March 20, 2025

California Air Resources Board (CARB)
Climate Disclosure Legislation Implementation Team
1001 I Street Sacramento,
CA 95814

Submission via: Portal

Information Solicitation for California Climate-Disclosure Legislation ("Questionnaire")

As a leading provider of climate risk data and analytics to the global investment community, MSCI[1] has collected sustainability (including climate-related) disclosures from thousands of companies globally for over two decades and developed tools to assist investors in their analysis of sustainability risk to their portfolios. We welcome the opportunity to contribute to the development of effective climate-disclosure guidelines.

Please find below a summary of primary observations and in the Annex, we respond to the Questionnaire:

1. **Californian sustainability disclosure standards should be based on international sustainability standards.** We encourage CARB to establish a robust reporting framework that aligns with global standards such as those from the International Sustainability Standards Board (ISSB) IFRS-S1 & S2.[2] A consistent approach would enhance comparability and facilitate informed decision-making, allowing investors to better assess the nature, size and timing of the investment risks they face related to climate change.

2. **Ensure information transparency.** Disclosures on GHG emissions and climate-related financial risks will ensure transparent information for investors about their investee companies. According to our research, there are around 2,961 public companies with operations in California[3] that could be in scope of SB 253 (Refer Appendix 1). As of FY 2022, out of the 2,961 companies, about 75% disclosed their Scope 1 and 2 emissions, however, only about 57% disclosed at least one category of upstream and 41% at least one category of downstream Scope 3 GHG emissions. This lack of comprehensive reporting inhibits investors' ability to accurately gauge companies' exposure to climate risks and opportunities. By endorsing more rigorous and standardized sustainability reporting, CARB can help investors make better-informed decisions.

[1] MSCI ESG Ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc.

[2] IFRS - ISSB issues inaugural global sustainability disclosure standards (IFRS | June 2023)

[3] An entity that has an asset location in California and the entity generates a revenue of greater than USD 1 billion.

3. **Consider fiduciary duty.** The reporting requirements should explicitly address the material financial risks faced by long-term investors, particularly asset owners with responsibilities to manage intergenerational risks. For instance, increased climate risks such as wildfires, floods, or other extreme weather events, can increase insurance costs, thereby raising operating expenses and affecting a company's financial resilience. By directly linking these tangible impacts to investment risk, CARB can underscore the necessity of robust climate disclosures for effective, risk-adjusted decision-making. This approach ensures that investor protection remains central to the reporting framework, aligning regulatory objectives with a comprehensive view of both immediate and long-term risks.

4. **Introduce materiality threshold for value chain emissions.** According to our analysis, Scope 3 value chain emissions frequently constitute the largest share of a company's carbon footprint (more detailed analysis in Appendix 2).[4] Despite the significance of value chain Scope 3 emissions, some companies report their value chain emissions as "non-material" even though sector-based research suggests high materiality-particularly in the financial sector.[5] For users of Scope 3 data, the importance of consistent and comparable reporting under the 15 upstream and downstream categories set by the GHG Protocol, is important.[6] An individual materiality determination is unlikely to achieve this consistency. Therefore, CARB could consider adopting a clear materiality threshold. As an example, MSCI deems Scope 3 emissions "material" if they exceed 40% of total company emissions (based on our Scope 3 estimation model).[7] This would help ensure robust and uniform Scope 3 disclosures across companies.

5. **Private assets.** Investors typically have public and private companies in their portfolios. To assist them with a total portfolio understanding of material climate risks in the portfolio, a consistent and minimum core disclosure requirement that applies across both types of entities would yield the most comprehensive and consistent information for investors. According to MSCI's private capital database of companies, there are currently 12,000 companies headquartered in California. This is a subset of the approximately 65,000 actively held private companies globally covered in our database. We found that, within this group of companies headquartered in California, 140 actively held private companies had revenues greater than USD 500 million and 56 private companies had revenues greater than USD 1 billion. Of these 140 entities, only 5 entities reported their GHG emissions.

[4] K. Watanabe & A. Panagiotopoulos, Breaking Down Corporate Net-Zero Climate Targets (May 2021)

[5] K. Watanabe & A. Panagiotopoulos, Breaking Down Corporate Net-Zero Climate Targets (May 2021)

[6] GHG Protocol

[7] K. Watanabe, A. Chain, K. Yadav, S. He, A. Husi, T. Sené, S. Vanston, Steering toward an Aligned Portfolio (June 2024),

For the purposes of this submission, and in the interests of brevity, we have focused on the fundamental initial steps required to address climate change disclosures but would welcome a discussion with the CARB to provide additional granular information on the data we use, and the information challenges we face, in modelling climate risk.

Yours sincerely,

Neil Acres

Neil Acres
Managing Director
Global Head of Government & Regulatory Affairs

Annexure:

General: Applicability

1. SB 253 and 261 both require an entity that "does business in California" to provide specified information to CARB. This terminology is not defined in the statutes.

a. Should CARB adopt the interpretation of "doing business in California" found in the Revenue and Tax Code section 23101?

MSCI: Reporting entities would welcome guidance on the applicability of SB 253 and SB 261 for groups of companies, holding companies, foreign companies, and parent-subsidiaries. A lack of clarity on this applicability may add additional cost (eg legal fees) to support with assessing the scope of the SB 253 and 261. As an example, please see the guidance of the UK Home Office regarding the publication of a Modern Slavery Statement under Section 54 (Transparency in Supply Chains) of the Modern Slavery Act, 2015.[8] A guidance document on similar lines may be useful for the statement preparers.

b. Should federal and state government entities that generate revenue be included in the definition of a "business entity" that "does business in California?"

MSCI: No Comment.

c. Should SB 253 and 261 cover entities that are owned in part or wholly owned by a foreign government?

MSCI: No comment.

d. Should entities that sell energy, or other goods and services, into California through a separate market, like the energy imbalance market or extended day ahead market, be covered?

MSCI: No comment.

2. What are your recommendations on a cost-effective manner to identify all businesses covered by the laws (i.e., that exceed the annual revenue thresholds in the statutes and do business in California)?

a. For private companies, what databases or datasets should CARB rely on to identify reporting entities? What is the frequency by which these data are updated and how is it verified?

MSCI: We recommend that CARB considers the following views with respect to scoping-in private companies and the datasets / databases available to identify these entities:

[8] Guidance - Publish an annual modern slavery statement (UK Government | 12 March 2019) Statutory Guidance: Transparency in Supply Chains - a practical guide (UK Government | 13 December 2021

1. **Private assets -** A minimum standard of reporting would enable a base comparison across portfolios containing companies in different sectors. Investors invest in both public and private companies and the most beneficial disclosure to the market would cast the net for minimum core disclosure wider than just publicly listed companies. We appreciate the significant complexities associated with mandating disclosure from private companies. However, as indicated in our response to Question 7 below, investment allocations to private companies are growing and, therefore, limiting disclosure only to public companies will result in incomplete data for investors.

   MSCI's database of companies that are actively held (invested in)[9] by at least one of the 18,000 plus private capital funds globally indicates that 12,000 such private companies are headquartered in California. Currently, a small subset of the 65,000 plus actively held private companies globally are part of MSCI's Private Company Data Connect database. Within this group of 12,000 private companies, 140 actively held private companies have revenue greater than USD 500million and 56 private companies with revenue greater than USD 1 billion. Of these 140 entities, only 5 entities report emissions. It is therefore evident that private companies' climate disclosures are currently very sparse.

   If policymakers want to ensure that the market has access to this information, disclosure standards incorporating the core set of metrics set out in our response to Question 7 below would need to be applicable to a qualifying group of private companies within an applicable threshold set by policymakers.

2. **Database / Datasets –** There are databases or datasets available in the market that CARB could rely on to identify reporting entities. Geo-location datasets, such as MSCI's GeoSpatial Asset Intelligence, could enable CARB to accurately identify and map key operational assets—including offices, production facilities, and other critical sites—owned or operated by public and private companies operating in California. This comprehensive dataset provides detailed information, such as geographic coordinates, ownership structures, operational affiliations, and activity types, all sourced from licensed databases, government records, and open sources. Supported by a rigorous verification process, the dataset covers over 1.1 million assets linked to more than 100,000 companies globally, offering a robust tool for informed decision-making and effective climate risk management.

[9] There are in all 12,000 actively held companies headquartered in California. An actively held company is defined as a private company that has been invested in by one of the Private Capital funds tracked by MSCI, the fund is still active (i.e., not yet liquidated), and the fund still holds an unrealized position in the company (the position could be any instrument type - e.g., equity, debt, warrants, etc.).

b. In what way(s) should CARB track parent/subsidiary relationships to assure companies doing business in California that report under a parent are clearly identified and included in any reporting requirements?

MSCI: No comment.

General: Standards in Regulation

3. CARB is tasked with implementing both SB 253 and 261 in ways that would rely on protocols or standards published by external and potentially non-governmental entities.

a. How do we ensure that CARB's regulations address California-specific needs and are also kept current and stay in alignment with standards incorporated into the statute as these external standards and protocols evolve?

MSCI: CARB should consider anchoring its regulatory framework in internationally recognized standards—such as IFRS S1 and S2, aligning with international sustainability reporting standards—to ensure both uniformity in non-financial reporting and ongoing relevance as protocols evolve. By adopting these globally benchmarked standards, CARB can provide a structured approach that:

- addresses California-specific requirements by allowing flexibility to incorporate localized risk considerations, such as extreme weather events and the financial impacts;
- ensures that the framework remains current through regular updates that reflect emerging best practices and evolving global regulatory landscapes; and
- facilitates comparability of climate and other sustainability disclosures, thereby supporting investors with consistent, decision-useful data across jurisdictions.

Aligning with international standards not only minimizes duplication effort for disclosing entities but also enhances interoperability between U.S. and global reporting requirements.

This approach would enable CARB to meet the statute's intent while continuously aligning with both California-specific needs and evolving international protocols.

b. How could CARB ensure reporting under the laws minimizes a duplication of effort for entities that are required to report GHG emissions or financial risk under other mandatory programs and under SB 253 or 261 reporting requirements?

MSCI: We encourage CARB to consider international climate disclosure frameworks such as IFRS S1 and S2.[10] There has been a steady increase in the adoption of IFRS S1 and S2 globally. IOSCO announced the launch of a dedicated network to support Growth and Emerging Markets Committee (GEMC) members in adopting or integrating

[10] ISSB issues inaugural global sustainability disclosure standards (ISSB | June 2023)

ISSB Sustainability Disclosure Standards.[11] The network initially includes 32 jurisdictions spanning regions such as Africa, Latin America, and the Middle East, with more expected to join. We, therefore, suggest a reporting framework be adopted by CARB based on these global standards while finalizing the reporting requirements. Investors would also benefit from consistent, comparable and timely disclosures to better assess the nature, size and timing of the investment risks they face related to climate change.

c. To the extent the standards and protocols incorporated into the statute provide flexibility in reporting methods, should reporting entities be required to pick a specific reporting method and consistently use it year-to-year?

MSCI: We recommend that companies tag their climate-related disclosures using XBRL. With increasing amounts of textual data / narrative, detailed tagging could help synthesize varied climate-related disclosures consistently, especially for qualitative information. To avoid inconsistencies, we suggest using a standardized list of tags—or clear guidance for defining them—that aligns with existing reporting standards and taxonomies, rather than permitting custom tags.

General: Data Reporting

4. To inform CARB's regulatory processes, are there any public datasets that identify the costs for voluntary reporting already being submitted by companies? What factors affect the cost or anticipated cost for entities to comply with either legislation? What data should CARB rely on when assessing the fiscal impacts of either regulation?

MSCI: No comment.

5. Should the state require reporting directly to CARB or contract out to an "emissions" and/or "climate" reporting organization?

MSCI: No comment.

6. If contracting out for reporting services, are there non-profits or private companies that already provide these services?

MSCI: No comment.

[11] IOSCO's Growth and Emerging Markets Committee launches a dedicated Network to support its members in the adoption or other use of ISSB Standards in their local jurisdictions (IOSCO | December 18, 2024)

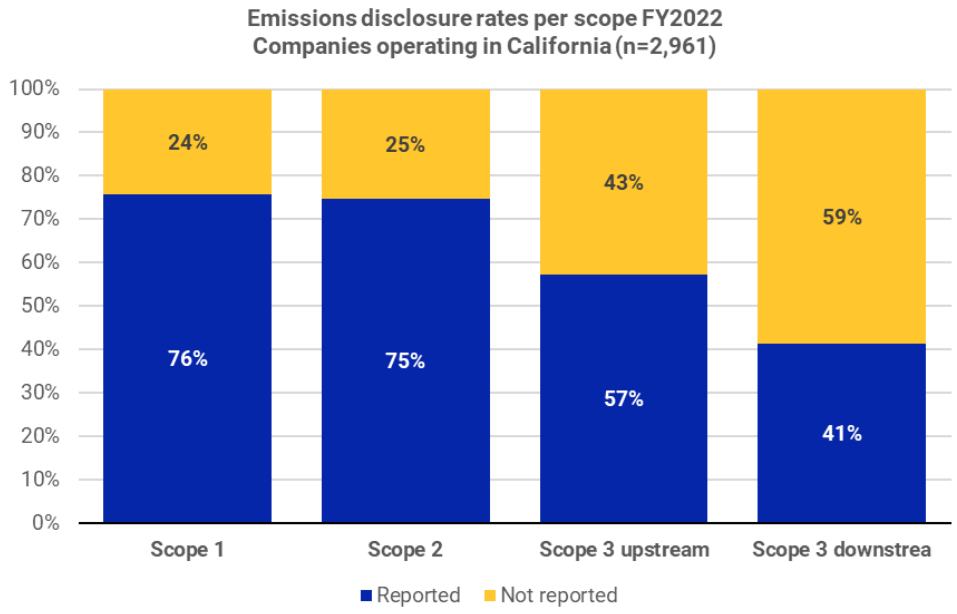
SB 253: Climate Corporate Data Accountability Act

7. Entities must measure and report their emissions of greenhouse gases in conformance with the GHG Protocol, which allows for flexibility in some areas (i.e. boundary setting, apportioning emissions in multiple ownerships, GHGs subject to reporting, reporting by sector vs business unit, or others). Are there specific aspects of scopes 1, 2, or 3 reporting that CARB should consider standardizing?

MSCI: We welcome the proposal to measure and report greenhouse gas emissions in conformance with the GHG Protocol which enhances data comparability on GHG emissions reporting for investors. The proposal also aligns with the disclosure requirements under IFRS S2 climate-related disclosures (IFRS S2), offering a standardized reporting methodology for GHG emissions. We suggest the following for better comparability of Scope 1, 2 and 3 data across U.S. companies.

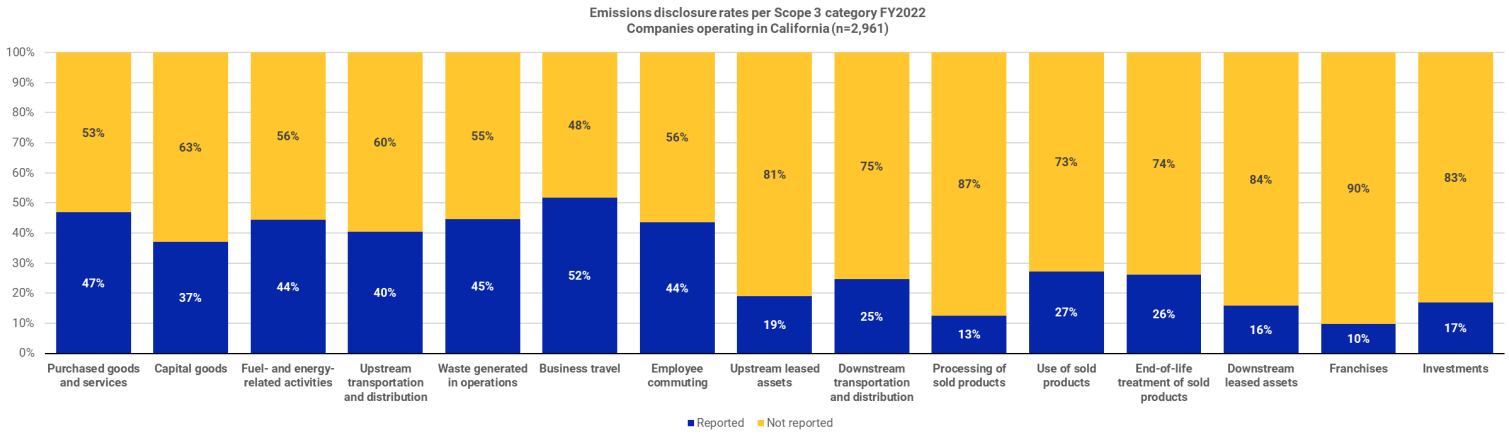
a. Strengthening climate-related financial disclosures - There are approximately 2,961 public companies operating in California that could be in scope of SB 253. (Refer Appendix 1). Of the 2,961 public companies, as of FY 2022, out of the 2,961 companies, about 75% disclosed their Scope 1 and 2 emissions, however, only about 57% disclosed at least one category of upstream and 41% at least one category of downstream Scope 3 GHG emissions.

Figure 1- Emission disclosure rates per scope FY 2022



Source: CDP. Company Disclosures. MSCI, as of February 03, 2025.

Figure 2- Emission disclosure rates per Scope 3 category FY 2022



Source: CDP. Company Disclosures. MSCI, as of February 03, 2025.

As a user of Scope 3 emissions data in our models and analysis for investors, we would emphasize the need for consistent and comparable disclosures. This standardization, which would not be achieved if materiality were determined by each company. Instead, we recommend that the CARB adopt a defined materiality threshold. Based on our Scope 3 estimated data in Appendix 2, 88% of constituents in the Californian custom universe would need to report Scope 3 emissions under a 50% materiality threshold and 93% under a 25% threshold.

b. Carbon offsets - The use of offsets should be reported separately from GHG emissions. Reporting of GHG emission should not be on a net-basis, to enable transparency. Standards for how to account for carbon credits as well as investor preferences on the treatment of carbon credits continue to evolve. To the extent that companies purchase offsets, reporting on offsets separately would preserve flexibility for users of the data to apply the appropriate treatment.

c. Location data - For Scope 1 and 2 emissions, location data should be easily accessible. Requiring location data in the case of Scope 1 and 2 emissions would aid investors with evaluating jurisdictional risk to the energy transition, arising from policy and technology changes. Therefore, we propose location data for Scope 1 and 2 at least should be mandated.

d. GHG Intensity - It would be useful if companies report a separate footprint and intensity per Scope (i.e. Scope 1 and 2 not grouped together).

8. SB 253 requires that reporting entities obtain "assurance providers." An assurance provider is required to be third-party, independent, and have significant experience in measuring, analyzing, reporting, or attesting in accordance with professional standards and applicable legal and regulatory requirements.

a. For entities required to report under SB 253, what options exist for third-party verification or assurance for scope 3 emissions?

b. For purposes of implementing SB 253, what standards should be used to define limited assurance and reasonable level of assurance? Should the existing definition for "reasonable assurance" in MRR be utilized, and if not why?

MSCI: No comment.

9. How should voluntary emissions reporting inform CARB's approach to implementing SB 253 requirements? For those parties currently reporting scopes 1 and 2 emissions on a voluntary basis:

a. What frequency (annual or other) and time period (1 year or more) are currently used for reporting?

b. When are data available from the prior year to support reporting?

MSCI: Whilst we have witnessed a general move towards non-financial information published at the same time or alongside financial information – e.g. EU's Corporate Sustainability Reporting Directive and UK's Mandatory Climate reporting – in practice many reporters do not generally have the same well-established systems for emissions reporting that exist for financial reporting. As such, it could take time to collect, process, review, internally sign off and, if required, externally assure emissions data, particularly for first time reporters in the case of Scope 1-2 emissions and all reporters when it comes to Scope 3 emissions.

c. What software systems are commonly used for voluntary reporting?

MSCI: No comment.

SB 261: Climate Related Financial Risk Disclosure

10. For SB 261, if the data needed to develop each biennial report are the prior year's data, what is the appropriate timeframe within a reporting year to ensure data are available, reporting is complete, and the necessary assurance review is completed?

MSCI: The timeframe could be up to a year, particularly if the scenario analysis needs to be updated and/or it is the first year of reporting and the company needs to establish new governance, strategy, risks management systems, and metrics and targets.

As this is a public disclosure and a mandatory requirement it is likely that additional rounds of internal review and senior sign-off may be undertaken, hence additional time being required to publish a SB261 disclosure.

11. Should CARB require a standardized reporting year (i.e., 2027, 2029, 2031, etc.), or allow for reporting any time in a two-year period (2026-2027, 2028-2029, etc.)?

MSCI: Yes, a standardized reporting year, aligned with entities' financial reporting could be adopted. This would make available comparable data for investors across companies and time periods. But please also refer our response to Q 9(b).

12. SB 261 requires entities to prepare a climate-related financial risk report biennially. What, if any, disclosures should be required by an entity that qualifies as a reporting entity (because it exceeds the revenue threshold) for the first time during the two years before a reporting year?

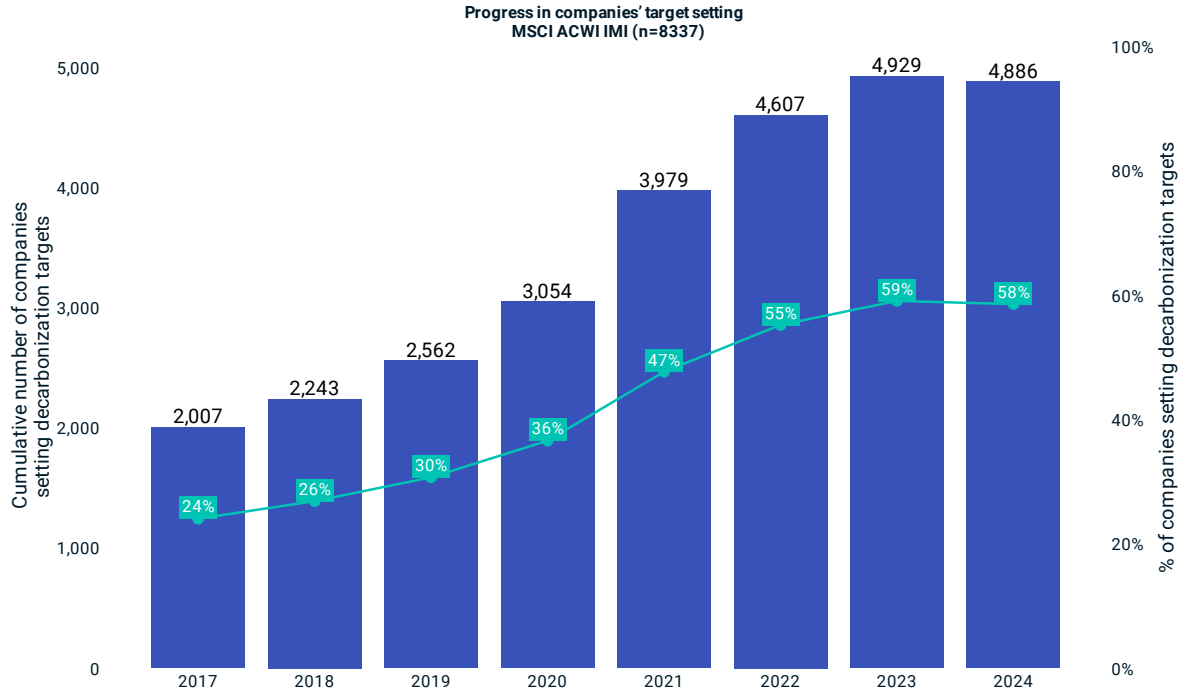
MSCI: If an entity qualifies as a reporting entity for the first time, it could take significant resources and time to prepare a first report so it may be useful to not add any additional reporting requirements as compared to the voluntary reporting already being done by the reporting entity in the first year.

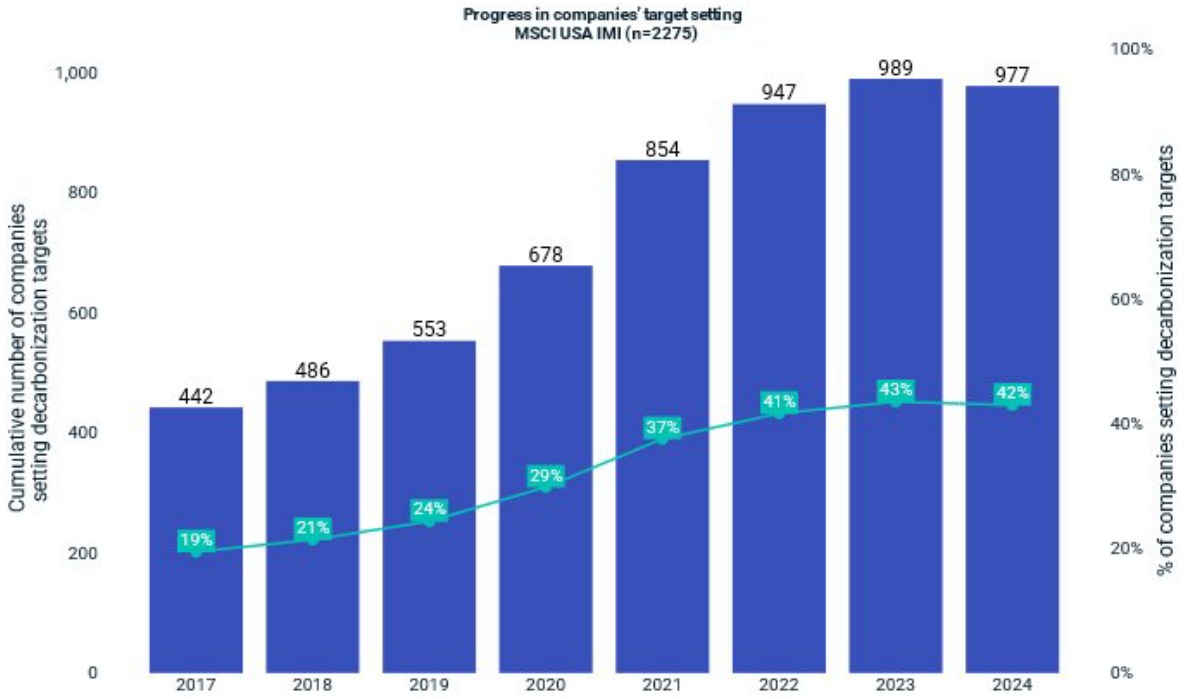
13. Many entities that are potentially subject to reporting requirements under SB 261 are already providing other types of climate financial risk disclosures.

a. What other types of existing climate financial risk disclosures are entities already preparing?

MSCI: We have seen steady progress in the number of public companies setting decarbonization targets. Among the world's largest firms (MSCI ACWI IMI, Figure 3), the number of companies with such targets has tripled over the past seven years, reaching approximately 60% in 2024. In the U.S., progress has been slower—among the 2,000 largest publicly listed companies, the number with decarbonization targets has doubled over the same period, with 42% having set targets by 2024.

Figure 3 - Progress in companies' target setting



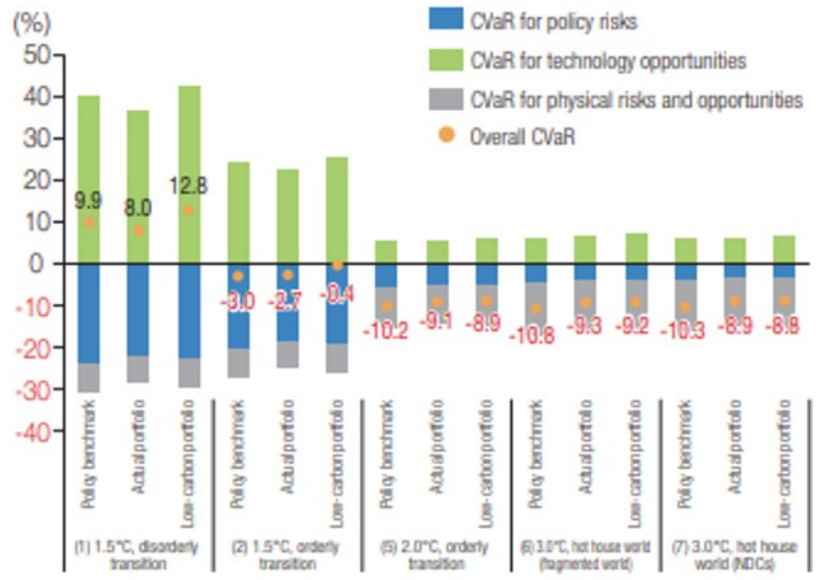


b. For covered entities that already report climate related financial risk, what approaches do entities use?

MSCI: MSCI's financial sector clients are increasingly incorporating climate-related scenario analysis into their risk management and disclosure practices, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and the ISSB standards. To support these efforts, MSCI offers tools like Climate Value-at-Risk (Climate VaR), which provides scenario-based, forward-looking assessments of climate-related risks and opportunities. This tool helps institutions quantify the potential financial impacts of transition and physical risks. Additionally, MSCI's Climate Risk & TCFD Report aids institutions in aligning their disclosures with TCFD guidelines, promoting transparency in reporting climate risks and opportunities.

Many large asset owners are already leveraging these analytics to assess and report on climate-related risks. For example, Japan's Government Pension Investment Fund (GPIF)—the country's largest public pension fund and one of the world's largest institutional investors—has been disclosing the impact of Climate VaR on its domestic equities portfolio, as well as highlighting revenues from low-carbon technologies and sector-specific patent growth.

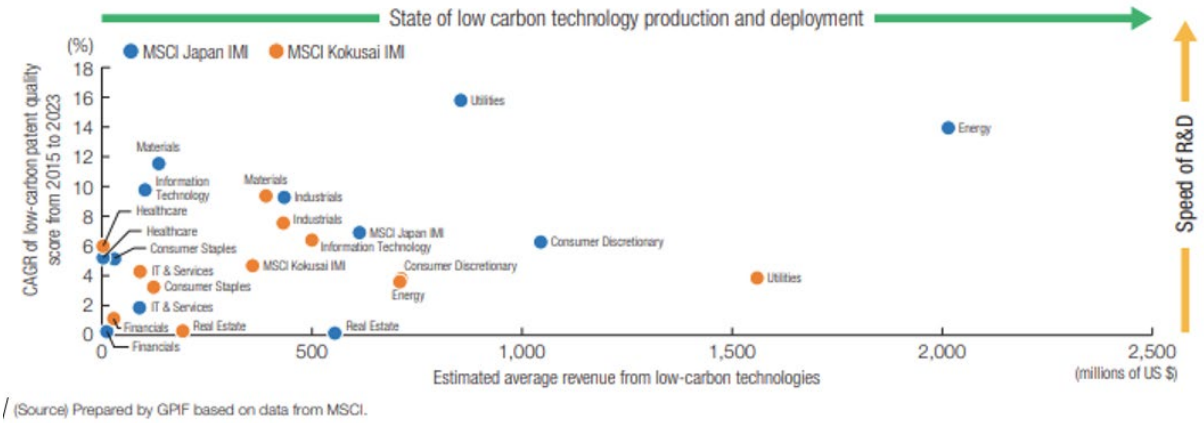
Figure 4 – Impact on Domestic Equities Portfolio



(Note) Omitted baseline scenarios (3) 1.5°C, orderly transition (low energy demand,) (4) 2.0°C, disorderly transition and (8) 3.0°C, hot house world (current policies.)
(Source) Prepared by GPIF based on data from MSCI.

Source: "ESG Report 2023," GPIF, September 2024.

Figure 5 – Revenue from Low-Carbon Technologies and Patent Growth Rate by Sector



(Source) Prepared by GPIF based on data from MSCI.

Source: "ESG Report 2023," GPIF, September 2024.

c. In what areas, if any, is current reporting typically different than the guidance provided by the Final Report of Recommendations of the Task Force on Climate-related Financial Disclosures?

MSCI: Our analysis shows that the ISSB standards—aligned with TCFD recommendations—are being increasingly adopted across various jurisdictions. To assess the regulatory landscape for sustainability disclosures, we compared key aspects of climate-related reporting, including jurisdiction-specific scenario analysis mandates, Scope 3 emissions reporting, and financial materiality considerations.

Our findings indicate that most jurisdictions are largely aligned with these standards, though some differences remain. Variations typically occur in the selection of scenarios for climate analysis and in GHG emissions reporting, where local regulations may override the global GHG Protocol. For example, in Japan, companies report under the Act on Promotion of Global Warming Countermeasures, using emissions data measured according to that framework rather than the GHG Protocol.

MSCI

Figure 6 – Global sustainability standards adoption tracker

Legend:

L - Listed Firms	S | D - Single / Double Materiality
P - Private Firms	M - Mandatory/Strongly encouraged
→ Phasing in	TR - Transition Relief(a)

Region	Market	Entering into force	Reporting Start Date	Entities in scope	Phasing In (b)	Standards Adopted	Assurance	Scenario Analysis	Scope 3	Transition Plan	Materiality	Voluntary/ Mandatory (V/M)
-	ISSB-Standards IFRS S1 & S2	2024	2025	-		IFRS S1 & S2	-	Prefer quantitative analysis Disclose a range of transition & physical scenarios across the short, medium & long-term.	**M**	Disclose if available, adopting framework of Transition Plan Taskforce (TPT)	S	V
Americas	Brazil	2026	April 2027	**L | P**	→	IFRS S1 & S2		Aligned with IFRS S2	**TR**	Aligned with IFRS S2	S	M
	Canada	2027	June 2028	**L | P**	→	IFRS S1 & S2	-	Aligned with IFRS S2	**TR**	Aligned with IFRS S2	S	V
	U.S. (SEC)	2024	TBC	**L**	TBC	TCFD	TBC	TBC	TBC	TBC	S	V
	U.S. (California)	2026	October 2027	**L | P**	-	TCFD	Yes(c)	TCFD is aligned with IFRS S2, additionally recommends inclusion of a 2°C or lower scenario.	**TR**	TCFD encourages outlining strategic plan	S	V
Europe	EU	2024	FY 2025 Reporting	**L | P**	→	ESRS E1	Yes(c)	Mandatory, if deemed material Identify physical & transition risks over short,- medium & long-term, include a 1.5°C scenario	Material S3 categories	Disclose if available for climate change mitigation	D	M
	UK	2021	April 2022	**L | P**	→	TCFD	-	Aligned with TCFD	**M**	Aligned with TCFD	D	M
	Switzerland	2023	April 2024	**L | P**	-	TCFD	-	Aligned with TCFD	**M**	Aligned with TCFD	D	M
APAC	Australia	2026	April 2027	**L | P**	→	IFRS S2 (S1 volunt.)	Yes(c)	Aligned with IFRS S2, apply and disclose a minimum of 2 scenarios (1.5°C and > 2.5°C)	**TR**	Aligned with IFRS S2	S	M
	New Zealand	2023	April 2024	**L**	→	TCFD	Yes(c)	Aligned with IFRS S2, apply and disclose a minimum of 3 scenarios (1.5°C and > 3°C)	**TR,** material S3 categories	Broadly aligned with TCFD and IFRS S2	D	M
	MoF China	2024	2025	**L**	→	Linked to IFRS S1	-	-	**TR**	-	D	V
	China Exchanges	2025	April 2026	**L**	-	Sustainability Reporting	-	Focus on physical scenario analysis. Qualitative / quantitative	-	Disclose if available	D	M

Region	Market	Entering into force	Reporting Start Date	Entities in scope	Phasing In (b)	Standards Adopted	Assurance	Scenario Analysis	Scope 3	Transition Plan	Materiality	Voluntary/ Mandatory (V/M)
	Hong Kong	2025	April 2026	L	→	IFRS S2	-	Aligned with IFRS S2	TR	Aligned with IFRS S2	S	M
APAC	Taiwan	2026	2027	L	→	IFRS S1 & S2	Yes(d)	Aligned with IFRS S2	TR	Aligned with IFRS S2	S	M
	Singapore	2025	April 2026	L	→	IFRS S2	Yes(d)	Aligned with IFRS S2	TR	Aligned withIFRS S2	S	M
	Malaysia	2025	April 2026	L	→	IFRS S1 & S2	Yes(d)	Aligned with IFRS S2	TR	Aligned with IFRS S2	S	V
	Japan	2027	June 2028	L	→	IFRS S1 & S2	TBC	Aligned with IFRS S2	TR	Aligned with IFRS S2	S	M
	South Korea	TBC	TBC	TBC	TBC	IFRS S1 & S2	TBC	Aligned with IFRS S2	TR	Aligned with IFRS S2	S	V

October 2024. (a) Transition Relief: providing disclosing entities extra time to meet reporting requirements, typically allowing an additional year to disclose Scope 3 GHG emissions; (b) Phasing in: reporting requirements apply to larger firms first; (c) Assurance requirements: US (California): limited assurance for Scopes 1 and 2 expected under Californian Senate Bills 253 and 261, moving to reasonable assurance in 2030, EU: comprehensive limited assurance, Australia: limited assurance for Scopes 1 and 2, moving to reasonable assurance by 2030, NZ: limited assurance for GHG emissions, Singapore: limited assurance for Scopes 1 and 2, Malaysia: reasonable assurance planned for Scopes 1 and 2.

Legend:

L - Listed Firms	S | D - Single / Double Materiality
P - Private Firms	**M - Mandatory/Strongly encouraged**
→ Phasing in	**TR - Transition Relief (a)**

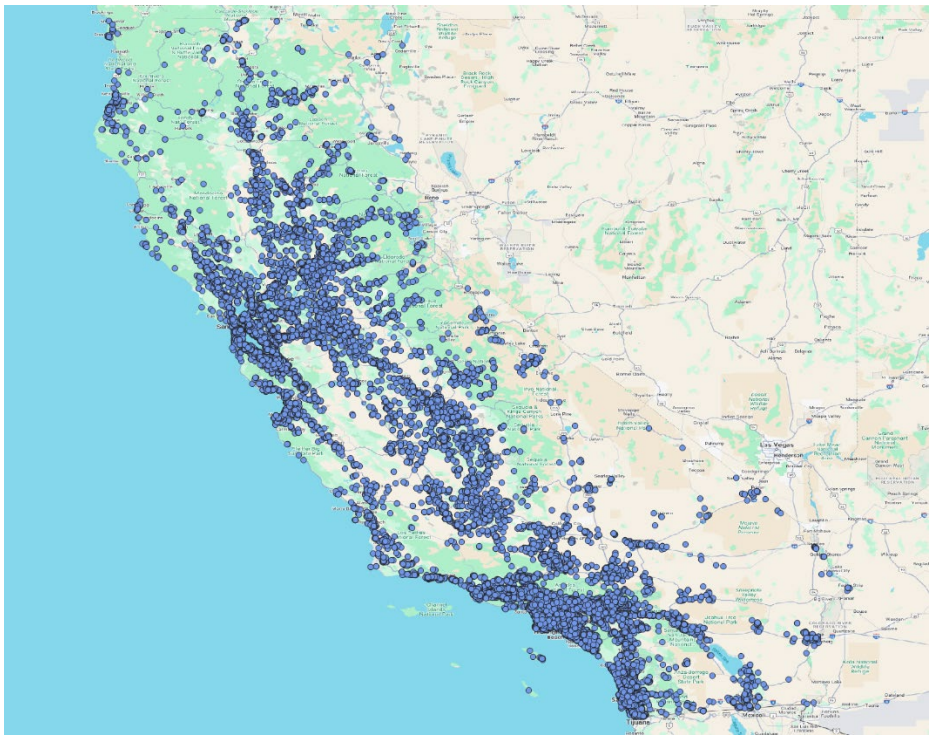
d. If not consistent with the Final Report of Recommendations of the Task Force on Climate-related Financial Disclosures, are there other laws, regulations, or listing requirements issued by any regulated exchange, national government, or other governmental entity that is guiding the development of these reports?

MSCI: Please refer to previous response.

Appendix 1

For our analysis we extracted companies in our universe (total 70,000 across public and private entities) with operations in the state of California and then checked those companies against revenue numbers. As of February 2025, we found that 2,961 of these companies had revenues of USD 1bn or more, as per MSCI.

Figure 7 – Company operations in the State of California based on MSCI's Geospatial Asset Intelligence database.



Source: MSCI, as of February 2025.

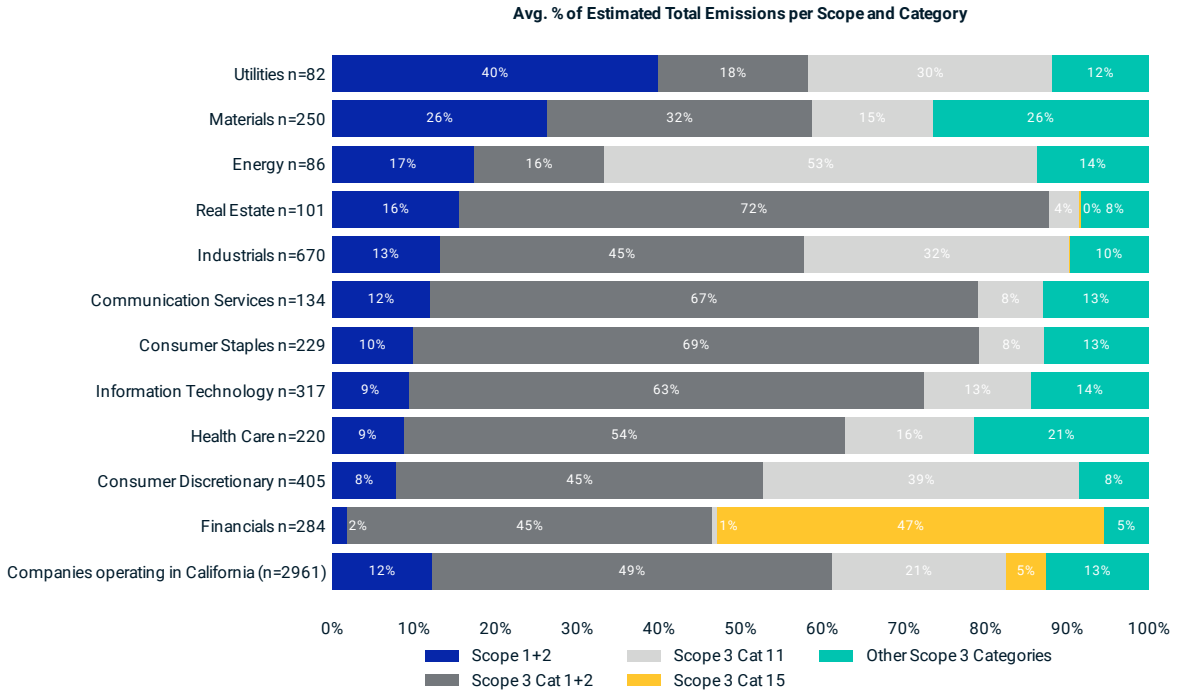
Appendix 2

For a universe of 2,961 companies, MSCI evaluated the materiality of Scope 3 greenhouse gas emissions using estimated data from both direct and indirect value chain emissions (upstream and downstream). We then compared these emissions to the companies' reported targets. Below are our findings.

Analysis of materiality of Scope 3 emissions based on estimated emissions and reported target data

Figure 8 shows that, on average, 88% of total emissions were attributed to Scope 3 GHG emissions, while Scope 1 and 2 emissions contributed on average only 12% of total emissions. Specifically, when considering value chain emissions, on average 49% of total emissions were related to the purchase of goods and services such as raw materials and the production of capital goods (e.g., buildings, machinery, vehicles, or other long-term assets - Scope 3, categories 1+2), 21% to the use of sold products and services (Scope 3, category 11), 5% to investments (Scope 3, category 15) and 13% to other categories such as transportation and the processing of sold products.

Figure 8 - Average % of estimated GHG emissions across Scopes 1, 2 and Scope 3 categories by sector

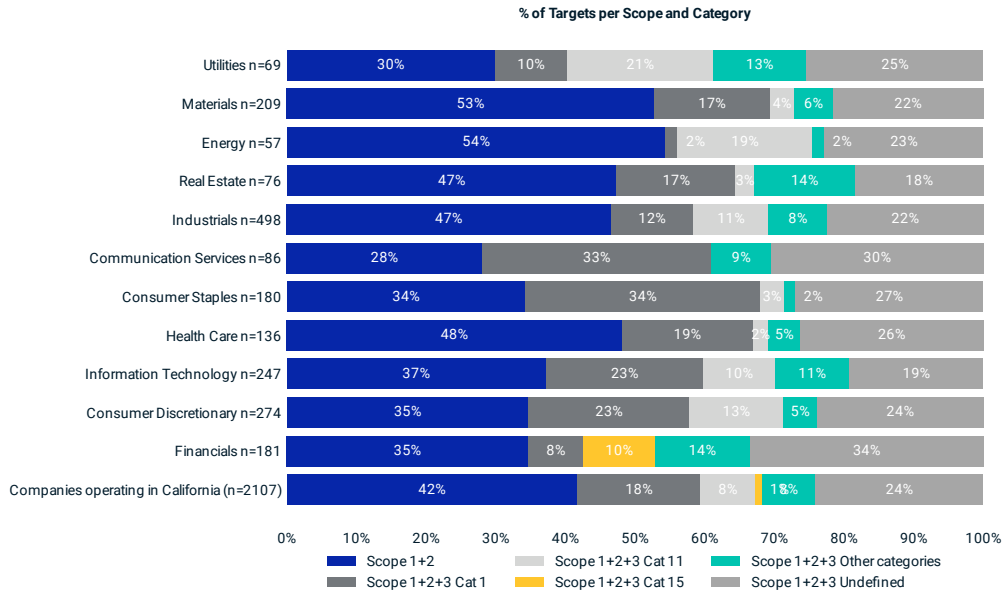


Source: Data as of March 10, 2025. Notes: Total value chain emissions per scope and category were estimated based on MSCI Scope 3 emissions estimation model for 2,961 companies with operations in the State of California and revenues of at least USD 1bn.

When analyzing companies' target-setting practices, we observed a stronger emphasis on direct emissions (Scope 1 and 2). Among California-based companies with revenues exceeding USD 1 billion, 2,107 have established decarbonization targets. Of these, 42% set targets for Scope 1 and 2 emissions, while only 58% addressed

their value chain emissions (see Figure 9).[12] Despite sourcing of goods and services (Scope 3, Category 1) accounting for the largest share of corporate value chain emissions (49%, Figure 8), fewer than 20% of companies set specific reduction targets for this category (Figure 9).

Figure 9 – Reported company targets per sector and GHG emissions scope



Data as of March 10, 2025.

[12] 18% targeted Scope 3 Category 1, 8% Category 11, 18% other Scope 3 categories and 24% set targets undefined by Scope emissions.