



March 21, 2025

Submitted via CARB Public Comment Web Portal

Liane M. Randolph, Chair  
California Air Resources Board  
1001 Street  
Sacramento, CA 95814  
[climatedisclosure@arb.ca.gov](mailto:climatedisclosure@arb.ca.gov)

**Re: Environmental Defense Fund Comments – Information Solicitation to Inform Implementation of California Climate-Disclosure Legislation**

Chair Randolph:

Environmental Defense Fund (“EDF”) respectfully submits the following comments to the California Air Resources Board (“CARB”) in response to its request for information (“RFI”) on implementing Senate Bills (“SB”) 253 and 261 as amended by SB 219 (collectively, the “Climate Risk Disclosure Programs”).<sup>1</sup> One of the world’s leading nonprofit organizations, EDF creates transformational solutions to the most serious environmental problems. To do so, EDF links science, economics, law, and innovative private-sector partnerships.

EDF strongly supports CARB’s efforts to improve transparency from companies regarding their greenhouse gas (“GHG”) emissions and climate-related financial risks. This transparency will allow California consumers, investors, and members of the public to make better-informed business and investment decisions. In these comments, we provide information and recommendations to support CARB in developing effective implementing rules for SB 253 and 261. We recommend that CARB align its regulations with existing reporting frameworks to the extent possible to leverage established best practices, streamline compliance, and enhance consistency. Additionally, we recommend that CARB ensure transparency on reporting methodologies to provide crucial context for end-users of data, as well as develop clear expectations and supportive resources in key areas such as assurance and Scope 3 emissions reporting. EDF stands ready to continue providing additional expertise, information, or other engagement that would aid CARB in developing its vital Climate Risk Disclosure Programs.

\* \* \*

---

<sup>1</sup> EDF is submitting additional comment letters jointly with other organizations focused on the topics of voluntary carbon credits, oil and gas methane reporting, and the importance of implementing these laws.

## 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.**

### **1a. Should CARB adopt the interpretation of “doing business in California” found in the Revenue and Tax Code section 23101?**

Yes. Leveraging the definition in California’s tax code will provide a strong foundation for CARB’s Climate Risk Disclosure Programs, bringing clarity and consistency for regulators and covered entities alike. CARB should fully evaluate the implications of utilizing the definition in this context and make any clarifications needed to avoid the creation of unintentional loopholes in the program and to carry out the direction of the Legislature (including aligning with the intention not to encompass certain energy market activities, as described in response to question 1d below).

Under the tax code definition, these are the criteria used to determine if an entity is “doing business in [California]:”

- **“Doing business”** means actively engaging in any transaction for the purpose of financial or pecuniary gain or profit” (RTC § 23101(a); see also further interpretation and explanation in Cal. Code Regs. Tit. 18 § 23101) *and*
- Doing business **in California** means that an entity meets any of the following criteria that year (RTC § 23101(b)):
  - **Organized or commercially domiciled in California.** This refers to entities formally established or having their primary business location in the state;
  - **Sales in California** exceeding the lesser of \$735,019 in 2024 (adjusted annually for inflation) or 25% of the taxpayer's total sales. This establishes a quantitative threshold based on sales revenue;
  - **Real property and tangible personal property in California** exceeding the lesser of \$73,502 in 2024 (adjusted annually for inflation) or 25% of the taxpayer's total real property and tangible personal property. This sets a threshold based on the value of physical assets; *or*
  - **Payroll in California** exceeding the lesser of \$73,502 in 2024 (adjusted annually for inflation) or 25% of the taxpayer's total payroll. This focuses on the amount of wages paid to employees in the state.

In sum, this definition generally covers entities conducting activities for financial gain in California, including companies located outside of California who are selling goods, services, or property within the state. It excludes out-of-state entities with *de minimis* sales, property, and payroll in California.

Apart from “doing business in California,” the Climate Risk Disclosure Programs’ revenue thresholds provide the other key parameter for coverage. We encourage CARB to use California Franchise Tax Board (“FTB”) data to reliably identify covered entities according to both of these parameters, as further described under question 2 below.

While EDF does not expect that many companies that both meet the “doing business in California” definition and exceed the \$500 million or \$1 billion annual revenue thresholds have *de minimis* GHG emissions or climate-related financial risks, it is possible that some companies will make this claim. In order to ensure that implementation is both rigorous and efficient, CARB could consider defining a process in its regulations where entities that meet clear, predetermined criteria that align with legislative intent could apply for a reporting exemption that could be approved by CARB’s Executive Officer and valid for a specified period. This process could help ensure that CARB’s resources are allocated effectively while avoiding the creation of unintentional gaps in coverage and allowing for the exemptions to be reevaluated periodically, especially as operations or business needs evolve (for example, a technology company may have previously had low emissions, but new investments in data centers and power resources have increased its emissions).

**1b. Should federal and state government entities that generate revenue be included in the definition of a “business entity” that “does business in California?”**

We encourage CARB to consider the text and intent of the statutes to determine the applicability of the regulations to specific entities. CARB’s program should be rigorous and reach all entities the laws are intended to cover. As discussed above in response to question 1a, California Revenue and Taxation Code section 23101 defines “doing business” as “actively engaging in any transaction for the purpose of financial or pecuniary gain or profit.” This definition focuses on the activity’s purpose: generating financial gain.

While some state and federal agencies may exceed the revenue thresholds, these agencies typically engage in appropriations, taxes, and fees, rather than sales of goods or services for purposes of generating pecuniary gain or profit. Some governmental entities may also generate revenue that is specifically dedicated to activities such as funding public programs, managing public assets, protecting public health, and enforcing rules. Governmental entities are generally exempt from many forms of taxation.

EDF therefore does not expect that governmental entities would generally fall within the scope of SB 253 and 261, but encourages CARB to consider whether there are particular governmental entities that act more as market participants or otherwise engage in activities for financial gain that would fall within the FTB definition if conducted by a private sector entity. CARB should then consider the legal and practical implications of including such entities in the program and the significance of the entities’ GHG emissions or climate-related financial risks, and consider providing opportunities for governmental entities that wish to report voluntarily. The University of California system, for instance, has established climate goals, and is actively working on implementing actions to cut carbon emissions across its ten campuses, and participating in

CARB's Climate Risk Disclosure Programs could help support further emissions reduction efforts.

**1c. Should SB 253 and 261 cover entities that are owned in part or wholly owned by a foreign government?**

The definition of “doing business in California” found in the Revenue and Tax Code section 23101 does not exempt foreign government-owned entities from reporting. The regulations that further interpret “doing business” note the following (Cal. Code Regs. Tit. 18, § 23101(a):

A foreign corporation which engages in a transaction for the purpose of financial or pecuniary gain or profit in California is considered “doing business” in this State whether or not the transaction is considered exclusively engaged in interstate commerce, and is therefore subject to tax under Chapter 2. However, if the only activities of employees of foreign corporations within this State engaging exclusively in interstate commerce are the solicitation of orders for goods to be shipped to customers in this State from points outside this State, the corporations are probably within the purview of Public Law 86-272 (15 U.S.C. Sections 381, et.seq.) [and accordingly not generally subject to state income tax].

There are potential complexities associated with requiring reporting from foreign government-owned entities, such as claims of sovereign immunity and international agreements. We encourage CARB to work with the California FTB to identify potentially covered companies owned wholly or in part by foreign governments to determine if additional applicability requirements are needed. CARB should aim to minimize the risk of companies strategically providing foreign governments with partial ownership to circumvent this program (for example, if defined too broadly, an exemption for partial foreign government ownership could conceivably sweep in a public company in which a foreign government owned shares).

**1d. 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?**

Entities that sell energy or other goods and services into California through separate markets such as the Energy Imbalance Market (EIM) or Extended Day Ahead Market (EDAM) should not be covered by CARB's Climate Risk Disclosure Programs on the basis of those activities.

This position aligns with legislative intent as documented in the [letter to the Senate Daily Journal](#) from the authors of SB 253 and 261. The letter explicitly states that it was **not the intent of the legislature to include wholesale electricity transactions occurring through the Western Energy Imbalance Market or the Extended Day Ahead Market** within the scope of these reporting obligations. Moreover, the letter states that the definitions of a “reporting entity” in SB 253 (now Section 38532(b)(2) of the Health and Safety Code) and of a “covered entity” in SB 261 (now Section 38533(a)(4) of the Health and Safety Code) do not apply

to businesses whose sole activity in California consists of wholesale electricity transactions conducted in interstate commerce.

For these reasons, we recommend that CARB not require entities participating in wholesale electricity markets such as EIM and EDAM to comply with CARB's Climate Risk Disclosure Programs on the basis of those activities.

**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)?**

**2a. 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?**

This answer covers questions 2 and 2a.

EDF recommends that CARB work with the California FTB to determine how its data could be utilized to support this effort. Some other California datasets could be useful in identifying entities doing business in the state, but not annual revenue (e.g. licenses, permits, registrations, etc.). Private datasets such as Dun and Bradstreet's corporation data appear to be designed to support the identification of customers, not to enforce a program, where the accuracy and frequency of updates are paramount.

Based on our research, the FTB's data appears to be the most comprehensive and accurate dataset available that aligns with CARB's needs to reliably identify businesses "doing business in California" with total revenue over \$500 million or \$1 billion. To do this, CARB can partner with FTB to gain the administrative and/or legislative support needed to gain access to the needed data. Further detail follows on how CARB could utilize this data, as well as some limitations.

**Types of Information Reported to the FTB:**

- Franchise Tax Returns: Companies file these returns reporting their income, deductions, and tax liability. This data reveals the total revenue of the company and the portion of the revenue that is generated within California.
- Combined Reports: Multistate or multinational companies file combined reports, detailing the income of all affiliated entities. This helps determine the portion of income attributable to California.
- Information Returns: Companies file these returns to report payments made to individuals and other businesses. This can provide insights into a company's business relationships and activities within California.

**FTB Data and Identifying Businesses:**

- FTB data would facilitate identification of companies that meet both the revenue threshold and the "doing business" criteria.

- **Revenue Threshold:** The FTB can readily identify companies with total revenues exceeding \$500 million or \$1 billion based on the data reported in franchise tax returns and combined reports.
- **“Doing Business” Criteria:** The FTB assesses whether a company’s activities meet the criteria for “doing business” in California, as defined in the Revenue and Taxation Code. This involves examining factors like sales, property, and payroll in the state.

### **Confidentiality Restrictions:**

- **Confidentiality of Information:** California law protects the confidentiality of taxpayer information reported to the FTB. This means that the FTB cannot publicly disclose specific taxpayer data.
- **Data Sharing Restrictions:** The FTB may also face restrictions on sharing taxpayer data with other state agencies. CARB and the state legislature could work with FTB to ensure reports generated for the enforcement of this program are appropriately classified.

### **Potential Solutions:**

- **Legislation:** Legislation could be enacted to explicitly authorize data sharing between the FTB and other agencies like CARB for specific purposes, such as identifying businesses subject to the Climate Risk Disclosure Programs. The FTB could also be directed to generate annual reports for CARB that contain only information necessary to implement these programs.
- **Interagency Agreements:** Agreements between the FTB and CARB could be established to facilitate data sharing within legal boundaries, including the content of any reports or data disclosed and limitations on use. These agreements would also need to address confidentiality considerations and ensure compliance with applicable laws.

In summary, we encourage CARB to work with the FTB and the legislature to assess the value of utilizing this information to efficiently and accurately enforce program requirements and the processes necessary to do so.

### **2b. 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?**

SB 219 specifically permits covered entities to consolidate both GHG emissions and climate-related financial risk reporting at the parent company level. To effectively track parent/subsidiary relationships for this reporting, CARB could implement a mandatory field that requires companies to disclose their corporate structure, including the identification of parent companies and all subsidiaries operating within California. This should be coupled with a robust data verification process.

CARB's guidance should detail the specific criteria for determining parent/subsidiary relationships, the required documentation, and the procedures for updating reported information. Utilizing federal identifiers like Employer Identification Numbers ("EINs") can significantly enhance tracking accuracy. While EINs primarily identify individual business entities, they can be used in conjunction with other data points to build a more complete picture of corporate structures. CARB could require companies to submit the EINs of both parent companies and subsidiaries, allowing for more precise data matching and cross-referencing with federal and state databases, especially as companies change name or report using alternative "doing business as" names.

Drawing from other regulators' practices, such as the U.S. Securities and Exchange Commission ("SEC"), or the treatment of corporate association relationships under California's Cap-and-Trade Regulation, CARB could leverage standardized data formats and require companies to submit organizational charts or legal entity relationship diagrams. Another example CARB could consider drawing from the U.S. Environmental Protection Agency's ("EPA") approach for managing parent companies in its [GHG reporting program](#).

Additionally, cross-referencing with existing databases, like those maintained by the U.S. Census Bureau, the California FTB, or state-level business registries, could help validate reported relationships. For example, the EPA's Toxic Release Inventory program uses a combination of self-reporting and cross-referencing with other databases to ensure accurate facility identification, which could be adapted to track corporate structures.

These steps would help ensure full and decision-useful GHG emissions and climate-related financial risk data from companies operating in California, including those under parent company umbrellas.

## **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.**

#### **3a. 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?**

To ensure California's climate disclosure regulations remain current and aligned with evolving best practices, CARB can clarify its intent to incorporate the Task Force on Climate-related Financial Disclosures ("TCFD") recommendations and GHG Protocol ("GHGP") standards dynamically, rather than statically, allowing for a process to stay informed upon and consider adoption of future updates. The California Office of Administrative Law could verify the extent of permissible updates before a new rulemaking process is required. Another option is for CARB's Board to explicitly delegate to CARB's Executive Officer the ability to incorporate

administrative adjustment into the regulations via a streamlined process (e.g., implementation guidance, Executive Officer Hearing).

Starting in 2033, SB 219 grants CARB the discretion to adopt new “globally recognized” accounting and reporting standards, which would prompt the development of new regulations to “ensure full conformance” with those standards. The future adoption of new rules, updates to existing rules, or guidance to reflect changes in methodologies can mirror CARB’s existing process for incorporating changes to its Mandatory Reporting Regulation (“MRR”) program.

In summary, we believe that CARB can adopt TCFD and GHGP frameworks as they exist today and then consider adoption of updates as they arise, potentially through rulemaking or guidance developed using a public process as appropriate. To further understand how CARB can keep its regulations current, it is helpful to look to the history, governance, use, and anticipated updates of these frameworks.

### **Background on TCFD Recommendations**

The [TCFD](#) was created by the Financial Stability Board (“FSB”) in 2015 with the goal of increasing and improving reporting of climate-related financial information to support market transparency and more informed capital allocation. In 2017, the TCFD released its disclosure recommendations. The [TCFD Recommendations](#) are structured around four thematic areas that represent core elements of how companies operate: governance, strategy, risk management, metrics and targets. The FSB requested that the TCFD promote the adoption of its framework through 2023 by providing further guidance, supporting educational efforts, preparing annual status reports, and monitoring climate-related financial disclosure practices. Upon delivery of the TCFD’s 2023 Status report, the FSB determined that the TCFD had fulfilled its stated goal and was disbanded. Now, the [International Financial Reporting Standards \(“IFRS”\) Foundation](#) has taken over the monitoring and progress of TCFD-aligned climate-related disclosures. Companies can continue to use the TCFD recommendations, and the IFRS states that these recommendations are a good entry point to the IFRS [International Sustainability Standards Board \(ISSB\)](#) standards. The IFRS Foundation has [published a comparison of the standards](#), which can be useful to CARB when evaluating how the TCFD recommendations feed into the ISSB standards, both of which are referenced in SB 261.

### **Background on GHGP Standards**

SB 253 additionally incorporates the [GHGP](#) standards, including the [Corporate Accounting and Reporting Standard](#) and the [Corporate Value Chain \(Scope 3\) Standard](#). The GHGP is an organization focused on establishing comprehensive standardized frameworks to measure and manage GHG emissions from private and public sector operations.

The GHGP Corporate Accounting and Reporting Standard provides guidance for organizations preparing an inventory of their own GHG emissions. The standard covers the accounting and reporting of seven GHGs: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen



trifluoride (NF<sub>3</sub>). It was updated in 2015 with the Scope 2 Guidance, which enables companies to credibly measure and report emissions from purchased or acquired electricity, steam, heat, and cooling.

The Corporate Value Chain (Scope 3) Accounting and Reporting Standard enables companies to assess their entire value chain emissions footprint. The standard was an effort to respond to the demand for a widely accepted method to support management of GHGs in companies' value chains. Since the release of this standard, the GHGP has actively worked with industry groups and governments to promote its widespread use.

In January 2025, the GHGP [announced significant planned updates](#) to several workstreams (summarized in the graphic below). The nature of these changes will be determined by several external committees and boards, and CARB should then review and determine how to incorporate these changes.

Workstream	2025	2026	2027	2028
<b>Corporate Standard</b>	<ul style="list-style-type: none"> <li>Summary of decisions taken on key issues as of Q4 2025 agreed by the TWG and ISB</li> </ul>	<ul style="list-style-type: none"> <li>Draft revised Corporate Standard for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Revised Corporate Standard</li> </ul>	
<b>Scope 2</b>	<ul style="list-style-type: none"> <li>Draft revised text on key requirements for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Revised text on key requirements</li> <li>Draft revised Scope 2 Standard and Guidance for public consultation on topics not included in the 2025 public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Revised Scope 2 Standard and Guidance</li> </ul>	
<b>Scope 3</b>	<ul style="list-style-type: none"> <li>Summary of decisions taken on key issues as of Q4 2025 agreed by the TWG and ISB</li> </ul>	<ul style="list-style-type: none"> <li>Draft revised Scope 3 Standard and Guidance for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Revised Scope 3 Standard and Guidance</li> </ul>	
<b>Actions and Market Instruments</b>	<ul style="list-style-type: none"> <li>Summary of decisions taken on key issues as of Q4 2025 agreed by the TWG and ISB</li> <li>Targeted public consultation on select key issues related to actions and market instruments at the end of 2025 to inform subsequent standard development</li> </ul>		<ul style="list-style-type: none"> <li>Draft standard and guidance on impacts of actions and market instruments for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Standard and guidance on impacts of actions and market instruments</li> </ul>
<b>Land Sector and Removals</b>	<ul style="list-style-type: none"> <li>Land Sector and Removals Standard and Guidance</li> </ul>			

*Planned GHGP Updates (Source: GHGP)*

## Lessons from CARB's Mandatory GHG Reporting Program

Under California's MRR GHG reporting program, reporting entities, including industrial sources, fuel suppliers, and electricity importers, must report their annual GHG emissions to CARB. As part of its MRR program, CARB implements and oversees a third-party verification

program. All GHG emissions data reports must comply with regulatory requirements and be submitted via an electronic reporting system created by CARB.

To ensure that CARB's new regulations track the evolution of reporting protocols and other advances, CARB can mirror its existing approach to updating its MRR standards. CARB periodically revises the reporting forms and methodologies of its MRR program based on new regulations, technological advancements, and feedback from stakeholders with the ultimate goal of ensuring the accuracy and relevance of collected GHG data. This process frequently involves updating emissions factors and verification procedures.

Three key areas that CARB can look to mirror in its goal of adhering to evolving standards and data include:

- Methodology updates: CARB regularly reviews and updates the calculation methodologies used in MRR to reflect new scientific understanding and policy changes;
- Reporting form revisions: CARB may modify the reporting forms used by entities to collect data based on new reporting requirements or to improve data quality; and
- Public feedback: CARB may solicit feedback from stakeholders, including industry representatives, environmental groups, and other data users, to inform updates.

**3b. 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?**

CARB's climate disclosure regulations under SB 253 and 261 should minimize duplicative efforts for reporting entities while ensuring transparency, comparability, and regulatory rigor. Given the significant overlap between the content of California's requirements and existing reporting frameworks—such as the GHGP, TCFD recommendations, ISSB standards, and the [EU's Corporate Sustainability Reporting Directive \(CSRD\)](#)—CARB is well-positioned to streamline compliance. CARB should retain flexibility to adapt and refine reporting requirements to ensure they serve the state's needs while maintaining interoperability with broader disclosure programs.

Because SB 253 and 261 explicitly reference the GHGP, TCFD, and ISSB, and because many other climate disclosure programs align with these frameworks, CARB can allow reporting entities to satisfy requirements using reports already prepared for other programs—so long as they satisfy the California requirements. Many entities covered under SB 253 and 261 already report or will be reporting under CSRD and/or ISSB-aligned frameworks, which include analogous GHG emissions and climate-related financial risk disclosures. CARB should assess the scale of overlap in covered companies between its Climate Risk Disclosure Programs and these other frameworks and should remain engaged with these entities to track developments and align reporting expectations where possible. CARB could consider developing guidance in consultation with other regulators on how existing disclosures can be leveraged to fulfill

California’s requirements, or even on a “universal” reporting template that would satisfy multiple major jurisdictions’ reporting requirements. Additionally, ongoing interaction with financial regulators and auditing bodies can ensure that California’s verification standards remain consistent with accepted best practices. Steps like these would reduce compliance costs and provide greater clarity to reporting entities operating across multiple jurisdictions, as well as providing greater consistency for end-users of the data.

CARB has an opportunity to design a climate disclosure framework that minimizes duplicative efforts while serving California’s needs. By ensuring interoperability with existing disclosure and verification frameworks, CARB can create a system that is efficient, useful, and adaptable.

Please see further relevant information in response to question 3a above and question 13f below.

**3c. 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?**

To maintain the integrity and comparability of emissions disclosures under SB 253 and 261, CARB should require reporting entities to clearly disclose their chosen reporting method, along with any changes made year over year and the justification for those changes. While flexibility is valuable—allowing companies to adopt improved methodologies as technology advances—frequent or unstructured changes in reporting methods can undermine comparability and obscure emissions trends. CARB can also continue to monitor and assess developments in reporting technologies and practices, and consider standardizing further in the future as appropriate.

### **The Importance of Methodological Transparency**

Different reporting methods can yield substantially different emissions estimates, as demonstrated in [an EDF case study](#). For example:

- **[Market-Based vs. Location-Based Accounting for Scope 2 Emissions](#)** – Electricity-related emissions can be calculated using a market-based approach (reflecting a company’s actual purchased energy contracts) or a location-based approach (using average emissions from the regional grid). Companies should disclose figures derived from both approaches, in line with the GHGP.
- **[Supplier-Specific vs. Industry-Average Data for Scope 3 Emissions](#)** – Some Scope 3 emissions are calculated using supplier-specific data, which can be more precise but requires direct engagement. Many are calculated using industry-average emissions factors or other estimation approaches, which are more readily available but can be less accurate. Information on the source(s) of a company’s Scope 3 emissions figures therefore provides important context for an end-user seeking to interpret the report.

## Standardizing Disclosure of Reporting Methodology

To improve comparability and data integrity, CARB should establish requirements ensuring that reporting entities:

1. **Disclose key aspects of their chosen emissions calculation methodologies** each year, including key approaches (like organizational boundary setting), assumptions, and types of data sources used for Scope 1, 2, and 3 emissions.
2. **Provide justification for significant changes in methodology**, with clear criteria such as advancements in emissions tracking, shifts in energy procurement, material changes in operations, or regulatory requirements.
3. **If significantly changing approach, report emissions under both the prior and new methodology** for at least one transition year to allow for accurate year-over-year comparison. CARB should evaluate and determine the appropriate length of time for requiring entities to report using both methodologies.

A structured approach to method selection and transparency will reduce inconsistencies in data interpretation and improve decision-usefulness for investors, regulators, and other data end-users. CARB should balance flexibility with accountability by allowing companies to adopt the best available reporting methodologies while ensuring full disclosure of methodological choices and changes. Establishing a clear and standardized approach to reporting method selection and transition will enhance the reliability of emissions data, minimize reporting errors, and enable meaningful year-over-year emissions comparisons.

## 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?**

Several independent analyses provide insight into climate risk reporting costs, with the caveat that the disclosures being assessed differ in various respects from those required by SB 253 and 261 (e.g., the SEC and CSRD reporting requirements encompass additional disclosure components beyond GHG emissions and TCFD-aligned disclosures). The [SEC’s final rule](#) includes detailed cost estimates for filers, outlining expenses including third-party assurance, legal fees, and administrative requirements. Similarly, the [CSRD](#) provides projections for listed and non-listed European entities, breaking down administrative and auditing costs for both limited and reasonable assurance. In addition, ERM conducted a [survey](#) on the costs of voluntary climate reporting across industries, including expenditures related to GHG analysis, climate risk scenario planning, and disclosure verification. Together, these datasets offer a strong foundation for beginning to assess compliance costs for California’s Climate Risk Disclosure Programs.

## Factors Influencing Compliance Costs

The cost of compliance varies significantly depending on company size, reporting complexity, and verification requirements. Reporting tends to be more expensive for larger companies, especially those with extensive supply chains, though such entities may also have more sophisticated data, monitoring, and compliance functions to facilitate reporting – and in many cases are already reporting climate risk data under another framework, making for lower incremental costs. The breadth and detail of disclosure required also affects costs, with, for example, GHG emissions and TCFD-aligned reports like those required by SB 253 and 261 being less resource-intensive than the more comprehensive sustainability disclosures required by the CSRD. Third-party assurance is another factor, as the cost varies with the level of scrutiny required. Limited assurance, which involves a lower degree of verification, is less expensive than reasonable assurance, which requires deeper data validation. Companies may need to upgrade internal data management systems to improve emissions tracking and ensure compliance with reporting standards. Additionally, as regulations evolve, businesses may require legal and consulting services to interpret new requirements and align their reporting practices accordingly.

## Cost Savings and Economic Benefits

While climate risk disclosures come with compliance costs, they also generate financial benefits for both covered entities and the end-users of the disclosed data, as well as the broader economy. [Investors benefit](#) from standardized disclosures by reducing their reliance on costly third-party data providers, improving risk assessments, and enabling more informed capital allocation. Financial institutions and rating agencies see cost reductions in data collection and verification, making sustainability assessments more efficient. For [regulated entities](#), a well-structured reporting framework reduces administrative burdens by streamlining compliance processes and minimizing ad hoc data requests from investors and regulators, as well as providing opportunities for benchmarking against competitors and demonstrating value to investors. [Consumers](#), too, gain from clearer and more reliable information on companies' climate risks, which reduces search costs and protects against misleading claims. Overall, the availability of more consistent, higher quality climate risk information improves economic efficiency and resilience.

CARB should consider available cost (and benefit) data from the SEC, CSRD, and ERM analyses, while also considering the broader economic benefits that standardized reporting can create. A well-designed reporting framework can balance compliance costs with market benefits, ensuring transparency without placing unnecessary burdens on reporting entities. Aligning California's requirements with established disclosure frameworks will help reduce redundancies and improve the efficiency of implementation while maintaining regulatory rigor. We encourage CARB to explicitly account for the efficiencies and lower incremental costs of aligned frameworks in its assessment of the economic impacts of its reporting requirements. Please see [comments filed by the Institute for Policy Integrity](#) for additional discussion of these cost-benefit considerations.

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

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

This answer covers questions 5 and 6.

CARB should utilize a reporting system that is readily available before January 1, 2026. Given the significant time associated with building a new reporting system utilizing state resources, we expect this would entail working with one or more third-party providers that have existing systems or tools that will only require modest modifications to meet CARB’s needs rather than building a platform from the ground-up. Contracting with established third-party providers could streamline the reporting process for covered entities that already have experience with those providers and could be more cost-effective, since CARB would be leveraging existing platforms and tools instead of building its own.

There are multiple established companies and nonprofits that could potentially provide services or models for CARB’s reporting system. CARB should ensure that its chosen reporting system, whether developed internally and/or with external providers, has key functionalities for end-users of the disclosed information, including:

- The system should have easy-to-use tools to help generate data and reports in accessible formats, and support comparisons between companies or industry types over time.
- Beyond access to individual reports, it would be highly useful to have functionalities enabling users to download and analyze data from multiple reports.
- CARB should ensure that all disclosed data is freely, easily, and permanently accessible to the public (some existing platforms only allow users to access a limited number of reports for free).

CARB can continue to enhance the functionalities of its reporting system over time as technologies develop and as CARB, reporting entities, and data end-users learn from the experiences of the initial reporting years.

## **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?**

Where the GHGP affords companies flexibility in their reporting, CARB should generally require companies to provide transparency and explanation about the choices they make.



We recommend that CARB provide flexibility to companies in selecting between equity share or control approaches for boundary setting, in line with the GHGP and ISSB. CARB should consider some direction to prevent companies from misapplying the reporting system or obscuring aspects of their operations. For example, CARB should require that reporting entities identify all entities encompassed under their selected boundary approach and include justifications for any exclusions. With regard to [Scope 2 emissions](#), CARB should require companies to disclose both location-based and market-based figures, in line with the GHGP. CARB should also require reporting entities to provide emissions data disaggregated by GHG (i.e., separate figures for carbon dioxide, methane, etc.), as well as reporting CO<sub>2</sub>e (carbon dioxide equivalent) totals, and to report both absolute emissions and emissions intensity.

### **Supporting Advances in Scope 3 Reporting**

SB 253 defines Scope 3 emissions as [indirect upstream and downstream GHG emissions](#), including purchased goods and services, business travel, employee commutes, and the processing and use of sold products. This requirement applies regardless of location, meaning covered entities must track and report total emissions. While Scope 3 assurance is not yet mandated, CARB has indicated that it will [evaluate this requirement in 2027](#), with potential implementation starting in 2030. To address reporting challenges, SB 253 also includes a [safe harbor](#) provision, protecting companies from administrative penalties for good faith misstatements based on a reasonable basis.

For many businesses, Scope 3 emissions are the most complicated to report, since these emissions encompass categories from supplier activities to product use to disposal. Scope 3 emissions also make up the [vast majority of most businesses' carbon footprints](#), making this information highly important to end-users seeking to comprehensively understand a company's climate risks. To account for and report Scope 3 emissions, companies track and/or estimate emissions across multiple tiers of suppliers, partners, and customers. To facilitate this data processing, companies might build out their internal IT systems, enhance supply chain oversight, and invest in personnel who specialize in these processes.

CARB can support companies in effective Scope 3 emissions reporting by providing guidance and resources. Guidelines could include using recognized standards such as the GHGP and ISO 14064-1, engaging the value chain to obtain primary emissions data, integrating technology to streamline data collection and reporting, ensuring regular updates to reflect operational changes, and investing in training to improve reporting quality. Sequencing sector-specific guidance based on sectors with the most significant supply chain emissions—particularly where existing protocols lack clarity—could further improve the usability and comparability of emissions data. In developing such guidance, CARB should coordinate with the entities working on the GHGP update processes. For example, in the aviation sector, guidance on accounting for Sustainable Aviation Fuel (SAF) emissions reductions remains unclear, particularly regarding how different procurement methods affect Scope 3 reporting. Aligning with the CSRD's standardized digital format for Scope 3 reporting would provide consistency and facilitate data integration across regulatory frameworks. CARB should require that companies disclose all 15 categories of Scope 3 emissions as relevant, in line with ISSB and CSRD. Resources for

companies could include the development of reporting tools, calculators, webinars, training, and guidance; EDF's [Net Zero Action Accelerator](#) provides some such resources.

By establishing clear reporting expectations and providing supportive resources, CARB can help companies build effective Scope 3 reporting systems, ensuring that emissions disclosures are reliable, transparent, and actionable. EDF stands ready to provide additional expertise on this complex area as CARB works to refine methodologies, identify key challenges, and develop practical solutions that meet California's policy objectives while aligning with other reporting frameworks.

**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.**

**8a. For entities required to report under SB 253, what options exist for third-party verification or assurance for scope 3 emissions?**

Independent assurance is essential to ensure that reported emissions—particularly Scope 3, where data sources, assumptions, and methods vary—are reliable, decipherable, comparable, and free from conflicts of interest. To achieve this, CARB should establish clear accreditation requirements for third-party verifiers, align with standardized verification methodologies, and promote consistency across assurance providers.

### **Existing Third-Party Assurance Options for Scope 3 Emissions**

Several established verification frameworks provide pathways for third-party assurance of Scope 3 emissions:

- [ISO 14064-3:2019](#): This standard provides guidance for verifying GHG statements, including emissions categories that correspond to Scope 3, even if not explicitly labeled as such. It allows third-party verifiers to validate climate disclosures based on a structured, widely recognized methodology.
- [ISO 14065:2020](#): Accreditation bodies, such as the American National Standards Institute (ANSI), certify verification organizations under this standard, ensuring that they meet general principles for environmental information validation. This system creates a structured pathway for third-party assurance providers to verify emissions statements against ISO 14064-3.

A variety of organizations are accredited to provide validation of ISO 14064, including:

- **Big Four Auditing Firms (PwC, Deloitte, EY, KPMG)** – Frequently engaged for compliance with other climate disclosure verification requirements.



- **Specialized Environmental Consultancies (Bureau Veritas, LRQA, TÜV, DNV, SGS)** – These firms have long-standing expertise in environmental and sustainability assurance.

Please see the response to question 8b below for further discussion of additional sustainability assurance frameworks and expectations. Given that climate disclosure verification is an evolving and growing field, establishing structured validation and accreditation criteria and processes for assurance providers under SB 253 will be essential to maintaining credibility, consistency, and transparency across reporting entities.

### **Transparency and Consistency Across Assurance Providers**

To ensure comparability across companies and reporting years, CARB should establish baseline requirements that all third-party verifiers must adhere to, regardless of the specific firm conducting the assurance. The third-party verifiers should be held to similar regulatory, training, competency, and enforcement standards as verifiers in CARB's MRR program. The baseline requirements should include:

- **Standardized Verification Protocols:** All accredited verifiers should follow the same core methodology for assessing Scope 3 emissions, preventing discrepancies in how emissions are calculated, reported, and assured.
- **Clear Accreditation Criteria:** Assurance providers should demonstrate experience with Scope 3 emissions verification, particularly for industries where upstream and downstream emissions constitute a major portion of total emissions.
- **Publicly Available Verification Criteria:** Transparency in verification requirements ensures that reporting entities, data end-users, and regulators can understand the basis for emissions assessments and compare verification outcomes across entities.
- **Flexibility Without Undermining Standardization:** While companies may utilize different third-party verifiers, the underlying methodologies should be standardized enough to ensure comparability across entities and reporting years.

A well-designed third-party verification system ensures that Scope 3 emissions disclosures under SB 253 are credible, meaningful, and resistant to inconsistencies across reporting entities. By requiring assurance providers to be formally accredited, standardizing verification methodologies, and aligning with widely recognized assurance frameworks, CARB can ensure that emissions data is transparent, rigorous, and useful. A consistent and structured verification system will provide investors, consumers, and regulators with the confidence that reported emissions accurately reflect corporate climate risks while minimizing compliance burdens for reporting entities.

**8b. 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?**

Clear and consistent definitions for limited and reasonable assurance are critical under SB253. While different regulatory programs and assurance standards define these terms with slight variations, their core concepts remain aligned across sectors:

- **Limited assurance** provides a moderate level of confidence in disclosed information, relying on analytical procedures and inquiries rather than extensive testing.
- **Reasonable assurance** offers a high level of confidence, requiring comprehensive verification, including data sampling, substantive testing, and validation of controls.

**Aligning SB 253 Assurance Standards with Established Best Practices**

CARB should consider aligning its definitions with widely accepted assurance frameworks to ensure consistency, durability, and interoperability with other reporting regimes. Several key standards provide a structured basis for defining assurance levels:

- [ISO 14064-3:2019](#)
  - **Limited assurance:** level of assurance where the nature and extent of the verification activities have been designed to provide a reduced level of assurance on historical data and information.
  - **Reasonable assurance:** level of assurance where the nature and extent of the verification activities have been designed to provide a high but not absolute level of assurance on historical data and information.
- [SEC Climate Risk Disclosure Rule](#)
  - Limited assurance is equivalent to the review conducted for interim financial statements (Form 10-Q).
  - Reasonable assurance aligns with the full audit procedures required for annual financial statements (Form 10-K).
- [International Auditing and Assurance Standards Board \(IAASB\) – ISSA 5000](#)
  - The ISSA 5000 standard establishes a detailed framework for conducting both limited and reasonable assurance engagements in sustainability reporting.
- [EU Corporate Sustainability Reporting Directive \(CSRD\)](#)
  - The CSRD will require limited assurance by 2026 and reasonable assurance by 2028, with ongoing discussion on possible alignment with IAASB’s ISSA 5000.
- **California’s MRR**
  - Defines reasonable assurance as a “high degree of confidence that submitted data and statements are valid.”

Given the similarities between these frameworks, CARB should define assurance levels in a way that ensures compatibility with established standards, including existing California regulations.

## **Beyond Definitions: Ensuring Rigor in Assurance Implementation**

While defining assurance levels is necessary, the methodology for achieving these standards is equally important. Assurance should be transparent, standardized, and verifiable across reporting entities to maintain credibility in emissions disclosures. CARB should ensure that:

- **Verification procedures are well-defined** – Limited assurance should focus on reviewing documentation, performing data consistency checks, and interviewing key personnel to assess the plausibility of reported emissions. Reasonable assurance should involve tracing emissions data back to source records, verifying activity data against utility bills or supplier reports, conducting site visits to inspect monitoring equipment, and assessing the effectiveness of internal controls over data collection and reporting.
- **Assurance providers meet high accreditation standards** – Verifiers should be accredited under ISO 14065:2020 or equivalent frameworks approved by CARB to ensure they possess the necessary expertise in GHG emissions verification.
- **Comparability is maintained across reporting years and entities** – The assurance process should be structured so that emissions data remains comparable over time and across companies, avoiding inconsistencies due to variations in verification practices.

CARB has an opportunity to establish assurance standards that are both rigorous and aligned with existing practices. By drawing from ISO 14064-3, IAASB's ISSA 5000, SEC financial assurance frameworks, and the EU CSRD, CARB can ensure consistency, credibility, and durability in climate disclosures under SB 253. The focus should not only be on defining assurance levels but also on ensuring robust implementation standards that maintain transparency, comparability, and reliability across reporting entities.

### **9. How should voluntary emissions reporting inform CARB's approach to implementing SB 253 requirements?**

Many large companies already disclose some of their emissions under a variety of voluntary programs, such as TCFD, the Carbon Disclosure Project ("CDP"), and the Global Reporting Initiative ("GRI"), but as declared in the legislative findings for SB 253, the current system "lacks the full transparency and consistency needed by residents and financial markets to fully understand these climate risks." To the extent possible, CARB's reporting system should align with established reporting practices under widely used frameworks like these – not reinventing the wheel, but bringing greater consistency, reliability, and public accessibility to the existing disclosure landscape. These reporting frameworks have significant track records – over 20 years in some cases – and many large companies in the U.S. already report in line with them. See also the answer to question 4 above, regarding the lower incremental costs of compliance with California's Climate Risk Disclosure Programs for companies that are already reporting such information in other contexts, and the answer to questions 13f-13i below.

## **SB 261: Climate Related Financial Risk Disclosure**

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

**13f. What other types of existing climate financial risk disclosures are entities already preparing?**

**13g. For covered entities that already report climate related financial risk, what approaches do entities use?**

**13h. 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?**

**13i. 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?**

This answer addresses questions 13f-13i.

As demand from investors and other stakeholders for climate risk information grew, multiple voluntary climate risk disclosure frameworks and standards developed, including the CDP, GRI, TCFD, and Sustainability Accounting Standards Board (“SASB”). Over the last several years, these entities and others have achieved notable [harmonization and consolidation](#) under the ISSB, whose standards [numerous jurisdictions](#) are adopting. Interoperability with ISSB therefore represents one of the most important ways for CARB to leverage best practices that have developed over time and minimize duplicative burdens for companies, along with the [EU CSRD](#). Further information on the history and characteristics of each of these initiatives is below.

Founded in 2000, [CDP](#) is a nonprofit aiming to create a reliable and verified system for climate disclosures by providing a structure for data collection and reporting. The CDP website houses a [portal](#) containing questionnaires and guidance, including reporting guidance and scoring methodologies, that companies can access for free. Based on the data that CDP acquires, companies are given a score based on their environmental disclosure and management practices. This [score](#) provides insight into how well an organization is addressing environmental risks, managing emissions, and implementing sustainable practices. Tens of thousands of companies worldwide disclose data through CDP, and its questionnaire is [aligned](#) or has a high degree of interoperability with key frameworks like TCFD, ISSB, and European Sustainability Reporting Standards (“ESRS”).

[GRI](#) is an independent organization founded in 1997 that works with businesses, investors, policymakers, civil society, labor organizations and other experts to develop sustainability

standards. GRI allows entities to publish standardized information on economic, environmental, and social impacts. GRI's system incorporates [three main sets of standards](#): (1) universal standards (providing a foundation for all GRI reporting on topics such as governance, strategy, and management approach); (2) sector standards (providing additional guidance for organizations in specific sectors, such as agriculture, manufacturing, and financial services); and (3) topic standards (providing detailed guidance on specific topics like climate change, human rights, and corruption).

The [TCFD](#) was created by the Financial Stability Board ("FSB") in 2015 with the goal of increasing and improving reporting of climate-related financial information. In 2017, the TCFD released climate-related financial disclosure [recommendations](#) designed to help companies provide better information to support market transparency and more informed capital allocation. In 2021, the TCFD updated its implementation [guidance](#) to address "evolving disclosure practices, new climate data methodologies, and user needs." The TCFD recommendations are structured around four thematic areas that represent core elements of how companies operate: governance, strategy, risk management, metrics and targets. The FSB requested that the TCFD promote the adoption of its framework through 2023 by providing further guidance, supporting educational efforts, preparing annual status reports, and monitoring climate-related financial disclosure practices. Upon delivery of the TCFD's 2023 status report, the FSB determined that the TCFD had fulfilled its stated goal and was disbanded. Now, the [IFRS Foundation](#) has taken over the monitoring and progress of companies' TCFD-aligned [climate-related disclosures](#), and the TCFD recommendations are fully incorporated into the ISSB standards.

The [SASB](#) standards were created in 2011 to help business investors develop common language about the financial impacts of sustainability. The SASB standards contain disclosure topics, associated accounting metrics and technical protocols, and activity metrics for each industry. The guidance contains definitions, scope, implementation, and presentation of applicable accounting metrics. In 2021, SASB announced its intentions to merge with the [International Integrated Reporting Council](#) to form the Value Reporting Foundation ("VRF"). The VRF synthesized resources focused on enterprise value, including the Integrated Thinking Principles, the Integrated Reporting Framework, and the SASB standards. In 2022, the VRF [consolidated](#) into the IFRS Foundation, and the SASB standards serve as [guidance](#) for companies on identifying sustainability risks and opportunities to disclose under the ISSB standards.

The [ISSB](#) is an independent organization that develops sustainability reporting standards. Created in 2021 by the IFRS Foundation, which also houses the International Accounting Standards Board, the ISSB aims to create standards that will result in a high-quality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets. The ISSB has set out four key objectives: (1) to develop standards for a global baseline of sustainability disclosures; (2) to meet the information needs of investors; (3) to enable companies to provide comprehensive sustainability information to global capital markets; and (4) to facilitate interoperability with disclosures that are jurisdiction-specific and/or aimed at broader stakeholder groups. As described above, the ISSB has consolidated or

aligned with many of the key climate risk reporting initiatives, and the ISSB standards are being adopted by numerous jurisdictions.

The EU adopted the [CSRD](#) legislation in 2022 as part of a broader Sustainable Finance Package, which aimed to enhance sustainability reporting for companies in the European Union. The CSRD requires companies above a certain size to disclose information on their risks and opportunities arising from social and environmental issues, including climate. Covered entities must report sustainability data in a standardized digital format, allowing for better understandability and easier comparison between companies. In 2023, the European Commission adopted the European Sustainability Reporting Standards (“ESRS”), which provide more granular direction to companies on complying with the CSRD.

In February 2025, the European Commission released the [Omnibus Package](#), legislation intended to streamline EU regulations. The proposed Omnibus Package would [postpone](#) reporting requirements under the CSRD for entities that have not yet started reporting by two years, limit the extent of value chain reporting required, and reduce the number of required data points, along with modifications to other EU sustainability policies. [Next steps](#) will involve consideration and potential amendments by the European Parliament and European Council, with negotiations expected to occur over the next several months.

CARB should continue to monitor ISSB and CSRD developments as it crafts its regulations and implements its Climate Risk Disclosure Programs, and can look to [insights from EDF](#) and other organizations engaged on these topics.

\* \* \*

EDF thanks CARB for its diligence in implementing the crucial California Climate Risk Disclosure Programs and its consideration of public input. EDF looks forward to continuing to engage supportively throughout the rulemaking and implementation process. Please do not hesitate to contact us.

Respectfully submitted,

Stephanie Jones  
Gabrielle Stephens  
Peter Zalzal  
Environmental Defense Fund  
[sjones@edf.org](mailto:sjones@edf.org)