

ISF White Paper

# Sentiment and Sustainability

How the language of U.S. corporate filings reveals divergent paths for management priorities on DEI and Environment

November 2025



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## **EXECUTIVE SUMMARY**

Corporations are quick to adjust their disclosures when political or regulatory shifts signal changing expectations from investors, regulators, and other stakeholders. This white paper summarizes the preliminary findings from analysing the language of mandatory annual corporate filings (Securities and Exchange Commission 10-Ks) in the United States before and after the recent re-election of U.S. President Donald Trump.

Specifically, we examined the changes in sentiment toward two key themes: **environment** (climate change and environmental sustainability), and **DEI** (diversity, equity and inclusion). Both are themes that have been central to corporate strategy and stakeholder engagement in recent years. Shifts in priorities of the new administration — including efforts to scale back ESG frameworks, limit DEI programming, and reduce environmental incentives — have created a regulatory atmosphere in which firms are recalibrating how they present these issues in mandatory disclosures.

Our results reveal a stark decline in DEI-related disclosure language following the 2024 election, with average DEI keyword mentions across S&P 1500 firms' filings falling by nearly 25 percent between 2024 and 2025. The decline is observed across industries, firm sizes, and both Republican (red) and Democratic (blue) states, though it is most pronounced among larger firms.

In contrast, climate- and environment-related terminology remained largely stable over the same period, registering only a small and statistically insignificant decrease.

These findings suggest that usage of DEI-themed language in 10-K filings is more sensitive and responsive to a changing regulatory environment. This contrasts our results related to usage of environment-themed language, which appears resilient to near-term political shifts, possibly indicating acceptance of this language as a baseline across global capital markets. The divergent trajectories highlight how corporate disclosure priorities are impacted not only by federal policy, but also by other considerations possibly to do with risk assessment, public sentiment or investor expectations.

## INTRODUCTION

The 2024 re-election of President Donald Trump in the United States has accelerated a nationwide shift in the political and regulatory environment surrounding diversity, equity, and inclusion (DEI) and environmental, social, and governance (ESG) priorities.

In the months leading up to and following the election, Republican policymakers at both federal and state levels have moved to dismantle existing ESG and DEI frameworks. The administration's "Big Beautiful Bill," for example, included provisions to eliminate tax breaks for electric vehicles 1, while several states have introduced legislation to defund public universities that maintain DEI programming 2. Amid this backdrop, companies face growing financial risks in publicly supporting ESG and DEI goals. As profit-maximizing entities, many may respond by downplaying these topics in their corporate disclosures.

Corporate disclosure language serves as a legal requirement and a strategic communication tool. Filings to the U.S. Securities and Exchange Commission (SEC), particularly mandatory disclosures such as the 10-K, provide insight into how firms perceive and manage environmental, social, and governance (ESG) risks and opportunities, regulatory priorities, shareholder and stakeholder expectations, and potential business risks. Their statements in these forms expose firms to legal risk via SEC audits and lawsuits. Therefore, the words companies choose to use or to avoid in their mandatory SEC filings offer unique and credible insights into corporate decision-making.

This white paper studies corporate disclosure patterns through analysis of changes in word counts observed in SEC 10-K filings. We assess patterns in disclosure language associated with two categories which have been in the public eye in recent years: diversity, equity, and inclusion (DEI) themed terminology and environmental/climate-related language. The paper documents a large shift in disclosure patterns that has emerged over the past two years.

The timing and magnitude of these changes are particularly noteworthy. Following significant political and regulatory shifts in early 2025, corporate America appears to have rapidly recalibrated its disclosure strategies. While environmental and climate-related disclosures have maintained their prominence and, in some cases, continued to expand, DEI-related language has experienced a decline across corporate filings.

This phenomenon raises critical questions for practitioners: Are companies responding to perceived shifts in regulatory enforcement priorities? Do these changes reflect evolving risk assessments or strategic repositioning? What are the implications for legal compliance, investor relations, and long-term business strategy?

## INSTITUTIONAL CONTEXT

The annual 10-K filing, which contains the firm's annual report, is a firm's primary SEC disclosure and includes a section on management's discussion and analysis of the company's financial condition and operational results. Within this section, firms address sustainability to the extent that it is deemed material to their business performance. However, the depth of such disclosures varies widely across individual firms, suggesting that materiality of sustainability remains a subjective point of view.

U.S. companies are not explicitly required to disclose diversity metrics in their 10-K filings. However, following the SEC's 2020 rule which requires the disclosure of material aspects of workforce management, many now include such information under categories called, for example, human capital, DEI, and Workforce Management. In these 10-K sections, firms discuss, among other things, their diversity, equity, and inclusion initiatives, representation goals, and related risks. This is especially discussed if these factors are considered material to performance or investor decision-making. The depth of diversity-related disclosures varies significantly across companies and across time.<sup>1</sup>

An interesting example is Meta's 10-K filings from January 2024<sup>2</sup> and January 2025<sup>3</sup>; excerpts are shown below. They highlight how the discussion on diversity and inclusion within the 10-K filings has changed. The 2024 10-K form included detail about the proportion of "underrepresented people" in its global and U.S. workforce with figures for proportion of people of colour, people with disabilities and people who identify as LGBTQ+. While Meta continues to track these data, in 2025 no similar paragraph is included in the 10-K filing.

## **EXCERPT: META PLATFORMS, INC. 2024 10-K FILING**

#### **Diverse and Inclusive Workplace**

We work to build a diverse and inclusive workplace where we can leverage our collective cognitive diversity to build the best products and make the best decisions for the global community we serve.

In our 2023 Responsible Business Practices Report, we published our global diversity and U.S. ethnic diversity workforce data. As of December 31, 2022, our global employee base was composed of 45.4% underrepresented people, with 47.9% underrepresented people in the U.S., and 43.1% of our leaders in the U.S. being people of color. As published in our 2023 Responsible Business Practices Report, people with disabilities now represent 7.2% of our U.S. workforce, and based on voluntary self-identification, veterans represented 2.3% and members of the LGBTQ+ community make up 9.8% of our U.S. workforce.

We want our products to work for people around the world and we need to grow and keep the best talent in order to do that. We also remain committed to having a skilled, inclusive and diverse workforce because we believe cognitive diversity fuels innovation. To aid in this effort, we have taken steps to reduce bias from our hiring processes and performance management systems, as well as offering learning and development courses for our employees.

<sup>1</sup> For more on this, see: Harvard Law School Forum on Corporate Governance, "Human Capital Disclosures Findings From 2020 10-Ks".

<sup>2</sup> Source: SEC, Meta Platforms, Inc. 2024 10-K filing.

<sup>3</sup> Source: SEC, Meta Platforms, Inc. 2025 10-K filing.

## **EXCERPT: META PLATFORMS, INC. 2025 10-K FILING**

#### The Strength of Our Workforce and People Processes

In early 2025, we announced changes to our diversity programs in light of the shifting legal and policy landscape. We will continue to work to build an inclusive workplace where we can leverage our collective cognitive diversity to build the best products and make the best decisions for the global community we serve.

We want our products to work for people around the world and we need to grow and keep the best talent in order to do that. We remain committed to having a skilled, inclusive and diverse workforce with a broad range of knowledge, skills, political views, backgrounds, and perspectives because we believe cognitive diversity fuels innovation. To aid in this effort, we have taken steps to reduce bias in our people processes and tooling, including our hiring processes and performance management systems.

## **METHODOLOGY**

Two sets of keywords were constructed to contain terms central to two main themes: **DEI** and **nature/climate**. For the purposes of this study, DEI (Diversity, Equity, and Inclusion) captures terminology related to racial or gender representation and equity within the workforce. We considered terminology related to global warming or environmental sustainability to be nature or climate-themed, including relevant frameworks such as Taskforce on Climate-related Financial Disclosures (TCFD) and Paris Accords. A full description of the Methodology and complete dictionary of the included keywords and associated themes is included in the Appendix (tables).

We constructed a panel dataset using S&P 1500 companies that submitted 10-K filings which were downloaded from SEC's <u>EDGAR database</u>. Total counts for DEI-themed and nature themed words were aggregated for each firm and each year. Our analysis focused on measuring the significance of differences in average usage per report between 2024 and 2025.

States were mapped to political leaning (red or blue/Republican or Democrat) based on 2024 election results. Standard Industrial Classification (SIC) numbers were mapped to 11 industry groups using a commonly used crosswalk developed by the Occupational Safety and Health Administration.

# **DIVERSITY, EQUITY AND INCLUSION IN DECLINE**

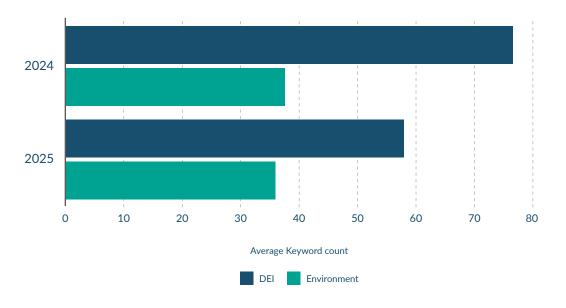
Summary statistics reported in <u>Table 1</u> support a sharp drop in DEI keyword usage since Trump returned to office. Figure 1 graphs DEI keyword mentions (alongside environmental keyword mentions) for all firms appearing in each respective sample year. When we focus on firms that have filed SEC form 10-K in both 2024 and 2025, we find that the average number of DEI keyword mentions in 2024 was 76.6, and the average number of DEI keyword mentions in 2025 was 57.9. This 24.4 percent decrease in DEI keyword mentions is economically large for such a short period of time.

TABLE 1
Summary statistics

Variable	Mean	Median	Std Dev
Climate count 2024-2025	-2.4	-1	± 10.22
DEI count 2024-2025	-20.580	-11	± 31.975

Some keywords such as **exclude**, **diversity**, **inclusion**, and **diverse** exhibited a particularly sharp drop-off in usage, with a number of other DEI terms trailing not far behind. Complete ranked list of words for each theme and their averaged word count deltas can be found in the Appendix (Table A1 and Table A2).

Average keyword usage per 10-K filing between 2024 and 2025, grouped by keyword theme

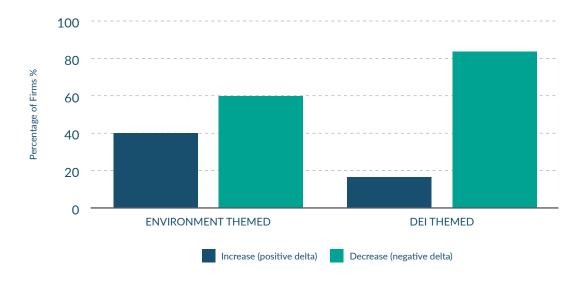


## **ENVIRONMENT HOLDING STEADY**

In contrast, we find that climate-themed keyword usage — also graphed in **Figure 1** — exhibited a small (and statistically insignificant) 4.3 percent decrease in average usage between 2024 and 2025. Specifically, when we focus on firms that have filed SEC form 10-K in both 2024 and 2025, we find that the average number of environmental keyword mentions in 2024 was 37.6, and the average number of environmental keyword mentions in 2025 was 36. Of note, this small decrease bucks the trend observed in previous years of increasing environmental keyword mentions in SEC filings. Going forward, it will be interesting to observe if 2025 indicates a levelling off of environmental mentions, if it is an aberration and environmental mentions will continue to increase after one steady year, or if it portends a decrease in environmental mentions in the future.

#### FIGURE 2

Percentage of firms exhibiting positive vs. negative word count deltas between 2024 and 2025, grouped by keyword theme



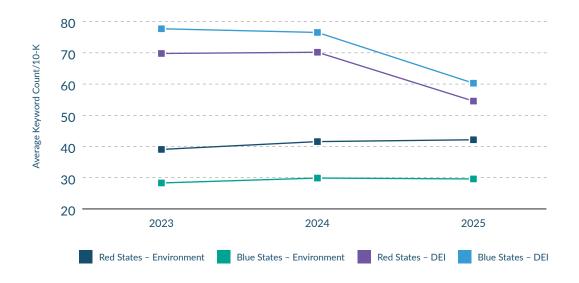
## **KEY RESULTS BY FIRM SIZE, SECTOR, AND STATE**

Actions and decisions made by firms are ultimately driven by the sentiments of their stakeholders, including their shareholders, employees, customers, and community. Discussion of DEI and environmental issues is more likely to occur at firms whose stakeholders consider these issues most pressing, and the observed retrenchment in this discussion may also be a function of firm stakeholders.

We characterize differences in firm stakeholders using the political alignment or voting patterns of the states where firms are headquartered. We also consider firm industry and size as independent factors that may affect disclosure behaviour. Smaller firms have historically exhibited limited environmental/DEI discourse. Understanding these potentially driving factors motivates our analysis, with a broader goal of understanding how the political climate is reshaping corporate language and signaling around environmental and DEI topics.

Consistent with stakeholders in blue, or Democrat-voting states being more sensitive to social issues, we find that firms headquartered in blue states have more DEI keyword mentions than firms headquartered in red, or Republican-voting states. Keyword usage for both themes is graphed in <u>Figure 3</u>, with separate plots for red state and blue state firms, and using all firms from each year included in the study (rather than only firms that were included in the S&P 1500 in all years of the study).

Average keyword usage from 2023 to 2025, grouped by keyword theme and state type

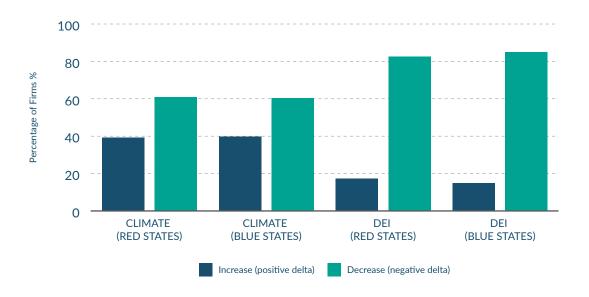


For example, in 2024 filings in blue states contained an average of 79.29 DEI keyword mentions, whereas firms in red states had 71.41 key word mentions. Between 2024 and 2025, averages declined to 59.10 in blue states and 54.32 in red states respectively. This represents a 25.46% reduction in blue states and a 23.93% reduction in red states, slightly closing the gap in DEI keyword usage observed between red and blue states.

When we examine the proportion of firms that increase or decrease their DEI and environmental mentions (see <u>Figure 4</u>), we find similar proportion across both red and blue states. This result suggests the difference in changes across firms headquartered in red and blue states is driven by the magnitude of the change rather than the proportion of the change. In other words, it is not that more firms in blue states are decreasing their DEI mentions, it is that when they do decrease the mentions it is by a larger amount. It is unclear if the magnitude of the change is driven by the higher baseline of DEI mentions (e.g. there is more to cut).

#### FIGURE 4

Percentage of firms exhibiting positive vs. negative word count deltas between 2024 and 2025, grouped by keyword theme and state group



While significant shifts were observed across all size deciles, shifts in DEI usage appear to be greatest amongst large firms. The strongest effects were demonstrated by deciles D7, D10, and D9 (ordered by descending effect strength, with respective means of -18.564  $\pm$  24.156, -22.196  $\pm$  30.686, and -18.579  $\pm$  26.551), while the effects were weakest in deciles D2, D3, and D1 (also presented in descending effect strength, with means -26.091  $\pm$  54.209, -11.065  $\pm$  27.717, and -18.014  $\pm$  46.696).

Changes in average DEI themed keyword counts were observed across all industry groups except Construction (mean =  $-13.895 \pm 38.335$ ), reflecting the particularly large variance in climate themed keyword usage within this category. Effects were strongest amongst Finance, Insurance and Real Estate, Manufacturing, and Services (means of  $-20.798 \pm 33.956$ ,  $-18.751 \pm 36.134$ , and  $-20.098 \pm 26.371$  respectively).

Overall change in mean climate themed keyword counts was found to be statistically insignificant; there are also no statistically significant differences between red and blue states, although mean shift in usage was slightly more positive in red states than blue states (means of  $0.816 \pm 11.844$  and  $0.132 \pm 10.879$  respectively).

Building on the insights from these descriptive patterns, we ran regressions to model changes in keyword counts between 2024 and 2025, controlling for industry, firm size, and firm state. Separate regressions were estimated for DEI keyword usage and environmental keyword usage. In this specification, for the DEI model regression, the only significant predictor was firm size: larger firms exhibited greater reductions in DEI keyword usage ( $\beta = -0.44$ , SE = 0.20, p = 0.025). No industry or state effects were statistically significant. The coefficients on all covariates for environmental dependent variables are statistically insignificant.

For comparison, regressions on absolute 2025 keyword counts (rather than changes in count) are reported in the <u>Appendix</u>. These models indicate higher DEI keyword usage amongst firms in Finance, Insurance and Real Estate, and lower usage amongst Retail and Wholesale Trade firms, with firm size positively associated with both DEI and climate keywords. However, because the changes in keyword count more directly capture trends in disclosure behaviour, we focus on these results in the main text.

## CONCLUSION

Our results highlight a striking drop-off in usage of DEI themed terminology within 10-K filings amongst S&P1500 firms since the 2024 U.S. federal election.

Equally striking is the extent to which usage of climate themed terminology has remained strong, contrasting the targeted removal of DEI keywords seen in our results.

Taken together, these findings suggest that disclosure of DEI initiatives is perceived by firms as discretionary language — easily scaled back when political and regulatory winds shift — whereas climate-related terminology has become more entrenched in baseline disclosure practice. The resilience of climate language may reflect international investor expectations, the global nature of environmental regulation, and the perceived materiality of climate risk across many countries and industries. By contrast, DEI terminology appears more vulnerable to domestic policy and political signaling.

Firms exhibit a readiness to recalibrate disclosure strategies in response to perceived changes in regulatory enforcement priorities, even in the absence of explicit new mandates. Future research should track whether the decline in DEI references represents a temporary reaction to the current political environment or a more durable realignment of corporate disclosure practices. This study could also be expanded to include more explanatory drivers, such as incorporating changes to state-level policy and other potentially confounding factors that may affect disclosure behaviour.

## **APPENDIX**

#### **METHODOLOGY**

A dictionary of keywords was manually constructed to contain terms central to two main themes: **DEI** and **nature/climate change**. For the purposes of this study, DEI (Diversity, Equity, and Inclusion) captures all terminology related to racial or gender representation and equity within the workforce. We considered terminology related to global warming or environmental sustainability to be climate-themed, including relevant frameworks such as *TCFD* and *Paris Accords*. A complete dictionary of the included keywords and associated themes is included below in Table A1 and Table A2.

To maximize interpretability of the results of this preliminary study, we chose to select keywords by hand instead of using word embeddings. By using a small set of seed terms, word embeddings can be used to extend a set of keywords by identifying similar terms. Resulting keyword sets will be more comprehensive at the cost of some interpretability.

We constructed a panel dataset extending from 2023 to 2025 using S&P1500 companies that submitted 10-K filings for these years. 10-K filings were downloaded from SEC's EDGAR database API as raw html files.

Keyword counts were executed using python and utilized regular expressions for keyword matching. Counts of singular and plural were combined for keywords where both forms are relevant. Total counts for DEI themed and climate themed words were summed for each firm and each year. Our analysis focused on measuring the significance of shifts in these total counts between 2023 and 2025.

Data was merged with Compustat data of corresponding fiscal years; companies were matched on both CIK and year to ensure accuracy. This data included total assets (AT) as a proxy for firm size, state, and SIC number. Values from 2023 of total assets were used to categorize firms into deciles corresponding to firm size. States were mapped to political leaning (red or blue/Republican or Democrat) based on 2024 election results. SIC numbers were mapped to 11 industry groups using the OSHA crosswalk.

Any datapoints missing AT, state, or SIC number were dropped. S&P1500 contains some firms based in Puerto Rico and Canada; these were also dropped. Finally, firms with 'Non-Classified' SIC number were dropped.

Firms that reported in some years but not others were included in panel data and associated summary statistics (avoiding survivorship bias), however only firms that submitted 10-Ks in both 2024 and 2025 were included in the subsequent analysis of deltas.

#### **REGRESSION ON ABSOLUTE KEYWORD COUNTS**

To understand what might be driving the higher keyword usage observed in red state firm filings, we implemented a linear regression on absolute keyword count in 2025, controlling for industry, firm size, and firm state (red or blue). After controlling for these confounding factors, we found that for DEI counts, firms in Finance, Insurance and Real Estate reported significantly higher usage ( $\beta$  = 23.13, SE = 5.79, p = 0.00064), while firms in Retail Trade ( $\beta$  = -13.03, SE = 4.72, p = 0.005811) and Wholesale Trade ( $\beta$  = -13.46, SE = 4.74, p = 0.004494) reported significantly lower usage. Differences in usage were not found to be significant for the remainder of industries (Construction, Mining, Manufacturing, Services, and Transportation/Communications). Firm size was positively associated with DEI mentions ( $\beta$  = 5.05, SE = 1.26, p = 0.000063), while firm state was not significant.

For nature/climate keyword counts, a positive association with red states ( $\beta$  = 6.03, SE = 1.94, p = 0.001896) persisted even after controlling for firm size and industry. A correlation was also found between firm size and usage of nature/climate keywords ( $\beta$  = 6.01, SE = 0.73, p = 2.54e-16). No industry group differed significantly from the baseline.

While these models control for firm size and industry, the possibility of endogeneity remains. For example, unobserved factors such as investor pressure, or regional policy environments may simultaneously influence both firm location and disclosure behaviour. Since this couldn't be addressed with the data available, we left this for a future study to explore. Regression results for the absolute keyword counts should therefore be interpreted as descriptive correlations rather than causal effects.

All environmental (climate and nature-themed) keywords, ranked by decrease in usage

Rank	Keyword	Average Change in Count per 10-K
1	environment	-0.772
2	climate change	-0.654
3	emissions	-0.406
4	carbon	-0.299
5	emission	-0.078
6	net zero	-0.073
7	net-zero	-0.063
8	tcfd	-0.041
9	carbon neutral	-0.016
10	sustainable investments	-0.004
11	sustainable investment	-0.003
12	paris accords	-0.003
13	climate finance	-0.001
14	green investment	0.000
15	tnfd	0.000
16	nature positive	0.000
17	green transition	0.001
18	climate transition	0.004
19	paris agreement	0.007

#### TABLE A2

TABLE A1

# All DEI-themed keywords, ranked by decrease in usage

Rank	Keyword	Average Change in Count per 10-K
1	exclude	-8.634
2	diversity	-3.200
3	inclusion	-2.076
4	diverse	-1.809
5	women	-0.885
6	inclusive	-0.580
7	equal	-0.543
8	status	-0.448
9	equitable	-0.243
10	minority	-0.239
11	disability	-0.226
12	institutional	-0.204

Rank	Keyword	Average Change
		in Count per 10-K
13	opportunity	-0.188
14	excluded	-0.177
15	equality	-0.167
16	racial	-0.155
17	race	-0.141
18	lgbtq	-0.134
19	ethnicity	-0.131
20	bias	-0.107
21	minorities	-0.105
22	disabilities	-0.069
23	sexual	-0.065
24	social impact	-0.037
25	justice	-0.033
26	systemic	-0.026
27	trauma	-0.023
28	bipoc	-0.019
29	multicultural	-0.019
30	transgender	-0.018
31	woman	-0.015
32	inequities	-0.007
33	stereotypes	-0.006
34	socioeconomic	-0.002
35	inequity	-0.001
36	hate speech	0.000
37	indigenous	0.000
38	marginalize	0.000
39	sociocultural	0.000
40	stereotype	0.000
41	prejudice	0.006
42	discrimination	0.032
43	discriminatory	0.037
44	merit	0.077