagreement (coefficient =  $-27.13$ ,  $t = -9.13$ ), also significant at the 1% level. These findings suggest that the relative orientation toward people-oriented and technology-oriented values within a firm's overall culture is associated with substantial differences in environmental rating disagreement.

[Table 3]

Panel A of Table 4 examines the continuous culture measures. Consistent with the ratio-based results, People Culture is positively associated with environmental rating disagreement

(coefficient = 0.71,  $t = 9.28$ ), whereas Tech Culture is negatively associated with disagreement (coefficient =  $-0.40$ ,  $t = -5.27$ ), both significant at the 1% level.

I further decompose people-oriented culture into its three constituent dimensions and, similarly, technology-oriented culture into its two sub-dimensions. Column (2) shows that *Integrity* (coefficient = 0.64,  $t = 3.43$ ) and *Teamwork* (coefficient = 1.58,  $t = 8.87$ ) are positively associated with environmental rating disagreement, both significant at the 1% level, while *Respect* is not statistically significant. For the technology-oriented culture, *Innovation* (coefficient =  $-0.30$ ,  $t = -3.22$ ) and *Quality* (coefficient =  $-0.87$ ,  $t = -4.78$ ) are negatively associated with environmental rating disagreement, both significant at the 1% level.

Panel B of Table 4 examines firms in the top quartile of each cultural orientation. Consistent with the main results, Strong People Culture is positively associated with environmental rating disagreement, whereas Strong Tech Culture is negatively associated with disagreement, both significant at the 1% level. Similar patterns emerge for the underlying cultural dimensions.

[Table 4]

Taken together, these results indicate that environmental rating disagreement varies systematically across cultural orientations. Specifically, firms with stronger people-oriented cultures are positively associated with environmental rating disagreement, whereas firms with stronger technology-oriented cultures are negatively associated with it. These findings support Hypotheses 1 and 2 and suggest that variation in environmental ratings across agencies is related to underlying cultural orientations.

#### **4.2 Disclosure and reporting practices mechanism**

Next, I turn to Hypothesis 3 and the disclosure and reporting practices mechanism. To analyze the mechanism, I use several outcome measures, including the Bloomberg

environmental disclosure score and an aggregated CSR Transparency measure by Fiechter et al. (2021). I also test the moderating effects of environmental policies and ESG report size.

#### 4.2.1 Cultural orientation and environmental disclosure and transparency

I first examine the environmental disclosure score from Bloomberg, which captures the extent of firm's environmental disclosure. To assess whether it is associated with cultural orientations, I re-estimate Equation (1) using the disclosure score as the dependent variable and the cultural measures as independent variables.

Table 5, Column (1), shows that *People Culture Ratio* is negatively associated with environmental disclosure (coefficient =  $-15.20$ ,  $t = -3.91$ ), significant at the 1 % level, indicating that firms with a greater relative emphasis on people-oriented values are associated with less extensive environmental disclosures. In contrast, *Tech Culture Ratio* is positively associated with environmental disclosure (coefficient =  $15.67$ ,  $t = 2.51$ ), significant at the 5% level, suggesting that firms with relative emphasis on technology-oriented values are associated with more extensive environmental disclosure practices. Overall, the evidence indicates that cultural orientation is linked to the extent of environmental disclosure.

[Table 5]

Next, I examine broader reporting transparency using the CSR Transparency measure constructed following Fiechter et al. (2022) as the dependent variable. I re-estimate Equation (1) using the CSR Transparency score and its components as dependent variables, and cultural measures as independent variables. *CSR Transparency* is an aggregated measure capturing five reporting dimensions: the existence of a stand-alone ESG report, global reporting scope, adoption of the GRI framework, adoption of OECD guidelines, and a third-party assurance.

Table 6 reports the results. Panel A examines people-oriented culture. The results show that *People Culture Ratio* is negatively associated with overall *CSR Transparency* (coefficient

= -0.80, t = -3.74), significant at the 1% level. Specifically, *People Culture* is negatively associated with the existence of a stand-alone report, broader reporting scope, and the adoption of GRI and OECD frameworks, while the association with assurance is not statistically significant.

Panel B examines technology-oriented culture. In contrast, *Tech Culture Ratio* is positively associated with overall *CSR Transparency* (coefficient = 0.72, t = 2.09), significant at the 5% level. At the component level, *Tech Culture* is positively associated with all reporting dimensions except *Assurance*.

These results suggest that firms with stronger people-oriented cultures are associated with lower levels of reporting standardization. In contrast, firms with stronger technology-oriented cultures are associated with more standardized reporting systems.

[Table 6]

#### 4.2.2 Moderating effect of environmental policies and ESG report size

To examine whether formalized environmental reporting mechanisms mitigate the association between corporate culture and environmental rating disagreement, I test the moderating effects of environmental policies and ESG report size.

##### ***ENV Disagreement***

$$\begin{aligned}
 &= \beta_0 + \beta_1(\textit{People Culture} \times \textit{ENV Policies}_{it}) + \beta_2(\textit{People Culture}_{it}) \\
 &+ \beta_3(\textit{ENV Policies}_{it}) + \beta_4(\textit{Tech Culture}_{it}) + \sum \gamma \textit{Controls}_{it} \\
 &+ \textit{Year fixed effect} + \textit{Industry fixed effect} + \epsilon_{it}. \tag{2}
 \end{aligned}$$

I employ Equation (2) to estimate the interaction effects. *ENV Policies* and *Report Size* are used as moderators in separate tests. I first examine the moderating effect using the overall culture measure (*Strong Culture*) and subsequently focus on the two cultural orientations, *People Culture* and *Tech Culture*, by interacting each cultural variable with the moderator.

Table 7, Column (1) shows that the interaction term between *People Culture* and *ENV Policies* is negative and significant at the 1% level (coefficient =  $-0.17$ ,  $t = -3.51$ ). This indicates that the positive association between *People Culture* and *ENV Disagreement* weakens in the presence of stronger environmental policy frameworks. In contrast, Column (3) shows that the interaction term *Tech Culture x ENV Policies* is not statistically significant.

[Table 7]

I next test whether the association between cultural orientation and environmental rating disagreement is moderated by ESG report size. Because ESG reports are hand-collected, the analysis is conducted on a reduced sample of 3,112 firm-year observations. Table 8 presents the results. Column (1) shows the interaction term *People Culture x Report Size* is negatively associated with *ENV Disagreement* (coefficient =  $-0.29$ ,  $t = -2.88$ ), significant at the 1% level. In contrast, Column (2) shows that the interaction term *Tech Culture x Report Size* is statistically significant at the 10% level (coefficient =  $-0.15$ ,  $t = -1.89$ ). These findings suggest that more extensive ESG reporting weakens culturally driven environmental rating disagreement particularly for people-oriented firms.

[Table 8]

Overall, the results indicate that cultural orientation is associated with the structure, extent, and formalization of environmental reporting. Specifically, firms with stronger people-oriented cultures are associated with lower environmental disclosure scores and reduced CSR transparency. In contrast, firms with stronger technology-oriented cultures are associated with extensive and standardized reporting practices. Furthermore, formal environmental policies and larger ESG reports weaken the positive association between people-oriented culture and environmental rating disagreement, suggesting that the results are consistent with the view that disagreement is more pronounced among people-oriented firms with less institutionalized

disclosure practices. Taken together, these findings support H3 and indicate that differences in reporting standardization and transparency constitute a key mechanism underlying environmental rating disagreement.

### **4.3 Cultural orientation and climate framing in external communication**

To better understand the source of the environmental rating disagreement, I examine the association between cultural orientation and environmental communication in earnings calls and ESG reports. First, I study climate change-related exposure measures from Sautner et al. (2023) as outcome variables. These exposure variables capture overall climate change discussion, the tone used in that discussion, and climate-related opportunity exposure and tone. Further, I examine how frequently climate change-related words from the category developed by Nicolas et al. (2023) appear in firms' ESG reports.

#### *4.3.1 Culture and climate change exposure and tone*

I use climate change-related exposure measures as outcome variables in a re-estimated version of Equation (1). Panel A of Table 9 reports the results for overall climate-related communication. *People Culture Ratio* is negatively associated with climate exposure (coefficient =  $-0.71$ ,  $t = -2.35$ ), net climate tone (coefficient =  $-0.51$ ,  $t = -4.34$ ), and positive climate tone (coefficient =  $-0.50$ ,  $t = -3.38$ ). In contrast, *Tech Culture Ratio* is positively associated with climate exposure (coefficient =  $0.82$ ,  $t = 2.93$ ), net climate tone (coefficient =  $0.72$ ,  $t = 5.26$ ), and positive climate tone (coefficient =  $0.72$ ,  $t = 4.39$ ). All coefficients are statistically significant.

Panel B focuses on climate-related opportunity communication. *People Culture Ratio* is negatively associated with opportunity exposure (coefficient =  $-0.42$ ,  $t = -3.25$ ), net opportunity tone (coefficient =  $-0.17$ ,  $t = -3.08$ ), and positive opportunity tone (coefficient =  $-0.20$ ,  $t = -2.86$ ). Conversely, *Tech Culture Ratio* is positively associated with opportunity

exposure (coefficient = 0.38,  $t = 2.80$ ), net opportunity tone (coefficient = 0.25,  $t = 3.93$ ), and positive opportunity tone (coefficient = 0.27,  $t = 3.45$ ). All coefficients are significant at the 1% level.

[Table 9]

#### 4.3.2 Culture and climate change related words in ESG reports

Table 10 reports the frequency of climate change related words from the dictionary developed by Nicolas et al. (2023) in firms' ESG reports. I re-estimate Equation (1), using *Climate Change Words* as the dependent variable.

The results in Table 10, Column (1) show that *People Culture Ratio* is negatively associated with *Climate Change Words* (coefficient =  $-2.02$ ,  $t = -3.40$ ), significant at the 1% level. In contrast, *Tech Culture Ratio* is not significantly associated with *Climate Change Words*. Consistent with the earnings call results, firms with stronger people-oriented cultures are associated with less climate change discussion.

Overall, these results show systematic differences in climate-related communication across cultural orientations in both earnings calls and ESG reports. Technology-oriented firms are positively associated with the extent of climate-related discussion and a more positive tone, whereas people-oriented firms are negatively associated with the extent of climate-related discussion and positive tone. These patterns are consistent with the interpretation that rating disagreement reflects structured differences in culturally driven disclosure practices rather than random variation.

[Table 10]

#### 4.4 Corporate culture and underlying environmental performance

To examine whether environmental rating disagreement is driven by underlying environmental performance rather than disclosure practices, I conduct additional analyses

using environmental violations as an outcome measure and emission intensity as a moderating variable. I first examine whether cultural orientation is associated with differences in environmental violations as a proxy for environmental performance and then test whether disagreement is concentrated among environmentally intensive firms.

#### *4.4.1 Environmental violations and fines*

To examine whether corporate culture is associated with underlying environmental performance, I re-estimate Equation (1), using alternative dependent variables. Specifically, I replace environmental rating disagreement with measures of environmental violations and environmental violation fines.

Table 11 shows that *People Culture Ratio* is negatively associated with both environmental fines (coefficient =  $-0.73$ ,  $t = -2.80$ ) and environmental violations (coefficient =  $-0.07$ ,  $t = -2.66$ ), both significant at the 1% level. These findings indicate that firms with a stronger people-oriented cultural orientation experience fewer environmental violations and lower environmental fines.

In contrast, *Tech Culture Ratio* is not significantly associated with either environmental fines or environmental violations. Overall, the results suggest that the higher environmental rating disagreement observed among firms with stronger people-oriented cultures is unlikely to reflect poorer environmental performance. If anything, these firms appear to exhibit fewer environmental violations and incur lower environmental fines despite experiencing greater disagreement across rating agencies.

Overall, the evidence indicates that firms with stronger people-oriented cultures are associated with fewer environmental violations, suggesting better environmental compliance outcomes. By contrast, firms with stronger technology-oriented cultures do not systematically experience fewer violations or fines.

[Table 11]

#### 4.4.2 Emission intensity and environmental rating disagreement

To further assess whether disagreement is concentrated among environmentally intensive firms, I examine whether the relation between cultural orientation and environmental rating disagreement is moderated by high emission intensity. Because emission data are available for only a subset of firms, this analysis is conducted on 3,187 firm-year observations. I re-estimate Equation (2) by introducing *High Emission*, defined as emissions scaled by sales, as a moderating variable. The independent variables include *People Culture*, and *Tech Culture*, and their interactions with *High Emission*.

If environmental rating disagreement were driven by underlying environmental performance, the positive association between *People Culture* and *ENV Disagreement* would be strongest among high-emission firms. However, the interaction results do not support this explanation. Table 12, Column (1), reports that the interaction term *People Culture x High Emission* is negative and significant at the 10% level (coefficient =  $-0.38$ ,  $t = -1.66$ ). This indicates that the positive association between *People Culture* and *ENV Disagreement* weakens among firms with high emission intensity. In contrast, Column (2) shows that the interaction between *Tech Culture* and *High Emission* is not statistically significant.

These findings indicate that environmental rating disagreement is not amplified among high-emission firms. Instead, the cultural effect on disagreement is more pronounced among firms with lower emission intensity. Taken together, the evidence from violations and emission intensity does not support the view that rating disagreement reflects weaker environmental performance.

[Table 12]

#### 4.5 Robustness test: alternative measures of corporate culture

Table 13 presents robustness tests using alternative measures of corporate culture based on the Competing Values Framework (Bhandari et al., 2022). Consistent with the main

findings, firms with a strong collaboration-oriented culture exhibit significantly higher environmental rating disagreement, while firms with a strong competition-oriented culture exhibit lower environmental rating disagreement. Specifically, the coefficient on *Strong Collaboration* is positive and significant at the 1% level, whereas the coefficient on *Strong Competition* is negative and significant at the 10% level. These results provide additional support for the conclusion that people-oriented cultural characteristics are associated with greater environmental rating disagreement, whereas more competition-oriented cultural characteristics are associated with lower disagreement.

## **5. Conclusion**

This study examines whether corporate culture and its underlying people- and technology- oriented dimensions are associated with environmental rating disagreement across rating agencies. The findings show that firms with stronger people-oriented cultures are associated with significantly higher environmental rating disagreement, whereas firms with stronger technology-oriented cultures are associated with significantly lower disagreement across agencies.

The findings suggest that these differences arise from culturally driven variation in disclosure and reporting practices. Firms with stronger people-oriented cultures are linked to less extensive environmental and climate disclosure, lower reporting transparency, and less standardized ESG reporting practices, whereas technology-oriented firms are associated with more extensive disclosure and more standardized reporting systems. Additional tests show that the environmental rating disagreement is not explained by environmental performance, supporting the interpretation that culturally driven differences in disclosure and reporting practices contribute to variation in disagreement.

This study makes several contributions to literature. First, it contributes to the growing literature on the drivers of ESG rating disagreement (e.g. Chatterji et al., 2016; Christensen et al., 2022; Berg et al., 2022; Tang et al., 2026) by identifying corporate culture as an organizational characteristic associated with variation in environmental ratings. In contrast to prior work emphasizing methodological and informational drivers, this study highlights the role of internal cultural factors and shows their connection to the structure and extent of environmental and ESG disclosure and environmental rating disagreement.

Second, this study contributes to the corporate culture literature by providing further evidence on the impact of people-oriented and technology-oriented cultural dimensions introduced by Li et al. (2021b). Prior research shows that cultural orientations are associated

with financial reporting quality (Bhandari et al., 2022). Building on this literature, this study suggests that cultural orientations are also linked to firms' ESG information environments, as reflected in environmental disclosure practices and communication style, as well as ultimately in the consistency of environmental ratings.

Finally, more broadly, the findings contribute to the discussion on ESG ratings by showing that culturally driven differences in disclosure practices are associated with variation in how rating agencies assess firms' environmental performance. This suggests that variation in ESG ratings may be rooted in deeper organizational factors, with implications for standard-setters and regulators designing reporting frameworks and mandates.

This study is subject to several limitations. First, the analysis relies on environmental ratings from two providers, MSCI and LSEG, whereas prior studies often include more. Additional agencies could provide a more comprehensive view of rating disagreement. Second, corporate culture is measured using dimensions developed by Li et al. (2021a; 2021b). Although this is a systematic and scalable measure, reflecting culture as expressed in managerial communication, it may not fully capture underlying corporate culture. Despite these limitations, the study provides novel evidence.

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## Appendix: Definition of variables

Variable name	Definition	Source
<b><i>Dependent variable</i></b>		
<i>ENV Disagreement</i>	The standard deviation of environmental ratings that a firm received for yearly environmental performance	Constructed based on LSEG and MSCI (Christensen et al. 2022)
<i>ENV Score LSEG</i>	Environmental Score (enscore)	LSEG
<i>ENV Score MSCI</i>	ENV Pillar Score is the annual last monthly Environmental Pillar Scores of the year provided by MSCI	MSCI
<i>ENV Viols</i>	Natural logarithm of the number of fines for environmental violations	Violation tracker
<i>ENV Fines</i>	Natural logarithm of the total dollar amount of fines for environmental violations	Violation tracker
<i>ENV Disclosure</i>	Measure of firm-level environmental disclosure capturing information on carbon emissions, resource use, environmental management systems, and climate-related risks and opportunities (Environmental Category).	Bloomberg ESG Disclosure Score
<i>CSR Transparency</i>	CSR Transparency Score assigns a score of 1 for each of the following: CSR report available (cgvsdp026), CSR report covering global activities (cgvsdp029), GRI report (cgvsdp028) available or OECD report (socodp013) available, and CSR report audited (cgvsdp030). The score ranges from 0 (low CSR reporting) to 4 (high CSR reporting)	Constructed based on LSEG (Fiechter et al. 2022)
<i>CSR Report</i>	Indicates (1/0) whether CSR report is published	LSEG
<i>Reporting Scope</i>	Indicates (1/0) whether CSR report covers global activities	LSEG
<i>GRI Report</i>	Indicates (1/0) whether CSR report is compliant with GRI reporting guidelines	LSEG
<i>OECD Report</i>	Indicates (1/0) whether CSR report is compliant with OECD reporting guidelines for multinational enterprises	LSEG
<i>Assurance</i>	Indicates (1/0) whether CSR report is audited (cgvsdp030)	LSEG
<i>Climate Exposure</i>	Relative frequency of climate change–related bigrams in earnings conference call transcripts (number of climate bigrams divided by total bigrams).	Sautner et al. 2023
<i>Net Climate Tone</i>	Difference between positive and negative tone words associated with climate-related discussions in earnings conference call transcripts, scaled by total climate-related words (or total words).	Sautner et al. 2023; Loughran and McDonald, 2011
<i>Pos Climate Tone</i>	Relative frequency of climate change related bigrams are mentioned together with positive tone in earnings call transcripts, divided by total bigrams.	Sautner et al. 2023; Loughran and McDonald, 2011
<i>Opportunity Exposure</i>	Relative frequency of climate change–related opportunity bigrams in earnings conference call transcripts (number of climate opportunity bigrams divided by total bigrams).	Sautner et al. 2023
<i>Net Opportunity Tone</i>	Difference between the relative frequency of positively toned and negatively toned climate change opportunity–related bigrams in earnings conference call transcripts.	Sautner et al. 2023; Loughran and McDonald, 2011
<i>Pos Opportunity Tone</i>	Relative frequency of climate change opportunity related bigrams mentioned in positively toned sentences in earnings conference call transcripts (number of positively toned opportunity-related climate bigrams divided by total bigrams).	Sautner et al. 2023; Loughran and McDonald, 2011

<i>Climate Change Words</i>	Number of words in a firm's ESG report classified under the climate change category of the ESG dictionary developed by Nicolas et al. (2023).	Constructed based on ESG report data and ESG keyword list by Nicolas et al. (2023)
<i>Strong Collaboration</i>	Strong collaboration-oriented culture is an indicator variable equal to one for firms in the top quartile of collaboration-oriented culture, measured as the frequency of collaboration-related words in a firm's 10-K filing scaled by the total number of words in the filing, based on textual analysis.	Constructed based on Bhandari et al. (2022)
<i>Strong Competition</i>	Strong competition-oriented culture is an indicator variable equal to one for firms in the top quartile of competition-oriented culture, measured as the frequency of competition-related words in a firm's 10-K filing scaled by the total number of words in the filing, based on textual analysis.	Constructed based on Bhandari et al. (2022)
<b><i>Independent variable</i></b>		
<i>Strong Culture</i>	Dichotomous variable equal to 1 if total culture (People + Tech Culture) value is in the top quartile, otherwise 0	Based on Li et al. (2021a)
<i>People Culture</i>	People-oriented culture score calculated as the sum of the cultural dimensions of Integrity, Respect, and Teamwork	Li et al. (2021a)
<i>Tech Culture</i>	Technology-oriented culture score calculated as the sum of the cultural dimensions of Innovation and Quality	Li et al. (2021a)
<i>People Culture Ratio</i>	Ratio of people-oriented culture to total culture, measured as people culture divided by total culture.	Based on Li et al. (2021a)
<i>Tech Culture Ratio</i>	Ratio of tech-oriented culture to total culture, measured as tech culture divided by total culture.	Based on Li et al. (2021a)
<i>Strong People</i>	Dichotomous variable equal to 1 if People Culture value is in the top quantile, otherwise 0	Based on Li et al. (2021a)
<i>Strong Tech</i>	Dichotomous variable equal to 1 if Tech Culture value is in the top quantile, otherwise 0	Based on Li et al. (2021a)
<i>Integrity</i>	Weighted-frequency count of integrity-related words in the Q&A section of earnings calls averaged over a three-year window	Li et al. (2021b)
<i>Teamwork</i>	Weighted-frequency count of teamwork-related words in the Q&A section of earnings calls averaged over a three-year window	Li et al. (2021b)
<i>Respect</i>	Weighted-frequency count of respect-related words in the Q&A section of earnings calls averaged over a three-year window	Li et al. (2021b)
<i>Innovation</i>	Weighted-frequency count of innovation-related words in the Q&A section of earnings calls averaged over a three-year window	Li et al. (2021b)
<i>Quality</i>	Weighted-frequency count of quality-related words in the Q&A section of earnings calls averaged over a three-year window	Li et al. (2021b)
<i>High Emission</i>	Indicator variable equal to one if the firm's emission intensity is in the highest quartile of the sample distribution, and zero otherwise.	Constructed based on LSEG
<i>ENV Policies</i>	ENV Policies is a total count of environmental policies with a score of 1 for Energy Efficiency (enrrdp0122), Emission (enerdp0051), and Water Efficiency (enrrdp0121) policies, with a max score of 3.	Constructed based on LSEG
<i>Report Size</i>	Natural logarithm of the ESG report file size measured in kilobytes (derived from the report's word count).	Hand-collected ESG reports
<b><i>Firm characteristics</i></b>		
<i>LN(TA)</i>	Log of fiscal year's total assets	Compustat
<i>LEV</i>	Total liabilities divided by total assets	Compustat

<i>CFO</i>	Cash from operations (Operating Activities - Net Cash Flow) to total assets	Compustat
<i>ATO</i>	Net sales divided by total assets	Compustat
<i>DPS</i>	Dividends per share divided by earnings per share	Compustat
<i>PPE</i>	Net property, plant & equipment divided by total assets	Compustat
<i>ROA</i>	Net income divided by total assets	Compustat
<i>LN(AF)</i>	Log of number of financial analysts following a firm	I/B/E/S
<i>IO</i>	Percentage of the firm's shares owned by institutional investors at the end of the year. Max value capped at 100.	Factset

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**TABLE 1 – Sample description**

<b>Panel A: Sample selection</b>									
Compustat data for U.S. firms, 2014-2021								76,264	
Observations with available environmental ratings from LSEG and MSCI								36,221	
Observations with available culture data								17,368	
Final sample after excluding observations with missing values								10,137	
<b>Panel B: Sample distribution per year</b>									
2014	2015	2016	2017	2018	2019	2020	2021	Total	
580	967	1,272	1,353	1,419	1,492	1,513	1,541	<b>10,137</b>	
<b>Panel C: Sample distribution per industry</b>									
	<b>Firm-Years</b>		<b>Percentage (%)</b>						
(1) Consumer Non-Durables	560		5.52						
(2) Consumer Durables	307		3.03						
(3) Manufacturing	1,229		12.12						
(4) Oil, Gas, and Coal Extraction (Energy)	444		4.38						
(5) Chemicals and Allied Products	390		3.85						
(6) Computers, Software, Electronic Equip.	2,003		19.76						
(7) Telephone and Television Transmission	246		2.43						
(8) Utilities	424		4.18						
(9) Wholesale, Retail, and Some Services	1,190		11.74						
(10) Healthcare, Medical Equipment, Drugs	1,242		12.25						
(11) Finance	1,846		18.21						
(12) Other (e.g., Hotels, Entertainment)	256		2.53						
<b>Total</b>	<b>10,137</b>		<b>100.00</b>						
<b>Panel D: Sample distribution per industry for strong people culture</b>									
	<b>Strong people culture = 1</b>		<b>Strong people culture = 0</b>						
	Firm-Years	Percentage (%)	Firm-Years	Percentage (%)					
(1) Consumer Non-Durables	51	2.01	509	6.69					
(2) Consumer Durables	12	0.47	295	3.88					
(3) Manufacturing	57	2.25	1,172	15.41					
(4) Oil, Gas, and Coal Extraction (Energy)	4	0.16	440	5.79					
(5) Chemicals and Allied Products	13	0.51	377	4.96					
(6) Computers, Software, Electronic Equip.	704	27.80	1,299	17.08					
(7) Telephone and Television Transmission	61	2.41	185	2.43					
(8) Utilities	97	3.83	327	4.30					
(9) Wholesale, Retail, and Some Services	222	8.77	968	12.73					
(10) Healthcare, Medical Equipment, Drugs	687	27.13	555	7.30					
(11) Finance	466	18.40	1,380	18.15					
(12) Other (e.g., Hotels, Entertainment)	158	6.24	98	1.29					
<b>Total</b>	<b>2,532</b>	<b>100.00</b>	<b>7,605</b>	<b>100.00</b>					

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**Panel E: Sample distribution per industry for strong tech culture**

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	<b>Strong tech culture = 1</b>		<b>Strong tech culture = 0</b>	
	Firm-Years	Percentage (%)	Firm-Years	Percentage (%)
(1) Consumer Non-Durables	159	6.28	401	5.27
(2) Consumer Durables	95	3.75	212	2.79
(3) Manufacturing	211	8.33	1,018	13.39
(4) Oil, Gas, and Coal Extraction (Energy)	15	0.59	429	5.64
(5) Chemicals and Allied Products	43	1.7	347	4.56
(6) Computers, Software, Electronic Equip.	1,195	47.2	808	10.62
(7) Telephone and Television Transmission	131	5.17	115	1.51
(8) Utilities	5	0.2	419	5.51
(9) Wholesale, Retail, and Some Services	401	15.84	789	10.37
(10) Healthcare, Medical Equipment, Drugs	116	4.58	1,126	14.81
(11) Finance	117	4.62	1,729	22.74
(12) Other (e.g., Hotels, Entertainment)	44	1.74	212	2.79
<b>Total</b>	<b>2,532</b>	<b>100.00</b>	<b>7,605</b>	<b>100.00</b>

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**TABLE 2 – Descriptive statistics for the main regression analysis**

<b>Panel A: Culture variables</b>			
	Mean	Mdn	S.D.
<b>Corporate Culture</b>			
<i>Total Culture</i>	16.012	14.826	6.402
<b>People Culture</b>			
<i>People Culture</i>	7.841	7.035	3.639
<i>Integrity</i>	2.312	2.103	1.120
<i>Teamwork</i>	2.422	2.025	1.499
<i>Respect</i>	3.107	2.543	2.128
<i>Strong People</i>	0.250	0.000	0.433
<b>Tech Culture</b>			
<i>Tech Culture</i>	8.171	7.342	4.106
<i>Innovation</i>	5.719	4.974	3.305
<i>Quality</i>	2.452	2.065	1.550
<i>Strong Tech</i>	0.250	0.000	0.433

  

<b>Panel B: Environmental rating disagreement and performance statistics, strong people culture</b>								
	<b>Strong people culture =1</b>				<b>Strong people culture =0</b>			
	N	Mean	Mdn	S.D.	N	Mean	Mdn	S.D.
<b>Environmental Scores</b>								
<i>ENV Disagreement</i>	2532	27.133	27.577	14.531	7605	18.497	15.684	13.471
<i>ENV Score MSCI</i>	2532	5.467	5.500	2.003	7605	4.522	4.400	2.235
<i>ENV Score LSEG</i>	2532	21.300	9.475	26.508	7605	32.813	26.950	27.418
<b>Environmental Violations</b>								
<i>ENV Viols</i>	2532	0.033	0.000	0.190	7605	0.138	0.000	0.401
<i>ENV Fines</i>	2532	0.414	0.000	2.213	7605	1.496	0.000	3.954
<b>Emission Intensity</b>								
<i>High Emission</i>	540	293.011	12.199	1144.297	2647	377.335	41.493	1006.336

  

<b>Panel C: Environmental rating disagreement and performance statistics, strong tech culture</b>								
	<b>Strong tech culture =1</b>				<b>Strong tech culture =0</b>			
	N	Mean	Mdn	S.D.	N	Mean	Mdn	S.D.
<b>Environmental Scores</b>								
<i>ENV Disagreement</i>	2532	22.263	20.782	14.250	7605	20.118	17.317	14.200
<i>ENV Score MSCI</i>	2532	5.120	4.800	2.106	7605	4.637	4.500	2.241
<i>ENV Score LSEG</i>	2532	29.582	21.380	28.838	7605	30.055	22.130	27.237
<b>Environmental Violations</b>								
<i>ENV Viols</i>	2532	0.050	0.000	0.228	7605	0.132	0.000	0.395
<i>ENV Fines</i>	2532	0.629	0.000	2.671	7605	1.424	0.000	3.876
<b>Emission Intensity</b>								
<i>High Emission</i>	797	51.295	19.807	163.513	2390	467.008	45.183	1168.878

  

<b>Panel D: Disclosure and transparency statistics</b>								
	<b>Strong people culture =1</b>				<b>Strong people culture =0</b>			
	N	Mean	Mdn	S.D.	N	Mean	Mdn	S.D.
<b>Environmental Disclosure Score</b>								
<i>ENV Disclosure</i>	1364	10.074	0.000	17.216	4710	16.909	5.230	20.832
<b>CSR Transparency</b>								
<i>CSR Transparency</i>	2438	0.845	0.000	1.352	7346	1.311	0.000	1.504
<b>Environmental Policies</b>								
<i>ENV Policies</i>	2447	0.999	0.000	1.255	7378	1.519	2.000	1.311

  

<b>Panel E: Disclosure and transparency statistics</b>								
	<b>Strong tech culture =1</b>				<b>Strong tech culture =0</b>			
	N	Mean	Mdn	S.D.	N	Mean	Mdn	S.D.
<b>Environmental Disclosure Score</b>								
<i>ENV Disclosure</i>	1436	16.823	6.645	20.576	4638	14.925	1.570	20.165

<b>CSR Transparency</b>								
<i>CSR Transparency</i>	2437	1.179	0.000	1.497	7347	1.201	0.000	1.476
<b>Environmental Policies</b>								
<i>ENV Policies</i>	2450	1.359	1.000	1.323	7375	1.399	1.000	1.315

**Panel F:** Firm characteristics, strong people culture (before entropy balancing)

	<b>Strong people culture =1</b> (N= 3,153)			<b>Strong people culture =0</b> (N= 6,984)		
	Mean	Variance	Skewn.	Mean	Variance	Skewn.
<i>LN(TA)</i>	21.680	3.157	0.599	22.310	2.511	0.463
<i>LEV</i>	0.579	0.073	0.323	0.631	0.054	0.100
<i>PPE</i>	0.051	0.032	2.312	0.237	0.054	1.207
<i>ROA</i>	0.673	0.030	-1.724	0.035	0.009	-2.217
<i>CFO</i>	0.137	0.023	-1.533	0.085	0.007	-1.200
<i>ATO</i>	0.220	0.356	2.005	0.787	0.406	1.459
<i>DPS</i>	-0.015	0.391	3.516	0.287	0.512	2.371
<i>LN(AF)</i>	2.419	0.431	-0.121	2.390	0.422	-0.237
<i>IO</i>	0.831	0.026	-1.332	0.821	0.026	-1.409

**Panel G:** Firm characteristics, strong tech culture (before entropy balancing)

	<b>Strong tech culture =1</b> (N=3,153)			<b>Strong tech culture =0</b> (N=6,984)		
	Mean	Variance	Skewn.	Mean	Variance	Skewn.
<i>LN(TA)</i>	21.920	2.809	0.646	22.240	2.701	0.370
<i>LEV</i>	0.595	0.067	0.450	0.626	0.056	0.017
<i>PPE</i>	0.172	0.027	1.580	0.225	0.058	1.273
<i>ROA</i>	0.027	0.013	-1.619	0.021	0.015	-2.611
<i>CFO</i>	0.099	0.009	-1.145	0.069	0.012	-1.938
<i>ATO</i>	0.873	0.384	1.766	0.720	0.395	1.554
<i>DPS</i>	0.223	0.464	3.544	0.286	0.488	2.310
<i>LN(AF)</i>	2.598	0.459	-0.355	2.330	0.395	-0.220
<i>IO</i>	0.836	0.025	-1.377	0.819	0.026	-1.392

**TABLE 3 – Effect of corporate culture on environmental rating disagreement**

Outcome variable:	<i>ENV Disagreement</i>		
	(1)	(2)	(3)
<i>Strong Total Culture</i>	0.95* (1.77)		
<i>People Culture Ratio</i>		15.07*** (5.44)	
<i>Tech Culture Ratio</i>			-27.13*** (-9.13)
<i>Total Culture</i>		0.06 (1.21)	0.06 (1.06)
<i>LN(TA)</i>	-2.49*** (-9.45)	-2.48*** (-9.02)	-1.96*** (-6.25)
<i>LEV</i>	-1.44 (-1.24)	-3.13*** (-2.69)	0.63 (0.46)
<i>CFO</i>	-2.80 (-0.90)	-3.16 (-1.00)	2.06 (0.52)
<i>ATO</i>	-1.27* (-1.67)	0.19 (0.24)	-1.95** (-2.49)
<i>PPE</i>	-8.38*** (-3.59)	-9.00*** (-3.82)	-4.07 (-1.55)
<i>DPS</i>	-0.25 (-0.87)	-0.57* (-1.81)	-0.41 (-1.38)
<i>ROA</i>	-4.46* (-1.80)	-2.77 (-1.11)	-3.56 (-1.25)
<i>LN(AF)</i>	1.19* (1.94)	1.67*** (2.57)	0.57 (0.79)
<i>IO</i>	1.52 (0.84)	3.80** (2.21)	-0.57 (-0.27)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes
<i>N</i>	10,137	10,137	10,137
adj. <i>R</i> <sup>2</sup>	0.286	0.305	0.304

Table 3 reports OLS estimates of Eq. (1) with ENV Disagreement as the dependent variable. All regressions are estimated using entropy-balanced weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). Entropy balancing is performed separately for each column using different treatment definitions, where “Strong” indicates firms in the top quartile of the respective culture measure. Specifically, Column (1) uses entropy-balancing weights based on Strong Total Culture firms, Column (2) uses weights based on Strong People Culture firms, and Column (3) uses weights based on Strong Tech Culture firms. People Culture Ratio and Tech Culture Ratio are measured as people culture and technology culture divided by total culture, respectively. t-values reported in parentheses are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 4 – Continuous Culture Dimensions and Environmental Rating Disagreement**

<b>Panel A: Culture Dimension Components and Environmental Rating Disagreement</b>		
Outcome variable:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>People Culture</i>	0.71*** (9.28)	
<i>Tech Culture</i>	-0.40*** (-5.27)	
<i>Integrity</i>		0.64*** (3.43)
<i>Teamwork</i>		1.58*** (8.87)
<i>Respect</i>		0.19 (1.52)
<i>Innovation</i>		-0.30*** (-3.22)
<i>Quality</i>		-0.87*** (-4.78)
<i>LN(TA)</i>	-1.74*** (-7.38)	-1.79*** (-7.61)
<i>LEV</i>	-1.01 (-0.94)	-0.61 (-0.58)
<i>CFO</i>	-2.25 (-0.74)	-1.60 (-0.53)
<i>ATO</i>	0.12 (0.18)	0.39 (0.59)
<i>PPE</i>	-5.73*** (-3.29)	-4.64*** (-2.63)
<i>DPS</i>	-0.49** (-2.23)	-0.49** (-2.23)
<i>ROA</i>	-5.77** (-2.53)	-4.71** (-2.12)
<i>LN(AF)</i>	1.56*** (2.96)	1.49*** (2.86)
<i>IO</i>	0.54 (0.38)	0.45 (0.32)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	No	No
<i>N</i>	10,137	10,137
adj. <i>R</i> <sup>2</sup>	0.278	0.286

Panel A in Table 4 reports OLS estimates of Eq. (1) with ENV Disagreement as the dependent variable. All culture variables are measured as continuous variables. Column (1) includes the aggregated People Culture and Tech Culture measures, while Column (2) includes the underlying cultural dimensions that compose these aggregated measures: Integrity, Teamwork, Respect, Innovation, and Quality. All regressions include control variables as well as year and industry fixed effects (first three digits of NAICS). t-values reported in parentheses are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 4 – Continuous Culture Dimensions and Environmental Rating Disagreement**

<b>Panel B: Strong people- and technology-oriented cultures and environmental disagreement</b>		
Outcome variables:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>Strong People Culture</i>	3.42*** (6.48)	
<i>Strong Tech Culture</i>	-2.11*** (-3.76)	
<i>Strong Integrity</i>		1.56*** (3.68)
<i>Strong Teamwork</i>		3.53*** (6.69)
<i>Strong Respect</i>		0.91* (1.79)
<i>Strong Innovation</i>		-1.40*** (-2.61)
<i>Strong Quality</i>		-2.77*** (-5.30)
<i>LN(TA)</i>	-1.84*** (-7.73)	-1.87*** (-7.96)
<i>LEV</i>	-1.15 (-1.05)	-0.78 (-0.72)
<i>CFO</i>	-3.68 (-1.21)	-3.10 (-1.03)
<i>ATO</i>	0.14 (0.20)	0.21 (0.32)
<i>PPE</i>	-6.68*** (-3.75)	-5.45*** (-3.08)
<i>DPS</i>	-0.45** (-2.07)	-0.50** (-2.28)
<i>ROA</i>	-6.31*** (-2.75)	-5.93*** (-2.63)
<i>LN(AF)</i>	1.50*** (2.84)	1.47*** (2.82)
<i>IO</i>	0.38 (0.26)	0.36 (0.25)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	No	No
<i>N</i>	10,137	10,137
adj. <i>R</i> <sup>2</sup>	0.296	0.278

This table reports OLS estimates of Eq. (1) with ENV Disagreement as dependent variable. All regressions include control variables as well as year and industry fixed effects (first three digits of NAICS). t-values, reported below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 5 – Effects of corporate culture on environmental disclosure score**

Outcome variable:	<i>ENV Disclosure</i>	
	(1)	(2)
<i>People Culture Ratio</i>	-15.20*** (-3.91)	
<i>Tech Culture Ratio</i>		15.67** (2.51)
<i>Total Culture</i>	0.12 (1.25)	0.03 (0.31)
<i>LN(TA)</i>	5.84*** (16.58)	6.32*** (11.36)
<i>LEV</i>	-0.40 (-0.26)	4.71* (1.91)
<i>CFO</i>	-0.68 (-0.19)	2.60 (0.38)
<i>ATO</i>	3.29*** (3.86)	2.46** (2.27)
<i>PPE</i>	2.32 (0.89)	1.04 (0.24)
<i>DPS</i>	1.77*** (4.66)	1.48*** (3.84)
<i>ROA</i>	0.39 (0.12)	4.59 (1.06)
<i>LN(AF)</i>	3.22*** (4.33)	3.94*** (3.78)
<i>IO</i>	-12.63*** (-5.66)	-11.76*** (-3.13)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	Yes	Yes
<i>N</i>	6,074	6,074
adj. <i>R</i> <sup>2</sup>	0.561	0.581

This table reports OLS estimates of Eq. (1) with ENV Disclosure as the dependent variable. All regressions are estimated using entropy-balanced weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-values, reported below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 6 – Effect of corporate culture on CSR reporting and its components**

<b>Panel A: People-oriented culture</b>						
Outcome variables:	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CSR Transparency</i>	<i>CSR Report</i>	<i>Reporting Scope</i>	<i>GRI Report</i>	<i>OECD Report</i>	<i>Assurance</i>
<i>People Culture Ratio</i>	-0.80*** (-3.74)	-0.27*** (-3.68)	-0.23*** (-3.26)	-0.23*** (-3.54)	-0.04 (-1.33)	-0.07 (-1.41)
<i>Total Culture</i>	0.00 (0.51)	-0.00 (-0.77)	-0.00 (-0.29)	0.00 (1.21)	-0.00 (-0.76)	0.00** (2.20)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	9,784	9,784	9,784	9,784	9,784	9,784
adj. <i>R</i> <sup>2</sup>	0.469	0.422	0.402	0.317	0.045	0.286
<b>Panel B: Tech-oriented culture</b>						
Outcome variables:	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CSR Transparency</i>	<i>CSR Report</i>	<i>Reporting Scope</i>	<i>GRI Report</i>	<i>OECD Report</i>	<i>Assurance</i>
<i>Tech Culture Ratio</i>	0.72** (2.09)	0.31*** (3.23)	0.26*** (2.61)	0.24** (2.33)	0.10** (1.96)	-0.10 (-1.01)
<i>Total Culture</i>	0.00 (0.05)	-0.00 (-0.98)	-0.00 (-0.31)	0.00 (0.38)	0.00 (1.14)	0.00 (1.39)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	9,784	9,784	9,784	9,784	9,784	9,784
adj. <i>R</i> <sup>2</sup>	0.509	0.434	0.416	0.371	0.057	0.351

Table 6 reports OLS estimates of Eq. (1) using CSR Transparency and its components—CSR Report (firms that prepared a CSR report), Reporting Scope (CSR report with a global reporting scope), GRI Report, OECD Report, and Assurance—as dependent variables. All regressions are estimated using entropy-balanced weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). The t-values, reported below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 7 – Moderating effect of environmental policies on environmental disagreement**

Outcome variable:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>People Culture x ENV Policies</i>	-0.17*** (-3.51)	
<i>Tech Culture x ENV Policies</i>		-0.03 (-0.56)
<i>People Culture</i>	0.60*** (6.16)	0.69*** (7.21)
<i>Tech Culture</i>	-0.32*** (-3.79)	-0.46*** (-4.04)
<i>ENV Policies</i>	-1.69*** (-3.11)	-2.77*** (-4.98)
<i>LN(TA)</i>	-0.99*** (-3.17)	-0.60* (-1.79)
<i>LEV</i>	-3.30*** (-2.86)	0.47 (0.36)
<i>CFO</i>	-3.19 (-0.99)	2.85 (0.72)
<i>ATO</i>	0.83 (1.05)	-1.89** (-2.31)
<i>PPE</i>	-7.93*** (-3.33)	-3.17 (-1.17)
<i>DPS</i>	-0.36 (-1.10)	-0.12 (-0.39)
<i>ROA</i>	-3.38 (-1.35)	-3.03 (-1.06)
<i>LN(AF)</i>	2.24*** (3.38)	0.92 (1.26)
<i>IO</i>	3.87** (2.28)	-0.99 (-0.49)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	Yes	Yes
<i>N</i>	9,825	9,825
adj. <i>R</i> <sup>2</sup>	0.352	0.343

This table reports OLS estimates of Eq. (2) with ENV Disagreement as the dependent variable. All regressions are estimated using entropy-balanced weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-values, reported below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 8 – Moderating effect of ESG report size on environmental disagreement**

Outcome variable:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>People Culture x Report Size</i>	-0.29*** (-2.88)	
<i>Tech Culture x Report Size</i>		-0.15* (-1.89)
<i>People Culture</i>	1.74*** (3.92)	0.71*** (4.73)
<i>Tech Culture</i>	-0.44*** (-4.46)	0.23 (0.61)
<i>Report Size</i>	2.39*** (2.72)	1.51 (1.63)
<i>LN(TA)</i>	-1.72*** (-3.81)	-1.01** (-2.19)
<i>LEV</i>	-3.30 (-1.48)	0.95 (0.40)
<i>CFO</i>	-10.47* (-1.69)	4.30 (0.59)
<i>ATO</i>	-0.02 (-0.02)	-2.17* (-1.65)
<i>PPE</i>	-8.42** (-2.47)	-2.88 (-0.73)
<i>DPS</i>	-0.20 (-0.44)	0.24 (0.55)
<i>ROA</i>	2.80 (0.50)	4.14 (0.75)
<i>LN(AF)</i>	3.71*** (3.53)	0.76 (0.67)
<i>IO</i>	-0.59 (-0.19)	-1.06 (-0.37)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	Yes	Yes
<i>N</i>	3,112	3,112
adj. <i>R</i> <sup>2</sup>	0.222	0.184

This table reports OLS estimates of Eq. (2) with ENV Disagreement as the dependent variable. All regressions are estimated using entropy-balanced weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-values, reported below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 9 – Corporate culture and framing of climate change in earnings calls**

<b>Panel A: Culture and Overall Climate Change Exposure and Tone</b>						
Outcome variables:	<i>Climate Exposure</i>		<i>Net Climate Tone</i>		<i>Pos Climate Tone</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>People Culture Ratio</i>	-0.71** (-2.35)		-0.51*** (-4.34)		-0.50*** (-3.38)	
<i>Tech Culture Ratio</i>		0.82*** (2.93)		0.72*** (5.26)		0.72*** (4.39)
<i>Total Culture</i>	0.00 (0.45)	0.00 (0.76)	0.00 (0.14)	0.00 (0.80)	0.00 (0.40)	0.00 (0.93)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	10,038	10,038	10,038	10,038	10,038	10,038
adj. <i>R</i> <sup>2</sup>	0.546	0.410	0.277	0.194	0.426	0.290
<b>Panel B: Culture and Climate Change Opportunity Exposure and Tone</b>						
Outcome variables:	<i>Opportunity Exposure</i>		<i>Net Opportunity Tone</i>		<i>Pos Opportunity Tone</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>People Culture Ratio</i>	-0.42*** (-3.25)		-0.17*** (-3.08)		-0.20*** (-2.86)	
<i>Tech Culture Ratio</i>		0.38*** (2.80)		0.25*** (3.93)		0.27*** (3.45)
<i>Total Culture</i>	0.00 (0.78)	0.00 (0.53)	-0.00 (-0.12)	-0.00 (-0.12)	0.00 (0.62)	0.00 (0.34)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	10,038	10,038	10,038	10,038	10,038	10,038
adj. <i>R</i> <sup>2</sup>	0.415	0.325	0.223	0.176	0.319	0.249

This table reports OLS estimates of Eq. (1) with measures of climate change exposure in earnings calls as the dependent variables. Panel A reports results for overall climate change exposure and tone. Panel B reports results for climate change opportunity exposure and tone. All regressions are estimated using entropy balancing weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-statistics, reported in parentheses below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 10 – Corporate culture and climate change words in ESG reports**

Outcome variable:	<i>Climate Change Words</i>	
	(1)	(2)
<i>People Culture Ratio</i>	-2.02*** (-3.40)	
<i>Tech Culture Ratio</i>		1.03 (1.26)
<i>Total Culture</i>	0.00 (0.27)	0.00 (0.00)
<i>LN(TA)</i>	0.15*** (2.72)	0.25*** (2.96)
<i>LEV</i>	-0.18 (-0.56)	0.44 (1.17)
<i>CFO</i>	0.28 (0.35)	1.20 (0.89)
<i>ATO</i>	-0.24 (-1.47)	-0.10 (-0.56)
<i>PPE</i>	-0.21 (-0.41)	-0.05 (-0.08)
<i>DPS</i>	0.05 (0.81)	-0.06 (-0.81)
<i>ROA</i>	0.69 (1.07)	-0.65 (-0.90)
<i>LN(AF)</i>	0.06 (0.42)	-0.13 (-0.76)
<i>IO</i>	-0.74 (-1.59)	-0.81 (-1.20)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	Yes	Yes
<i>N</i>	3,112	3,112
adj. <i>R</i> <sup>2</sup>	0.221	0.189

This table reports OLS estimates of Eq. (1) using Climate Change Words as dependent variable. All regressions are estimated using entropy balancing weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-statistics, reported in parentheses below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 11 – Effect of corporate culture on environmental violations**

Outcome variables:	<i>ENV Fines</i>	<i>ENV Fines</i>	<i>ENV Viols</i>	<i>ENV Viols</i>
	(1)	(2)	(3)	(4)
<i>People Culture Ratio</i>	-0.73*** (-2.80)		-0.07*** (-2.66)	
<i>Tech Culture Ratio</i>		0.22 (0.44)		0.01 (0.27)
<i>Total Culture</i>	-0.01*** (-2.59)	-0.03*** (-3.61)	-0.00** (-2.34)	-0.00*** (-3.30)
<i>LN(TA)</i>	0.32*** (7.15)	0.51*** (8.37)	0.03*** (6.70)	0.04*** (7.99)
<i>LEV</i>	-0.03 (-0.29)	0.00 (0.01)	-0.00 (-0.42)	-0.00 (-0.25)
<i>CFO</i>	-0.06 (-0.17)	-0.93 (-1.42)	-0.00 (-0.06)	-0.11** (-1.98)
<i>ATO</i>	0.31*** (2.83)	0.51*** (3.38)	0.03** (2.26)	0.05*** (2.89)
<i>PPE</i>	1.63*** (4.06)	2.79*** (4.68)	0.15*** (4.29)	0.27*** (4.92)
<i>DPS</i>	0.07 (1.39)	0.02 (0.41)	0.00 (0.85)	0.00 (0.67)
<i>ROA</i>	-0.48 (-1.62)	-0.75* (-1.66)	-0.04 (-1.46)	-0.03 (-0.70)
<i>LN(AF)</i>	-0.04 (-0.77)	-0.10 (-1.23)	-0.00 (-0.31)	-0.00 (-0.70)
<i>IO</i>	-0.57*** (-3.02)	-0.16 (-0.48)	-0.06*** (-3.28)	-0.03 (-0.93)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Entropy balanced	Yes	Yes	Yes	Yes
<i>N</i>	10,137	10,137	10,137	10,137
adj. <i>R</i> <sup>2</sup>	0.219	0.227	0.228	0.253

This table reports OLS estimates of Eq. (1) using measures of environmental violation fines as the dependent variables. Columns from (1) and (2) use the dollar amount of environmental violation fines, while Columns (3) and (4) use the number of environmental violation fines. All regressions are estimated using entropy balancing weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-statistics, reported in parentheses below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 12 – Moderating effect of emission intensity on environmental disagreement**

Outcome variable:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>People Culture x High Emission</i>	-0.38*	
	(-1.66)	
<i>Tech Culture x High Emission</i>		-0.01
		(-0.02)
<i>People Culture</i>	0.48***	0.63***
	(3.38)	(3.85)
<i>High Emission</i>	4.43**	0.67
	(2.25)	(0.18)
<i>Tech Culture</i>	-0.47***	-0.43***
	(-4.49)	(-3.72)
<i>LN(TA)</i>	-1.69***	-0.35
	(-3.61)	(-0.79)
<i>LEV</i>	1.49	1.18
	(0.70)	(0.51)
<i>CFO</i>	2.00	13.35*
	(0.31)	(1.67)
<i>ATO</i>	-0.02	-1.60
	(-0.02)	(-1.35)
<i>PPE</i>	-5.80*	-4.84
	(-1.79)	(-1.27)
<i>DPS</i>	-0.34	-1.24***
	(-0.66)	(-3.19)
<i>ROA</i>	0.82	-0.74
	(0.16)	(-0.15)
<i>LN(AF)</i>	2.80**	-1.22
	(2.41)	(-1.04)
<i>IO</i>	0.45	-1.50
	(0.12)	(-0.52)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	Yes	Yes
<i>N</i>	3,187	3,187
adj. <i>R</i> <sup>2</sup>	0.251	0.169

This table reports OLS estimates of Eq. (2) using ENV Disagreement as dependent variable. All regressions are estimated using entropy balancing weights and include control variables as well as year and industry fixed effects (first three digits of NAICS). t-statistics, reported in parentheses below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 13 – Robustness Test: Alternative Measures of Corporate Culture**

Outcome variable:	<i>ENV Disagreement</i>	
	(1)	(2)
<i>Strong Collaboration</i>	1.52*** (2.86)	
<i>Strong Competition</i>		-1.29* (-1.72)
<i>LN(TA)</i>	-1.94*** (-7.22)	-2.00*** (-7.44)
<i>LEV</i>	-1.24 (-1.00)	-1.45 (-1.16)
<i>CFO</i>	-5.26 (-1.38)	-4.75 (-1.24)
<i>ATO</i>	0.18 (0.22)	0.25 (0.31)
<i>PPE</i>	-7.38*** (-3.58)	-7.88*** (-3.80)
<i>DPS</i>	-0.34 (-1.33)	-0.36 (-1.42)
<i>ROA</i>	-6.70** (-2.29)	-7.05** (-2.40)
<i>LN(AF)</i>	1.21* (1.95)	1.41** (2.29)
<i>IO</i>	2.13 (1.27)	2.08 (1.24)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Entropy balanced	No	No
<i>N</i>	6,993	6,993
<i>adj. R<sup>2</sup></i>	0.272	0.272

This table reports OLS estimates of Eq. (1) using ENV Disagreement as dependent variable. All regressions include control variables as well as year and industry fixed effects (first three digits of NAICS). t-statistics, reported in parentheses below the coefficients, are based on robust standard errors clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.