

# Bringing Climate Reporting to a Golden State

Analysis of U.S. company climate risk disclosure  
ahead of California's SB-261 reporting requirements

AUGUST 2025



# Most U.S. Companies Have Significant Climate Disclosure Deficiencies Ahead of Mandatory Reporting

California's Senate Bill 261 (SB-261) marks a critical shift from voluntary to mandatory climate risk reporting in the United States, subjecting corporate disclosures to a higher level of scrutiny and potentially legal and reputational risks.

Companies that have done the bare minimum to meet the TCFD guidance may face heightened regulatory, investor and public scrutiny from January 1, 2026 when California SB-261 requires companies effectively "doing business" in California and which generate over \$500 million in revenue to publish a climate risk report.

## Our Findings:

We have assessed the climate disclosure alignment of Russell 1000 constituents against the TCFD recommended disclosures. Our analysis finds that the alignment of existing climate reports is low:

**45%**  
average alignment  
of TCFD recommended  
disclosures

**80%**  
disclose Scope 1  
and Scope 2  
emissions

**32%**  
Scope 3 emissions  
reporting

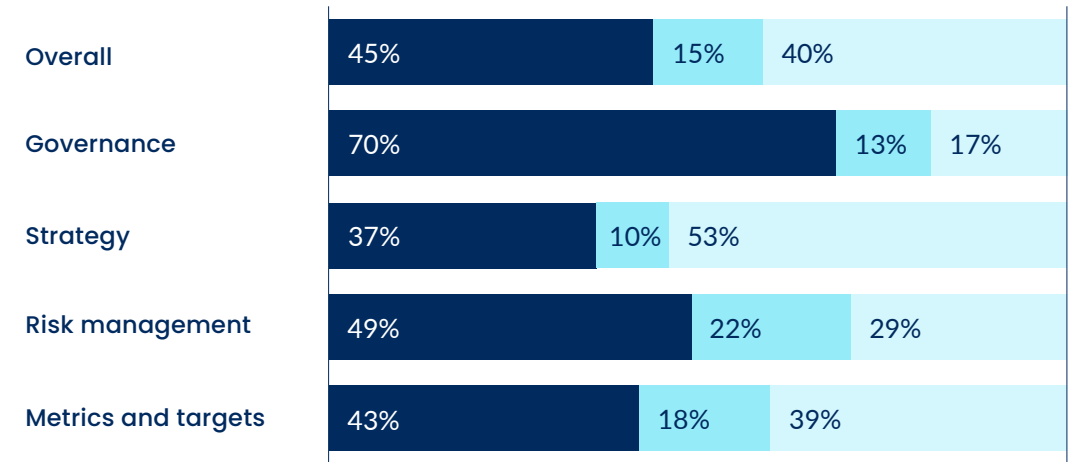
**11%**  
perform climate  
scenario analysis

**12%**  
provide no climate-  
related disclosures  
at all

**10%**  
disclose the metrics  
they use to measure  
climate risks

## ALIGNMENT BY TCFD PILLAR

● Met ● Partially Met ● Unmet





# Understand if your company's climate risk reporting meets TCFD's guidelines.

Canbury has prepared custom company TCFD climate reporting assessments for each Russell 1000 company which are available on a case-by-case basis. These include personalized actions based on a company's disclosures and include peer benchmarking.

We can show you how your company's current disclosures meet – or do not meet – TCFD's recommended disclosures.

Have confidence that your climate reporting meets regulatory and public expectations.

## TCFD CLIMATE REPORTING ALIGNMENT

### ASSESSMENT OVERVIEW

The company provides a high level of disclosure across all four TCFD pillars. The company provides comprehensive detail on Governance, articulating the specific roles of the board and management, and on Risk Management, explaining how climate risks are identified, assessed, and integrated through a comprehensive scenario analysis process.

Primary opportunities for The company include articulating the climate-related impacts on the company's supply chain – a disclosure now made by 65% of S&P 500 companies – as well as on how climate issues are factored into acquisitions, divestments, and capital expenditure decisions.

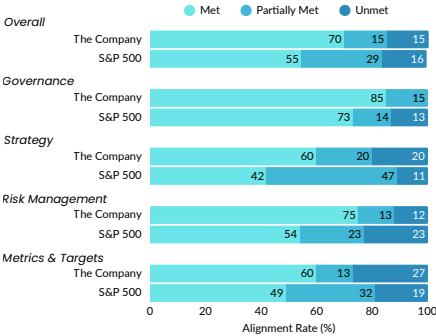
Under Metrics & Targets, the company could consider disclosing other climate-related metrics and targets beyond greenhouse gas emissions, such as energy reduction goals, physical risk exposure and investments to reduce emissions and mitigate climate-related risks.

### GOVERNANCE – 85% Met, 15% Partial, 0% Unmet

- **Key Strength:** The company clearly articulates the roles of both the board and management in climate oversight. Its disclosures detail assigned responsibilities, the organisational structure for monitoring climate issues, and the processes used for overseeing progress against goals.
- **Opportunity for Enhancement:** To further improve its disclosure, the company could more explicitly describe how the board considers climate-related issues when it reviews and guides corporate strategy. Fully detailing this connection would provide a more complete picture of how governance influences strategic decisions.

### RISK MANAGEMENT – 75% Met, 13% Partial, 12% Unmet

- **Key Strength:** The company clearly details its processes for identifying, assessing, and prioritising climate risks. Crucially, it explains how these processes are integrated into the company's overall risk management framework. Disclosures properly consider regulatory factors and provide clear definitions for risk terminology.
- **Opportunity for Enhancement:** The company could describe how the company determines the importance of climate risks relative to other business risks, a common disclosure among S&P 500 companies. Disclosures do not fully describe decision-making processes for managing identified risks (i.e., whether to mitigate, transfer, accept, or control them).



### STRATEGY – 60% Met, 20% Partial, 20% Unmet

- **Key Strength:** The company fully details its process for identifying risks, defining time horizons, and integrating climate issues into its financial planning. It provides a comprehensive description of climate scenarios used, the time horizons considered, and their potential financial impacts. It clearly reports on how climate change has affected its business, operations, R&D, and products/services.
- **Opportunities for Enhancement:** The company does not disclose climate impacts on its supply chain, in contrast to a majority (65%) of S&P 500 companies. Furthermore, there is no disclosure on how climate change affects adaptation activities, acquisitions and divestments, or access to capital.

### METRICS & TARGETS – 60% Met, 13% Partial, 27% Unmet

- **Key Strength:** Disclosures are comprehensive for Scope 1, 2, and 3 emissions, including historical data, methodologies, and industry-specific ratios. The company clearly states its interim and long-term carbon reduction goal and that climate-related performance metrics are incorporated into executive pay.
- **Opportunities for Enhancement:** While not frequently disclosed by other companies, The company could report on other climate-related metrics and goals, including for planned investments to achieve its carbon goals and if they will be funded out of operating or capital expenditures.

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# Background

SB-261 requires companies with over \$500 million revenue doing business in California to report climate-related risks using the Task Force on Climate-related Financial Disclosures (TCFD) framework or equivalent standards.

This legislation elevates the TCFD framework to a regulated requirement where accuracy and completeness are now paramount.

Canbury’s research shows most U.S. companies are unprepared. Drawing on decades of climate change reporting experience and using advanced analytics including large language models to identify reporting gaps, Canbury analyzed climate disclosures of Russell 1000 constituents against TCFD’s four pillars and 11 recommended disclosures.

Our analysis demonstrates a corporate landscape transitioning from high-level governance statements to the detailed, data-driven analysis that both the TCFD framework requires and investors demand.

# California reporting requirements in brief

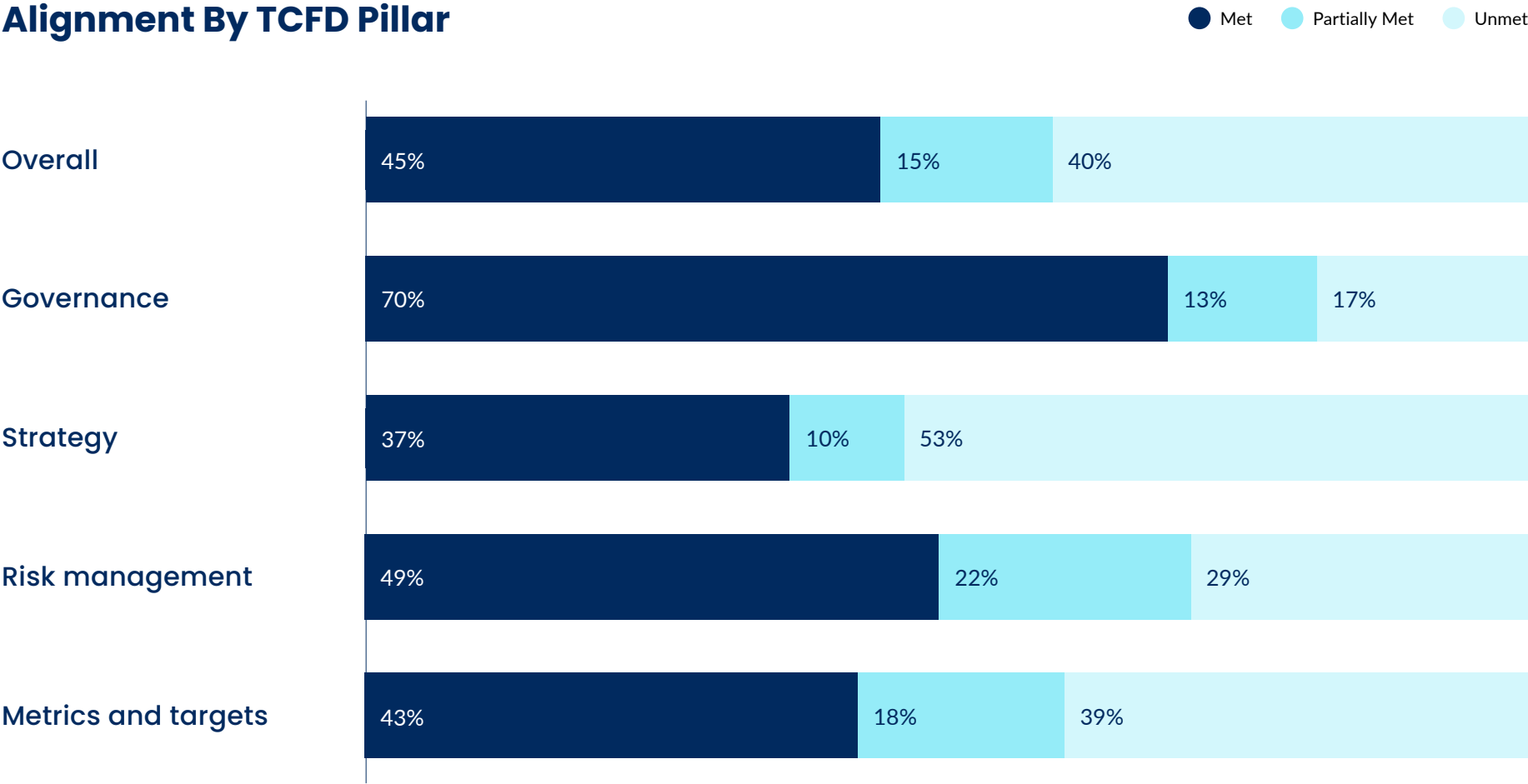
## Key Requirements

The California climate reporting requirements are driven by two Senate Bills: SB-261, which this report focuses on and mandates reporting of climate-related financial risks for applicable entities, and SB-253, which mandates reporting of greenhouse gas emissions data, including Scopes 1, 2, and 3 for entities in scope.

	SB-261	SB-253
Applicability	Companies ‘doing business’ in California with revenues exceeding \$500 million	Companies ‘doing business’ in California with revenues exceeding \$1 billion
Reporting Deadline	January 1, 2026	Scope 1 and 2: January 1, 2026 Scope 3: January 1, 2027
Non-Compliance Penalty	Financial penalties up to \$50,000 for failure to report or insufficient reporting	Financial penalties up to \$500,000 for failure to report or insufficient reporting (including Scope 3)
Assurance Requirement	No mandatory assurance required	Mandatory independent third-party verification of emissions disclosures

# Key Findings

## Alignment By TCFD Pillar



Our analysis reveals that, on average, companies achieve an overall TCFD alignment of 45% across all reporting requirements assessed. However, this aggregate figure masks significant variations across the four reporting pillars. Governance showed the highest alignment at 70%, while Strategy, Risk Management, and Metrics and Targets each had alignment below 50%.

While the foundational elements of climate reporting appear to be established, many disclosures lack the specific quantification and granular detail that effective climate risk reporting demands.

This pattern reveals a "governance first, data later" approach, as companies more readily document oversight structures than implement operational and technical climate processes and strategies. Lower technical alignment stems from challenges in climate scenario analysis, often limited risk quantification methodologies, underdeveloped metrics, as well as sensitivity around disclosures more generally.



## COMMON STRENGTHS

Governance is the most developed area of TCFD disclosure alignment in our assessment. Most companies describe both their board-level oversight and management's role in climate-related issues. Over 80% included descriptions of their companies' structure for climate-related governance, as well as the process by which management is informed about, and monitors, climate-related issues. The analysis shows that some alignment gaps could be considered "low-hanging fruit" for example, 28% of companies don't clearly articulate either the process, or the frequency, by which their board is informed about climate-related issues.

Greenhouse gas reporting shows progress, with over 80% of companies disclosing Scope 1 and Scope 2 emissions. However, less than one-third report Scope 3 emissions, revealing a value chain transparency gap that will become increasingly relevant for future Scope 3 mandatory reporting.

Most companies provided historical emissions data, establishing an important baseline for tracking future progress. This historical reporting is valuable despite the limitation that most emissions time series lack Scope 3 information. This direct emissions disclosure milestone demonstrates progress, though comprehensive all-scope reporting remains a development area.

The setting of climate targets was stronger, with almost half of companies either fully or partially meeting disclosure requirements for their climate targets. Many companies have also developed broader sustainability targets spanning emissions, water, and energy usage.

## COMMON GAPS

Our analysis identified consistent disclosure challenges suggesting blind spots in climate risk management. While many companies outline physical and transition risks, approximately only a quarter specify when and where these risks manifest.

Based on our analysis, 68% of companies describe their risk management processes and acknowledge existing and emerging regulation, the majority, however, failed to detail how they assess the potential size and scope of risks or how they determine the relative significance of climate-related risks compared to other business risks. These omissions suggest established basic risk frameworks exist, but companies lack quantification and prioritization methodologies for climate-related business risks.

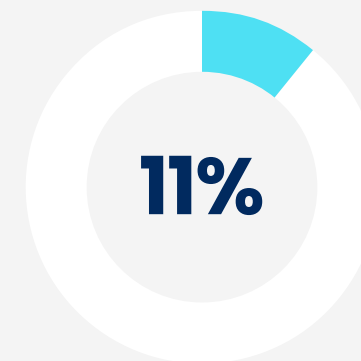
Strategy showed the lowest alignment at just 37%, primarily due to companies struggling with scenario analysis. With only 11% of companies addressing scenario analysis, a critical investor information gap exists. This absence severely limits the decision-usefulness of climate disclosures. Few companies disclose metrics for monitoring climate-related risks, with under 10% providing clear metrics linked to their identified climate-related issues.

## SCENARIO ANALYSIS

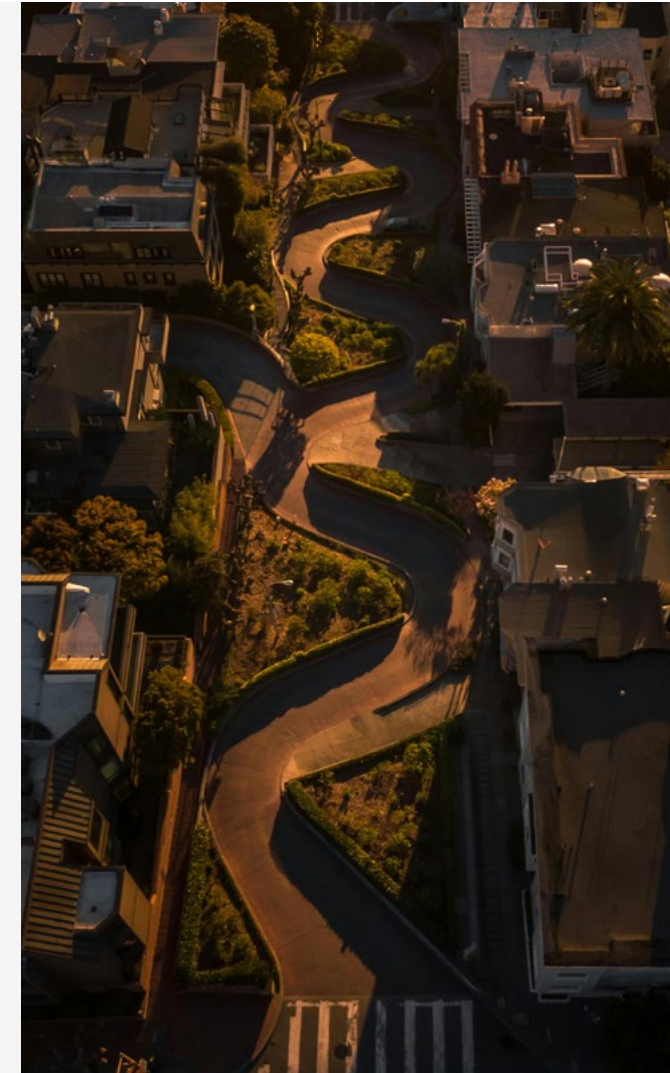
Scenario analysis is – by design – wrong. It is a scenario, not a forecast. Scenario analysis should be an input to a decision.

Companies typically undertake (at least) two scenarios<sup>1</sup>, a low warming scenario and a high warming scenario. This allows the company's management to understand how the company would respond in each scenario.

Scenario analysis supports resilience. It allows the company's management to consider the steps that could be taken to manage down-side risk in the event of either or both scenarios.



**Only 11% of companies  
disclose scenario analysis**



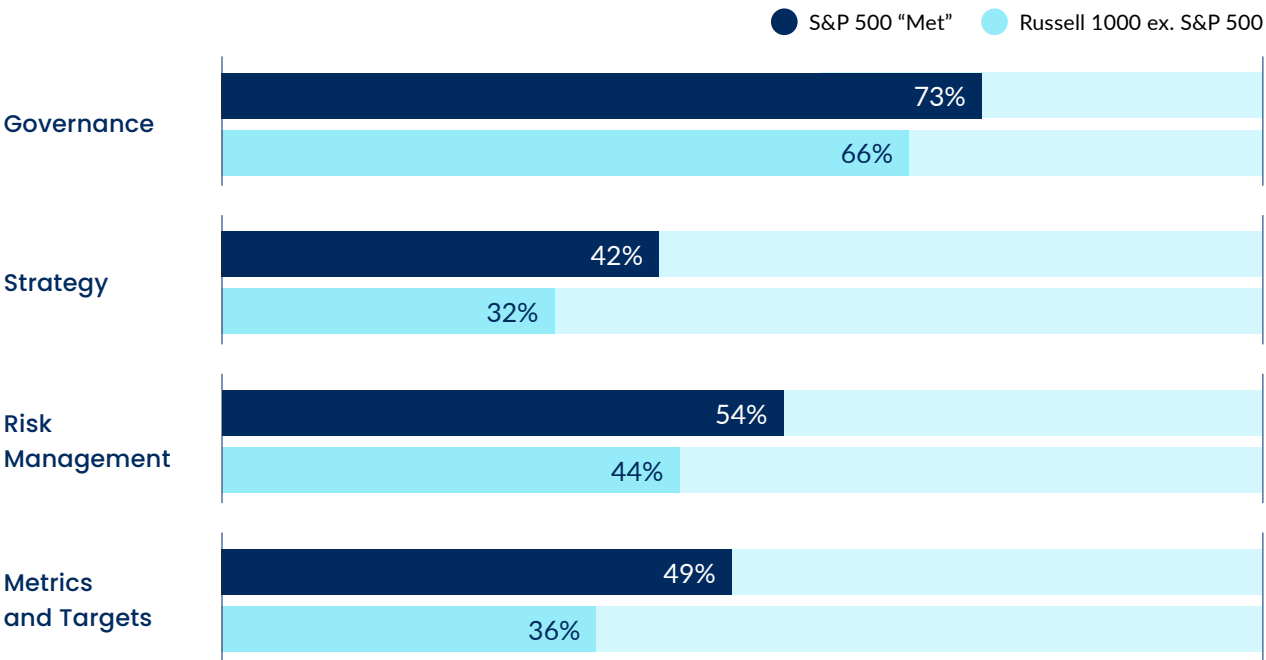
<sup>1</sup> TCFD 2021 Implementation Guidance "should describe how resilient their strategies are to climate-related risks and opportunities, taking into consideration a transition to a low-carbon economy consistent with a 2°C or lower scenario and, where relevant to the organization, scenarios consistent with increased physical climate-related risks."

ALIGNMENT BY SIZE

S&P 500 companies show higher TCFD alignment than non-S&P companies in the Russell 1000, with larger gaps in technical reporting areas of Strategy, Risk Management, and Metrics & Targets.

By market capitalization, the first and second quintiles disclosed approximately 50% of recommended disclosures, followed by progressive decline across third, fourth, and fifth quintiles.

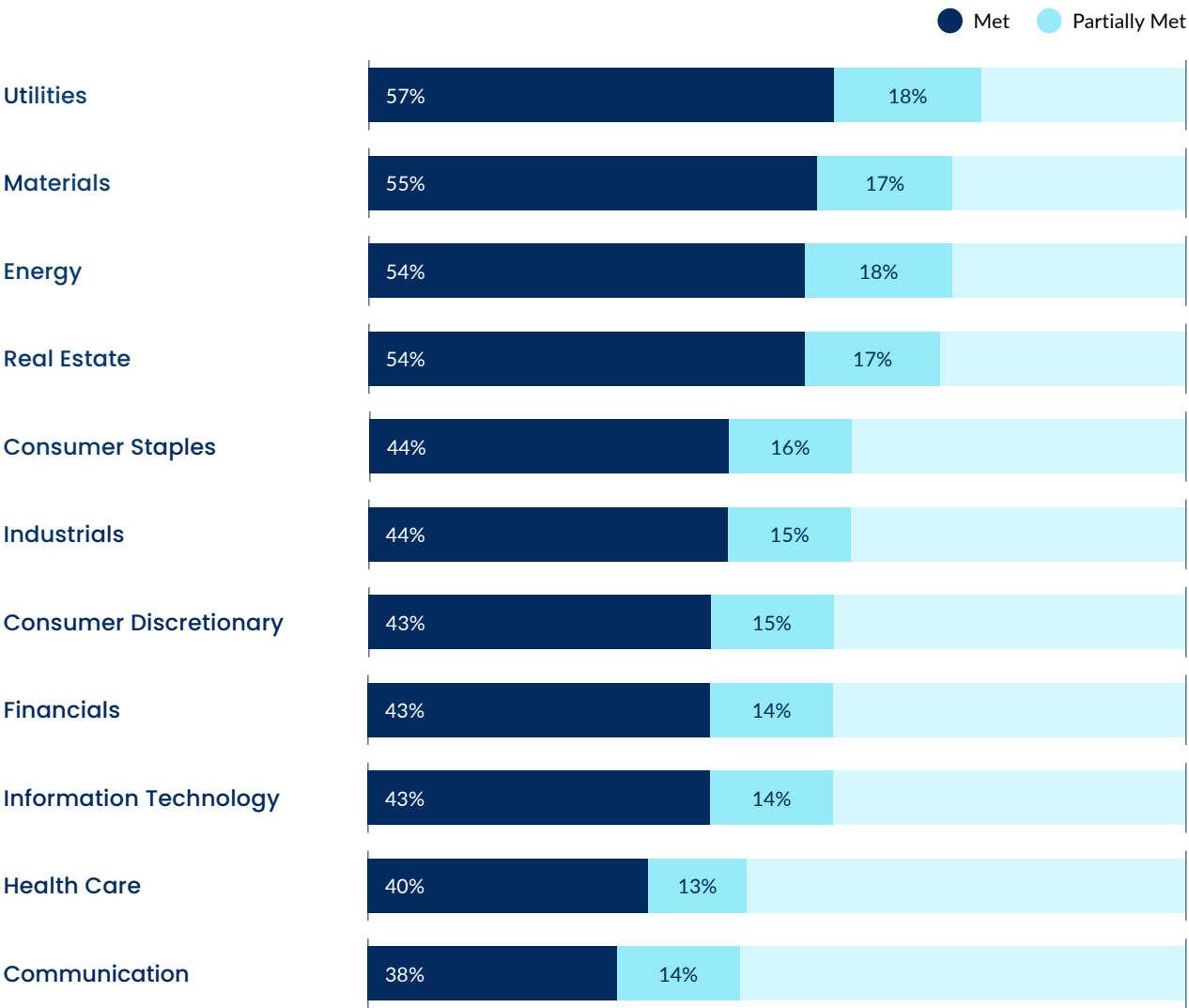
The largest S&P 500 versus non-S&P 500 disclosure gaps appear in Strategy and Metrics & Targets. For GHG emissions specifically, this gap was also significant between the two cohorts; 69% of S&P 500 companies disclosed Scope 1 and 2 emissions, compared to only 53% of smaller companies. These disparities reflect larger companies' reporting maturity, likely driven by greater sustainability resources, longer reporting experience, and stronger investor pressure for climate disclosure.



### ALIGNMENT BY SECTOR

Across GICS sectors, Utilities showed the highest TCFD alignment at 57%, with Energy, Materials, and Real Estate all exceeding 50%. In contrast, Communications showed the lowest alignment of 38%.

Sector variance was lowest in the Governance pillar, consistent with higher overall alignment in this area overall. Other pillars showed much greater differences, especially Strategy, where Utilities reached 54% alignment versus just 27% for Communications.



### NEXT STEPS: PREPARING FOR REGULATED CLIMATE DISCLOSURE

With California's SB-261 compliance deadline of January 1, 2026, approaching, our analysis reveals significant disclosure gaps that expose companies to reputational damage and penalties. These findings indicate that most companies must reassess their climate risk practices.

Climate disclosure requires integration into strategic planning and risk management, not relegation to a mere communications exercise. The identified weaknesses in strategy, scenario analysis, and risk quantification signal failures to articulate business resilience and suggest executives and boards may lack full understanding of climate-related risks and opportunities.

Companies should begin with a comprehensive gap analysis against TCFD requirements to create an actionable roadmap. Even minimal climate risks demand clear articulation, not dismissal. A proactive approach determines whether companies manage climate risk or are managed by it.



# About Us

## Canbury

Canbury is a technology-enabled sustainability consultancy applying AI tools to thoroughly, effectively and cost-efficiently deliver reporting, research, data and training. Canbury combines global expertise and local delivery to support U.S. companies to find value in sustainability.



### SUSTAINABILITY LED, TECH ENABLED

We bring both the extensive sustainability experience of our team and the potential of AI to corporate sustainability, for more valuable, comprehensive, and cost-effective sustainability reporting, strategy development, and ESG insights.



### GLOBAL EXPERTISE, LOCAL DELIVERY

With a head office in London and a U.S.-based team, we are well positioned to assist with meeting domestic disclosure expectations and international frameworks such as CSRD, TCFD and TNFD. Our global team works closely across regions, providing a cohesive and agile service for global companies.



### PROVEN EXPERIENCE IN SUSTAINABILITY REPORTING

Our team has successfully delivered major reports for organizations such as PRI, Storebrand, and JO Hambro, offering reporting and strategic development that aligns with evolving ESG regulations.

## Flag

Flag is a trusted global sustainability agency with 25 years of experience helping leading businesses to navigate the evolving reporting landscape.

Our team of in-house consultants, copywriters and designers translate complex sustainability content into accessible and engaging storytelling and credible disclosure. With robust ISO 9001-accredited quality processes and deep knowledge of global and national reporting standards, we provide tried and tested, affordable and efficient support with your reporting and communications.

Flag is delighted to have designed and produced this report for Canbury. Get in touch if you need support with your next sustainability report:

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Gregory leads Canbury's North America operations, advising on sustainability strategy, compliance, and reporting. With expertise in identifying financially and reputationally significant ESG issues, his 20+ year sustainability advisory career includes positions at Bloomberg, JPMorgan, and Joele Frank. He guides boards, executives, and experts through complex sustainability requirements, ensuring market recognition of impactful efforts.



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John leads Canbury's international corporate reporting and strategy teams. Experienced in international frameworks including TCFD, and CSRD in Europe, he helps companies leverage sustainability analysis beyond mere compliance. His guidance transforms regulatory requirements into competitive advantages and effective stakeholder engagement.

# Approach

This report looks at the climate disclosures of the sampled companies across their climate, sustainability and related reports that were publicly available as of July 1, 2025.

The primary objective of the assessment was to consider the existing alignment with TCFD “Guidance for All Sectors” and thereby understand the current status of reporting practices in advance of mandatory reporting requirements impacting in-scope SB-261 entities.

The assessment involved several key steps:

- 1. Entity selection:** The assessment was based on the constituents of the Russell 1000.
- 2. Data sourcing:** The most recent and publicly available climate disclosures were collected for each of the selected companies. These typically included integrated annual reports, sustainability reports, climate reports, and similar relevant disclosures. We were unable to locate climate-related disclosures for 12% of companies and these entities were therefore excluded from this analysis. The analysis makes no attempt to assess which companies will be in scope of SB-261 and we have therefore not made any further exclusions.
- 3. Framework Application:** Each of these reports was then systematically reviewed against all criteria set out in the “Guidance for All Sectors” across the eleven recommended disclosures of the 2021 TCFD Implementation Guidance<sup>2</sup>, using a combination of Canbury’s sustainability experts and Large Language Model Gemini 2.5 Pro. The assessment does not include requirements of supplemental TCFD guidance for the financial and non-financial sectors.
- 4. Gap Analysis and Categorization:** For each TCFD requirement assessed, an assessment of ‘Met’, ‘Partially Met’, or ‘Unmet’ was determined for each company based on the proportion of each requirement that was disclosed.
- 5. Data Analysis:** This data was then analyzed to identify themes across the TCFD pillars and companies. These themes then formed the basis of the insights within this report, highlighting both areas of progress and gaps.

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As part of individual preparations for reporting, entities in scope of SB-261 will need to review the requirements to ensure compliance against all requirements relevant to them, including, where relevant, sector-specific disclosures.

For more information about Canbury and our research methodologies, please visit our website or contact us directly.

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<sup>2</sup> [https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing\\_Guidance.pdf](https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf)

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