

March 21, 2025

California Air Resources Board 1001 I Street, Sacramento, CA 95814 P.O. Box 2815, Sacramento, CA 95812

Subject: DEKRA Response Submission to CARB on SB 253 and SB 261 Implementation

Dear CARB Team,

DEKRA is pleased to provide the following detailed responses and recommendations to support the California Air Resources Board (CARB) in effectively implementing Senate Bills 253 and 261, as amended by SB 219. As an organization committed to sustainability and compliance excellence, DEKRA brings extensive experience in emissions verification, climate risk assessment, and sustainability reporting. Our recommendations aim to facilitate clarity, consistency, and efficiency for regulated entities while ensuring rigorous and credible climate disclosures aligned with global best practices.

Please find enclosed DEKRA's responses to the Information Solicitation regarding the implementation of Senate Bills 253 and 261, as amended by SB 219. Our comments address critical areas including cost-effective identification of covered businesses, standards alignment, reporting practices, assurance requirements, and recommendations informed by current voluntary reporting practices.

We appreciate the opportunity to contribute to CARB's efforts in shaping clear, efficient, and effective regulations to achieve California's ambitious climate goals. DEKRA remains available for further discussions or clarifications as needed.

Thank you for considering our input.

Dr. Cem Onus Vice President – Audit, Sustainability DEKRA North America Cem.Onus@dekra.com



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?

DEKRA Response:

While Revenue and Tax Code **23101** provides a clear, established framework for identifying entities doing business in California, it falls short in aligning with the environmental and climate-risk disclosure goals of SB 253 and SB 261. Adopting a hybrid model that combines the \$1B revenue threshold with emissions-based and sector-specific criteria ensures that California's regulatory efforts are both impactful and efficient. These targeted solutions better support the state's goals of transparency, accountability, and meaningful progress toward decarbonization.

Case for Alternative Solutions Focusing on Significant Operations in California

1. Targeting High-GHG Contributors

- **Rationale**: SB 253 and SB 261 emphasize GHG emissions reductions and climate risk disclosures, yet **23101** casts too wide a net, potentially including companies with negligible environmental footprints while missing entities with indirect but substantial emissions contributions (e.g., supply chains).
- **Example**: An e-commerce company generating \$1B in revenue from California without local warehouses or logistics might face requirements, whereas a smaller manufacturing entity with high emissions in California could be overlooked.

2. Aligning Accountability with Environmental Impact

- **Proposal**: Adopt a **hybrid approach** that:
 - Uses the \$1B revenue threshold as a baseline for general reporting obligations.
 - Adds emissions thresholds (e.g., 25,000 metric tons CO2e/year) to capture smaller entities with significant GHG impacts.
 - Focuses additional requirements on key high-emission sectors (e.g., energy, transportation, manufacturing).

3. Ensuring Administrative Efficiency

- **Rationale**: Monitoring compliance using **23101** is administratively straightforward but risks regulatory inefficiency by spreading resources thin across a broad spectrum of companies.
- **Proposal**: Prioritize reporting entities based on:



- **Proximity to California's emissions goals**: Entities affecting transportation, utilities, or agriculture.
- **Operational scale in California**: Companies with substantial facilities, employee bases, or logistics infrastructure.

4. Fairness and Stakeholder Support

- **Rationale**: Applying broad criteria may be perceived as unfair, especially by entities with minimal environmental impacts. Alternatives focusing on emissions or California-specific operations align responsibilities with climate contributions.
- Example: The European Union's Corporate Sustainability Reporting Directive (CSRD) applies emissions and operational size thresholds, ensuring fair and targeted obligations. There is continued drive for further simplification in EU for deploying CSRD.

Analysis of Tax Code 23101 vs. Proposed Alternative Solutions for Addressing GHG Emissions and Climate Risk Disclosure

Criteria	23101 (Broad "Doing Business" Definition)	Proposed Alternatives
Coverage of High- GHG Entities	Captures many businesses deriving revenue from California but not necessarily those with high GHG impacts (e.g., financial services).	Targets entities with significant emissions or operations, prioritizing those with high GHG contributions.
Administrative Feasibility	Relatively simple as 23101 is already widely used for tax purposes.	Sectoral or emissions-based thresholds may require additional data collection and monitoring mechanisms.
Equity Among Businesses	Applies uniformly to entities meeting economic thresholds but can disproportionately impact companies with low GHG emissions.	Tailors obligations to those with substantial environmental impact, aligning responsibilities with contributions to California's climate goals.
Alignment with SB 253/SB 261 Goals	Broad coverage ensures inclusivity but lacks focus on entities significantly impacting California's emissions and climate risk.	Alternatives are more targeted, focusing on large emitters or sectors critical to emissions reductions and climate resilience.
Compliance Burden	Imposes uniform requirements, potentially burdening companies	Emissions-based or tiered reporting reduces unnecessary burdens on low-emission entities



Criteria	23101 (Broad "Doing Business" Definition)	Proposed Alternatives
	with minimal GHG emissions or indirect California operations.	while maintaining accountability for major contributors.
Global and National Relevance	Includes multinational corporations benefiting from California's market, but risks being over-inclusive for minor players.	Aligns with international standards (e.g., GHG Protocol, TCFD), ensuring compatibility with global reporting frameworks while emphasizing California-relevant impacts.
Incentive for Decarbonization	Limited focus on emissions may dilute the motivation for companies to decarbonize operations or supply chains specifically linked to California.	Directly incentivizes reductions by holding entities accountable for their California-related emissions and climate risks.
Public and Stakeholder Perception	Broad application may be perceived as overreach, especially for businesses without significant California-specific environmental impacts.	Enhances credibility by linking reporting obligations to operational or emissions significance, demonstrating fairness and strategic focus.

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

DEKRA Response:

Federal and state government entities should not be classified as "business entities" under SB 253 and SB 261. These laws are designed to hold private-sector businesses accountable for their climate impact, and including government entities would not align with the legislative intent or practical regulatory frameworks. Instead, government transparency and emissions reporting should continue through existing public-sector mechanisms rather than through corporate disclosure mandates.

Reasoning:

1. Legislative Intent and Scope

The primary goal of SB 253 and SB 261 is to increase corporate transparency regarding greenhouse gas (GHG) emissions and climate-related financial risks. The legislation repeatedly refers to "corporations, partnerships, limited liability companies, and other business entities" but does not include government entities in its definition.

• Government entities do not function as businesses in the traditional sense.



- The laws aim to regulate private-sector economic actors that compete in markets and generate emissions tied to profit-driven activities.
- 2. Regulatory Frameworks Typically Exclude Government Agencies
 - Existing corporate climate disclosure laws, including federal SEC reporting rules and international Task Force on Climate-Related Financial Disclosures (TCFD) standards, apply to business entities, not government agencies.
 - The Revenue and Tax Code Section 23101, which defines "doing business in California," is intended for tax purposes and does not traditionally apply to government agencies.

3. Legal and Constitutional Barriers

- Imposing corporate-style reporting requirements on federal and state government entities could face legal challenges under sovereign immunity protections.
- State agencies already operate under public transparency laws, such as the California Public Records Act (CPRA) and state environmental reporting laws.
- Federal agencies must comply with federal environmental reporting standards (e.g., EPA's greenhouse gas reporting program), making additional state mandates legally complex.

4. Redundancy and Administrative Burden

- Many government entities already voluntarily disclose environmental impact data under existing regulations.
- Requiring them to file additional corporate-style reports would add unnecessary administrative costs with minimal public benefit.

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

DEKRA Response

SB 253 and SB 261 should cover entities that are owned in part or wholly by a foreign government, if they meet the revenue threshold and conduct business in California. This ensures that all large economic actors—whether privately owned or state-owned—are held accountable for their greenhouse gas emissions and climate-related financial risks. Excluding foreign State-Owned Entities would create an unfair exemption and undermine the effectiveness of the laws.

Reasoning:

- 1. Legislative Intent to Ensure Transparency from All Large Market Participants
 - SB 253 and SB 261 are designed to increase corporate transparency for entities that "do business in California" and have annual revenues exceeding \$1 billion (SB 253) or \$500 million (SB 261).
 - The legislation does not distinguish between private corporations and stateowned enterprises (SOEs) or businesses with foreign government ownership.
 - The intent is to level the playing field so that all large companies, regardless of ownership structure, disclose their emissions and climate-related financial risks.
- 2. Precedents in International and U.S. Disclosure Laws



- The U.S. Securities and Exchange Commission (SEC) already requires foreign companies that issue securities in the U.S. to disclose financial and environmental risks.
- The Task Force on Climate-Related Financial Disclosures (TCFD), which informs SB 261, applies to all large financial institutions, including those owned by governments.
- The European Union's Corporate Sustainability Reporting Directive (CSRD) applies to non-EU companies that generate significant revenue within the EU, including state-owned enterprises (SOEs).

3. Foreign State-Owned Enterprises (SOEs) Compete with Private Firms

- Many foreign SOEs, such as China National Petroleum Corporation (CNPC), Saudi Aramco, or major European energy firms, operate for-profit businesses in California.
- If privately owned corporations must comply with GHG disclosure laws, then SOEs should be held to the same standard to prevent unfair competitive advantages.
- 4. Climate and Economic Risks Are Not Limited to Privately Owned Businesses
 - Foreign government-backed entities often have significant environmental footprints and contribute to California's climate risk exposure.
 - Exempting them would create a loophole, allowing foreign SOEs to avoid disclosure obligations while competing in California's economy.

5. Existing Legal Authority to Regulate Foreign-Owned Entities

- California has legal precedent to impose state-level regulations on foreignowned businesses operating within its jurisdiction (e.g., taxation, labor laws).
- The laws do not attempt to regulate foreign governments themselves, but rather business entities engaging in commerce within California, which is legally enforceable.

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?

DEKRA Response

1. Regulatory Consistency and Market Participation

Entities participating in California's energy markets benefit from the state's infrastructure, policies, and consumer base. Even if they are not physically located within California, their participation in the state's energy transactions has a direct impact on **greenhouse gas (GHG) emissions** and **climate-related financial risks**. Given that California is a global leader in climate policy, it is important that **all market participants are held to the same reporting and disclosure standards** to ensure **regulatory consistency** and **a level playing field**.

2. Addressing Carbon Leakage and Emissions Accountability

The **import of electricity, goods, or services** into California, particularly from fossil fuel-based sources, contributes to the state's overall carbon footprint. If out-of-state entities participating in these markets are **not required to disclose emissions**, this could create **a loophole that incentivizes emissions outsourcing**, commonly known as **carbon leakage**. Including these entities under **SB 253 and SB 261** ensures that California receives **a complete picture of its climate impact** and prevents regulatory gaps that could lead to **underreported emissions**.



3. Alignment with California's Existing Climate Policies

California already regulates emissions from **electricity imports** under the **California Air Resources Board (CARB) Mandatory Greenhouse Gas Reporting Program** and the **Cap-and-Trade Program**. Extending **SB 253 and SB 261** requirements to market participants selling energy or other goods/services into California aligns with these **existing frameworks** and ensures a **consistent approach** across all sectors.

4. Transparency and Market Integrity

Entities benefiting from California's economy and infrastructure should be required to provide **transparent climate disclosures**, just as in-state businesses are. Ensuring **uniform disclosure** from all market participants allows **investors, consumers, and regulators** to make **fully informed decisions** about the risks associated with climate change and carbon emissions.

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?

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?

Cost-Effective Identification of Covered Businesses:

The covered entities under California's SB 253 and SB 261 are determined by clearly defined annual revenue thresholds:

- SB 253: Applies to entities with annual revenues exceeding \$1 billion doing business in California, requiring annual reporting of greenhouse gas (GHG) emissions (Scopes 1, 2, and 3).
- **SB 261**: Applies to entities with annual revenues exceeding **\$500 million** doing business in California, requiring biennial disclosure of climate-related financial risks.

(a) Recommended Databases or Datasets for Identifying Private Companies:

Recommended Databases:

- 1. Dun & Bradstreet (D&B) Hoovers Database
 - **Advantages**: Comprehensive financial, operational, and organizational data; includes revenue data, parent/subsidiary relationships, and detailed corporate structures.
 - **Frequency**: Updated frequently (typically quarterly); financial data are refreshed annually based on company filings.



• **Verification**: D&B cross-checks information through multiple public and proprietary sources, and provides a confidence score or verification rating for data.

2. FactSet or Bloomberg

- **Advantages**: Detailed financial information and analytics, ownership structures, company revenue, and global operations.
- **Frequency**: Continuously updated; financial data updated quarterly/annually based on public disclosures.
- **Verification**: Uses rigorous verification methods, including review of official filings, annual reports, SEC filings (for companies that report publicly), and independent verification processes.

3. Standard & Poor's Capital IQ

- **Advantages**: Robust data on private companies, including revenues and organizational hierarchy (parent/subsidiary structures).
- **Frequency**: Updated quarterly; private company data are reviewed and refreshed at least annually.
- **Verification**: Information sourced from audited statements, company-provided data, and independent verification sources.
- 4. PrivCo
 - **Advantages**: Specializes in private company data, making it highly relevant for entities that don't publicly disclose their revenues.
 - Frequency: Annual updates and continuous monitoring of available financial records.
 - **Verification**: Compiles data from multiple verifiable sources, including direct company disclosures, investor reports, and audited statements.
- 5. California Franchise Tax Board (FTB) and Secretary of State
 - **Advantages**: Direct and authoritative governmental records of company registration, business activity, and tax filings within California.
 - **Frequency**: Annual (linked with tax filing deadlines).
 - Verification: Official state sources and verified via tax returns.

(b) Recommended Methods for Tracking Parent/Subsidiary Relationships:

Ensuring that CARB clearly identifies companies reporting under a parent company structure requires precise tracking methods:

1. Entity Identifier Systems:

- LEI (Legal Entity Identifier): A global standard that clearly identifies legal entities and parent/subsidiary relationships. Ensuring entities disclose LEIs can significantly streamline tracking corporate hierarchies.
- DUNS numbers (via Dun & Bradstreet): Provide explicit identifiers and parent-child organizational structures.
- 2. Mandatory Disclosure Requirements:



- Regulations could explicitly require companies to list all subsidiaries, parent entities, and affiliated companies operating in or doing business within California in their initial reporting.
- Annual verification and updating requirements would help maintain accuracy in the database.

3. Integrated Public-Private Data Platforms:

- Creating a dedicated, digital reporting platform (as proposed under SB 253) operated by CARB or a contracted emissions reporting organization, integrating data from verified sources listed above.
- Ensuring the platform has advanced filtering and aggregation capabilities for analyzing parent/subsidiary relationships and corporate groups.

4. Regular Cross-Verification Against Federal Data Sources:

 IRS filings (where accessible) and SEC disclosures (for entities with publicly traded parent companies) provide reliable references for verification and cross-checking subsidiary ownership.

Recommended Frequency of Verification:

- Annual verification of reporting entities' revenues, parent-subsidiary structures, and California business activity is recommended to align with annual reporting requirements under SB 253 and biennial reporting under SB 261.
- Cross-referencing against authoritative databases (like D&B, Capital IQ, Bloomberg, or PrivCo) and government records annually is sufficient, complemented by more frequent (quarterly or semi-annual) spot-checks for high-risk or rapidly changing industries/entities.

Summary of Recommendations:

CARB should:

- Leverage specialized corporate databases (D&B Hoovers, Bloomberg, FactSet, Capital IQ, PrivCo) for accurate annual revenue and corporate structure data.
- Integrate government sources (FTB, Secretary of State records) as authoritative baseline data.
- Mandate explicit identification (LEI or DUNS number) for robust tracking of parent/subsidiary structures.
- Establish a centralized digital platform or reporting system, which consolidates and maintains verified corporate data, offering transparency and auditability.
- Perform annual verification cycles aligned with reporting periods mandated by SB 253 and SB 261.

By following these steps, CARB can cost-effectively and accurately ensure compliance with California's climate disclosure laws.



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?

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?

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?

3(a) Ensuring California-Specific Needs and Alignment with Evolving External Standards:

To ensure CARB's regulations both meet California-specific needs and stay current with evolving external standards (e.g., Greenhouse Gas Protocol, Task Force on Climate-related Financial Disclosures (TCFD), IFRS Sustainability Standards), CARB should adopt a strategic and structured approach:

Recommendations:

- 1. Regular Review and Update Cycle:
 - Periodic Review: Mandate CARB regulations to undergo formal review every 2-3 years or immediately following significant updates to incorporated external standards.
 - Advisory Committees: Create a standing expert advisory panel, including representatives from California-based industry, academia, environmental justice communities, and relevant NGOs, to monitor and advise on external standards.

2. California-Specific Addenda:

- Implement California-specific addenda or supplemental guidance that augment the chosen external standards, clearly highlighting state priorities such as environmental justice, wildfire risks, drought adaptation, water scarcity, and public health impacts, which may not be fully addressed by external protocols.
- 3. Formal Mechanism for Tracking Changes:



- Develop a dedicated compliance and standards tracking team within CARB to continuously monitor and track changes to external standards (e.g., GHG Protocol, TCFD updates, ISSB guidance).
- Establish clear **triggers** (e.g., major updates to standards, emerging scientific or policy developments) to prompt CARB regulatory reviews or amendments.

4. Stakeholder Engagement:

 Facilitate regular (annual or biennial) stakeholder engagement forums to gather feedback from entities affected by regulations, ensuring CARB's approach remains pragmatic, feasible, and effective.

3(b) Minimizing Duplication of Reporting Efforts:

CARB can substantially reduce duplication of effort for entities required to report emissions or financial risks under other mandatory frameworks (such as federal SEC requirements, international reporting, or existing California-specific regulations):

Recommendations:

1. Interoperability with Existing Standards:

 CARB regulations should explicitly allow entities to submit equivalent disclosures from other established standards (e.g., SEC, CDP, IFRS Sustainability Standards, EU's Corporate Sustainability Reporting Directive (CSRD)), provided those disclosures meet minimum CARB-defined criteria and address all statutory requirements.

2. Single Submission Platform:

 Create or utilize a single integrated reporting platform or "digital hub" that allows entities to upload **one comprehensive report** meeting multiple requirements, which can then be parsed or tagged for use by CARB and other state or federal agencies.

3. Standardized Crosswalks:

- Publish and regularly update an official "crosswalk" document clearly mapping CARB requirements to corresponding requirements of other major external reporting frameworks.
- Offer clear guidance on areas where additional supplemental information is necessary to meet CARB-specific requirements.

4. Alignment of Reporting Timelines:

 Synchronize CARB's reporting deadlines with existing national or international reporting deadlines, such as SEC filing periods, CDP annual disclosure deadlines, or voluntary industry reporting cycles, minimizing burden on reporting entities.

5. Recognition of Third-party Verification:

 Clearly define and accept existing third-party assurance or verification provided for other frameworks, provided that the verification meets the quality and independence standards defined by CARB.



CARB must balance flexibility (to accommodate evolving practices and standards) with the need for consistent year-over-year comparisons of reported data:

Recommendations:

1. Consistency Requirement:

- Entities should initially select one reporting method from the permitted methodologies (e.g., as defined by the GHG Protocol or TCFD frameworks) and maintain consistency year-over-year, unless a justified rationale for a methodology shift is formally approved by CARB.
- Clear guidance should be provided by CARB outlining what constitutes an acceptable rationale for switching methods (e.g., methodological improvements, changes in international standards, mergers/acquisitions, or material changes in business operations).

2. Disclosure of Methodology Changes:

 Mandate clear and prominent disclosure in reporting documents of any change in reporting methodology, including the reasons for the change and an explicit reconciliation or comparison to prior years' reporting methods to maintain transparency and comparability.

3. Standardization of Critical Reporting Elements:

 Identify critical data elements (e.g., boundary setting, emissions factors, scope 3 estimation methodologies, or financial risk parameters) and prescribe or strongly encourage standardized approaches for these key elements to ensure comparability and credibility.

4. Transition Guidance and Grace Periods:

If entities must transition methods due to evolving external standards, CARB should provide detailed transition guidance, a transitional compliance period, and clear instructions for historical data recalculations.

Summary of Recommendations:

- Conduct periodic reviews aligned with external standards updates.
- Maintain California-specific guidance and stakeholder committees for localized context.
- Minimize reporting duplication through interoperability, platform consolidation, and standardized crosswalks.
- Require year-to-year consistency in methodologies while allowing changes only with justified approval.
- Promote transparency regarding any methodology changes to ensure comparability and integrity of disclosures.

By implementing these recommendations, CARB can achieve a robust, transparent, and efficient implementation of SB 253 and SB 261, aligned with external standards while effectively addressing California's unique needs.



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?

To assist CARB in identifying and analyzing costs for voluntary reporting and anticipating fiscal impacts related to SB 253 and SB 261 compliance, here are clear and actionable recommendations addressing available public datasets, critical cost factors, and data sources CARB should consider.

Public Datasets Identifying Voluntary Reporting Costs:

Currently, there is no single centralized dataset explicitly detailing voluntary reporting costs incurred by companies across all industries; however, several resources provide proxies or estimates that CARB can leverage:

- 1. CDP (Carbon Disclosure Project) Reports
 - What: CDP annually publishes extensive data on thousands of companies voluntarily reporting Scope 1, 2, and 3 emissions, climate risk management practices, and associated expenditures.
 - **Usefulness:** CDP disclosures often indicate the resources companies dedicate to reporting, including references to verification fees and internal administrative burdens.
 - Availability: Publicly accessible annual datasets and reports (CDP.net).

2. Corporate Sustainability Reports (CSR)

- **What:** Many large corporations issue annual sustainability or ESG (Environmental, Social, Governance) reports voluntarily, often indicating investments made in compliance, data collection, audits, and assurance processes.
- **Usefulness:** Provides qualitative and quantitative information on internal/external resource allocation to climate disclosure.
- Availability: Company websites and ESG-focused platforms such as the Global Reporting Initiative (GRI) or company investor relations sites.

3. SEC Climate Disclosure Comment Letters

- What: U.S. SEC public records on comments and discussions around proposed climate disclosure rules, including cost discussions and estimates submitted by publicly traded companies.
- **Usefulness:** Direct statements on estimated costs, particularly for Scope 3 emissions disclosures and assurance services.
- Availability: SEC public comment letters (<u>SEC.gov</u>).
- 4. EU Corporate Sustainability Reporting Directive (CSRD) Impact Assessments
 - **What:** Public studies conducted by EU agencies assessing anticipated costs and burdens of corporate sustainability and climate reporting.
 - **Usefulness:** Benchmarking international compliance costs for similar regulatory requirements.



• **Availability:** EU Commission websites and official CSRD publications (<u>European</u> <u>Commission</u>).

Factors Affecting the Cost of Compliance:

Several critical factors influence the costs or anticipated costs of entities complying with California's SB 253 and SB 261:

1. Company Size & Complexity

- Larger, more complex organizations (multiple business units, diverse supply chains) generally incur higher costs.
- Increased costs related to data collection, third-party verification, and more comprehensive reporting processes.

2. Current Reporting Capabilities

• Companies already voluntarily reporting under GRI, CDP, TCFD, or SEC rules have lower incremental compliance costs compared to those starting from scratch.

3. Scope 3 Data Collection & Verification

• Significant costs are driven by collection and verification of Scope 3 (indirect supply chain) emissions due to complexity and reliance on external sources or suppliers.

4. Third-party Assurance Costs

- Mandatory third-party assurance or verification substantially adds to compliance costs.
- Costs escalate as the level of assurance moves from "limited" to "reasonable" assurance.

5. Reporting Frequency

- Annual reporting (as required by SB 253) incurs recurring annual administrative and thirdparty verification expenses.
- Biennial reporting (SB 261) reduces annual costs but may involve significant one-time biennial reporting and risk-assessment expenses.

6. Technology & Software Costs

• Implementing and maintaining robust GHG inventory software or risk disclosure management systems adds upfront investment and recurring licensing/subscription fees.

7. Internal Labor and Expertise

• Costs related to hiring or training internal staff to develop, monitor, and maintain reporting frameworks.

Data Sources CARB Should Rely on for Fiscal Impact Assessments:

CARB should leverage multiple sources and methodologies to reliably assess fiscal impacts:

1. Surveys & Industry Consultations

• Conduct targeted surveys with industry representatives, companies already voluntarily reporting emissions or climate risks, and assurance providers to estimate current and anticipated compliance costs.



2. Case Studies

• Review and analyze real-world examples and reports from companies of varying sizes and industries to build representative cost estimates and compliance scenarios.

3. Regulatory Impact Assessments from Other Jurisdictions

• Leverage detailed fiscal impact analyses conducted by the SEC, EU (CSRD), Canada, UK, Australia, and other jurisdictions with comparable regulations.

4. Professional & Industry Reports

• Reports from consulting firms (e.g., EY, Deloitte, PwC, KPMG, McKinsey) on the cost of ESG and climate disclosure can provide credible benchmarks.

5. Academic & Institutional Research

• Use studies by think tanks, academic institutions (e.g., UC Berkeley, Stanford, Columbia Climate School), and environmental economics research groups that quantify climate-related disclosure costs.

6. Third-party Assurance Providers

• Directly gather estimates from assurance and auditing companies (Big Four and specialized environmental verification organizations) on typical verification and assurance costs, including factors influencing cost variation.

Recommended Approach for CARB's Fiscal Impact Analysis:

- **Quantitative Cost Modeling**: Use data points from CDP reports, SEC filings, industry consultations, and professional reports to model compliance costs based on business size, sector, and current reporting status.
- **Scenario Analysis**: Evaluate multiple scenarios (e.g., high vs. low-cost scenarios, varying scope 3 verification rigor) to account for uncertainty and variation in costs.
- Transparency & Stakeholder Feedback: Clearly document and communicate assumptions used in fiscal analyses, allowing stakeholders to provide input or alternative data for accuracy and credibility.

Summary of Recommendations:

- Leverage existing voluntary reporting data from CDP, CSR, SEC, and CSRD reports.
- Explicitly identify and analyze key cost drivers such as reporting complexity, scope 3 emissions, assurance, and internal resources.
- Use a combination of industry surveys, professional reports, regulatory impact assessments from comparable jurisdictions, and expert consultations.
- Implement robust, transparent, and scenario-based fiscal impact analyses to ensure comprehensive understanding of anticipated compliance costs.

By following these recommendations, CARB can effectively estimate and communicate the fiscal impacts and anticipated costs of compliance with SB 253 and SB 261, ensuring accurate regulatory assessments and effective policy implementation.



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

Determining whether the state (CARB) should require direct reporting or contract out reporting responsibilities to an external "emissions" and/or "climate" reporting organization involves weighing the benefits and trade-offs associated with each approach. Below is a structured analysis and recommendation based on best practices and practicality for SB 253 and SB 261 implementation.

Analysis of Reporting Approaches:

Option A: Direct Reporting to CARB

Advantages:

- **Full Control & Oversight:** CARB would have direct and complete oversight of data collection, analysis, and disclosure processes.
- **Transparency & Accountability:** Greater ability for CARB to directly engage with reporting entities and ensure compliance.
- **Data Security:** Sensitive financial and operational data remain directly under state government stewardship.

Disadvantages:

- **Resource Intensive:** Requires significant investment in technology, staffing, and infrastructure.
- **Implementation Timeline:** May take longer to develop robust data collection and management systems in-house.
- **Expertise & Scalability Constraints:** Limited immediate access to specialized expertise and flexibility compared to specialized reporting organizations.

Option B: Contracting Out to a Specialized Emissions and/or Climate Reporting Organization

Advantages:

- **Established Infrastructure:** External organizations (e.g., CDP, ISSB-aligned entities, The Climate Registry) already have sophisticated platforms and experienced staff, reducing implementation time and initial investment.
- **Specialized Expertise:** Access to existing specialists in GHG accounting, climate-risk disclosures, data management, and assurance standards.
- **Cost-effectiveness:** Leveraging existing systems may reduce overall regulatory costs and allow CARB to scale efficiently.

Disadvantages:

- **Reduced Direct Oversight:** Potential for less immediate control over data collection and reporting nuances.
- **Contract Management Risks:** Reliance on external entities introduces potential vulnerabilities such as vendor dependency or performance risks.



• **Transparency and Confidentiality:** Ensuring transparency, data integrity, and handling of confidential business information requires clear contractual agreements and oversight.

Recommended Approach:

Given the scale, complexity, and timelines associated with SB 253 and SB 261, the optimal approach is to **contract out reporting to specialized emissions/climate reporting organizations** under carefully defined conditions, combined with robust CARB oversight and management.

Rationale for Recommended Approach:

1. Efficiency and Rapid Implementation:

• CARB can leverage existing reporting platforms and established processes (e.g., CDP, The Climate Registry, or similar providers) to expedite implementation and ensure timely regulatory compliance.

2. Cost-effectiveness and Reduced Administrative Burden:

• Contracting experienced external organizations reduces the initial capital expenditure, streamlining operations and minimizing overhead costs for CARB and reporting entities.

3. Specialized Expertise and Industry Confidence:

• Emissions reporting organizations possess the technical knowledge required for comprehensive scope 1, 2, and particularly complex scope 3 emissions accounting, as well as financial-risk disclosure under frameworks such as TCFD.

4. Scalability:

• External reporting organizations are more adaptable and better equipped to handle potential increases in reporting volumes and complexity over time.

5. Best-Practice Alignment and Comparability:

• External reporting providers typically align with global standards, ensuring CARB's regulations remain aligned and comparable internationally (e.g., with SEC rules, EU CSRD, ISSB standards).

Essential Conditions for Contracting Out Reporting:

To mitigate risks and ensure optimal implementation, CARB should adopt the following conditions when contracting:

1. Robust Governance and Oversight:

• CARB must retain strong oversight of the contractor, including performance metrics, data transparency requirements, regular audits, and clear compliance benchmarks.

2. Data Transparency & Public Accessibility:

• Ensure that all data collected by the external reporting organization is fully accessible to CARB and is transparently disclosed through an official, CARB-managed, public-facing digital platform.

3. Data Privacy & Security Standards:



 Contractually enforce stringent data privacy, security, and confidentiality standards to protect sensitive corporate information.

4. Alignment with CARB's Specific Regulatory Goals:

• Require contractors to explicitly incorporate California-specific elements, such as environmental justice considerations, regional climate impacts, and state-specific policy objectives, into their reporting frameworks.

5. Transition and Contingency Planning:

• Clearly define contract durations, performance reviews, renewal criteria, and establish contingency plans to transition to alternative reporting mechanisms if necessary.

6. Independent Third-party Assurance:

• Mandate that reporting data undergoes robust third-party verification or assurance, ensuring accuracy and reliability.

Conclusion and Summary Recommendation:

- **Contracting out reporting functions** to experienced, specialized emissions/climate reporting organizations (such as CDP, The Climate Registry, or equivalents) is recommended as the optimal approach for CARB, provided stringent oversight, transparency, security, and alignment conditions are met.
- CARB should maintain clear governance mechanisms and robust standards to ensure the effectiveness and integrity of external reporting processes, thereby balancing efficiency, accuracy, and accountability.

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

Recommended Non-Profit Organizations:

1. CDP (formerly Carbon Disclosure Project)

- Type: Non-profit
- Overview:
 - o Global leader in voluntary GHG emissions and climate risk disclosures
 - Operates an established online disclosure platform used by thousands of companies worldwide
 - Aligns reporting with major frameworks (GHG Protocol, TCFD, ISSB standards)
- Key strengths:
 - Comprehensive Scopes 1, 2, and 3 reporting



- Robust benchmarking and analytics
- Strong data transparency and stakeholder confidence
- Website: cdp.net

2. The Climate Registry (TCR)

- Type: Non-profit
- Overview:
 - o Operates a voluntary GHG registry across North America
 - Provides standardized, rigorous emissions accounting and third-party verification processes
 - Works closely with states, local governments, and companies
- Key strengths:
 - o Deep experience in state-level regulatory programs
 - Strong existing relationship with CARB and familiarity with California regulatory context
- Website: theclimateregistry.org

3. Ceres

- Type: Non-profit
- Overview:
 - o Facilitates corporate sustainability disclosure and ESG reporting
 - Specializes in climate risk and sustainability reporting aligned with frameworks such as TCFD
 - Advises large corporations and investors on climate disclosure
- Key strengths:
 - o Expertise in climate-related financial risk disclosure
 - \circ $\;$ Established credibility with investor and business communities
- Website: <u>ceres.org</u>

4. Global Reporting Initiative (GRI)

- Type: Non-profit
- Overview:
 - Provides globally recognized standards for sustainability and GHG emissions reporting
 - o Comprehensive reporting methodology widely adopted internationally



- Key strengths:
 - Long-established global standards
 - Excellent alignment with other frameworks (e.g., CDP, TCFD, IFRS Sustainability standards)
- Website: globalreporting.org

Recommended Private Companies:

Greenly (via DEKRA)

- Type: Private
- Overview:
 - Provides comprehensive emissions reporting, climate disclosure management, and advanced analytics through an intuitive digital platform designed to simplify carbon accounting and sustainability reporting.
- Key strengths:
 - User-friendly interface that simplifies complex emissions calculations and sustainability data management.
 - Strong analytics and data visualization capabilities enabling effective identification, management, and reduction of emissions.
 - Efficient integration capabilities to seamlessly connect with existing business systems and streamline reporting processes.
- Website: greenly.earth

EcoVadis

- Type: Private
- Overview:
 - Operates a sustainability ratings platform, including emissions data collection and verification
 - o Comprehensive Scope 3 reporting support through extensive supplier networks
- Key strengths:
 - Strong expertise in managing complex supply-chain emissions reporting (Scope 3)
 - Advanced digital platform
- Website: ecovadis.com

2. Sphera (formerly thinkstep/GaBi)

- Type: Private
- Overview:
 - Software provider for GHG emissions accounting, life-cycle assessments, and ESG data management
 - Offers integrated cloud-based sustainability reporting tools
- Key strengths:



- Advanced emissions-calculation methodologies (Scopes 1, 2, and especially 3)
- Excellent data-analytics capabilities
- Website: <u>sphera.com</u>

3. Sustain.Life (Workiva)

- Type: Private
- Overview:
 - Provides cloud-based sustainability and emissions reporting software
 - o Simplifies emissions data collection, calculation, and reporting

• Key strengths:

- o User-friendly platform suitable for diverse corporate users
- Supports multiple reporting standards (GHG Protocol, TCFD)
- Website: <u>sustain.life</u>

4. Persefoni

- Type: Private
- Overview:
 - Specializes in SaaS-based emissions accounting aligned with global standards (GHG Protocol, SEC, ISSB, TCFD)
 - o Comprehensive emissions data management and verification platform
- Key strengths:
 - Advanced Scope 3 reporting and analytics
 - o Strong capability for regulatory compliance support
- Website: persefoni.com

5. Salesforce Net Zero Cloud (formerly Salesforce Sustainability Cloud)

- Type: Private
- Overview:
 - Provides emissions reporting, climate disclosure management, and analytics integrated within Salesforce's broader platform
- Key strengths:
 - o Seamless integration for companies already using Salesforce CRM
 - Strong analytics and reporting capabilities
- Website: <u>salesforce.com/products/net-zero-cloud</u>



Summary Recommendations:

- Non-profit reporting providers:
 - CDP, The Climate Registry, and Ceres are highly recommended based on extensive experience, existing regulatory alignment, and credibility within corporate and investor communities.
 - **GRI** standards are also recommended as a complementary standard-setting organization.
- Private companies/software providers:
 - Greenly (DEKRA), EcoVadis, Sphera, Persefoni, and Salesforce Net Zero Cloud offer powerful digital tools and analytics platforms suitable for emissions and climaterisk reporting.
 - These providers could serve as software or technology partners, complementing a non-profit reporting organization contracted for management and oversight.

Recommended Optimal Approach for CARB:

A hybrid contracting model that leverages:

- One central non-profit organization (e.g., CDP or The Climate Registry) to manage overall reporting, assurance, and regulatory oversight.
- Specialized private software providers (e.g., Greenly, Persefoni, Sphera) as technology partners or recommended service providers for regulated entities.

This approach maximizes expertise, efficiency, cost-effectiveness, and regulatory alignment, ensuring CARB meets legislative requirements promptly and effectively.

7. Entities must measure and report their emissions of greenhouse gases in conformance with the GHG Protocol, 1 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?

Yes, there are several specific areas within **Scopes 1**, **2**, **and 3 emissions reporting** where CARB should strongly consider standardizing requirements. While flexibility is important to accommodate diverse business structures and operations, standardization in key areas ensures **comparability**, **transparency**, **accuracy**, **and auditability** across reporting entities, crucial to the success of SB 253 implementation.

Below are clear recommendations on specific aspects to standardize:

Scope 1 (Direct Emissions) Standardization Recommendations:

1. Operational and Organizational Boundary Definitions

• **Recommendation:** Require all entities to consistently use either the **operational control approach**



(recommended) or clearly mandate the financial control approach for setting boundaries, per the GHG Protocol.

Justification:

Ensures comparability of emissions reports and clarity around responsibility.

2. List of Mandatory GHGs to Include

Recommendation:

Clearly define and require reporting of the six primary Kyoto gases:

- Carbon dioxide (**CO**₂)
- Methane (CH₄)
- Nitrous oxide (**N**₂**O**)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)

• Justification:

Harmonizes reporting across entities and aligns with existing global frameworks (e.g., GHG Protocol, CDP).

3. Emission Factors

• Recommendation:

Require standardized, CARB-approved emission factors (e.g., from EPA, IPCC, or CARB-specific values) to ensure consistency. Allow use of custom or industry-specific factors only if clearly justified and independently verified.

• Justification: Consistent emission factors improve comparability and auditability of emissions reports.

Scope 2 (Indirect Emissions from Purchased Energy) Standardization Recommendations:

1. Dual Reporting Approach (Location-based & Market-based)

• Recommendation:

Mandate that entities must report Scope 2 emissions using **both location-based and market-based methods**, clearly indicating renewable energy procurement or emissions reductions from energy purchases.

• Justification:

Provides clarity and transparency on energy choices, ensuring accurate reporting of emissions impacts from renewable energy procurement.

2. Standardized Emission Factors for Grid Electricity

• Recommendation:

Require entities to use standardized CARB-defined or EPA eGRID emission factors for location-based reporting.

• Justification:

Facilitates transparent comparison across entities operating in similar geographic areas.

3. Treatment of Renewable Energy Credits (RECs)



• Recommendation:

Clearly specify rules for counting RECs (Renewable Energy Certificates) in Scope 2 calculations, requiring standardized and independently verified retirement and disclosure of RECs.

• Justification:

Prevents double-counting and ensures the integrity of renewable energy claims.

Scope 3 (Indirect Upstream and Downstream Emissions) Standardization Recommendations:

Scope 3 has the highest complexity, variability, and potential ambiguity, so rigorous standardization is particularly crucial:

1. Mandatory Scope 3 Categories

• Recommendation:

Require all entities to report, at a minimum, on the following **key Scope 3 categories** clearly defined by the GHG Protocol:

- Category 1: Purchased goods and services
- Category 4: Upstream transportation and distribution
- Category 5: Waste generated in operations
- o Category 6: Business travel
- Category 7: Employee commuting
- Category 9: Downstream transportation and distribution
- Category 11: Use of sold products (especially relevant for product-based businesses)

• Justification:

Mandating common Scope 3 categories significantly enhances comparability, targets the largest sources of indirect emissions, and aligns with international best practices.

2. Data Quality and Estimation Methods

• Recommendation:

Require standardized **data quality criteria**, clearly specifying when and how primary data should be used, and the conditions under which secondary (industry-average) or proxy data are permitted.

• Justification:

Improves credibility, transparency, and comparability of emissions data, especially within Scope 3.

3. Apportionment of Emissions in Shared Ownership or Complex Supply Chains

• Recommendation:

Clearly standardize how entities allocate emissions from shared assets or supply chain operations, recommending usage of GHG Protocol's allocation methods (e.g., by economic value, operational control, or physical proportion).

• Justification:

Prevents inconsistencies and double-counting in multi-party scenarios.

4. Supply Chain Emissions Factors



• Recommendation:

Develop and mandate standardized emission factors or require use of reputable, preapproved databases (such as EcoInvent, EPA EEIO databases, or industry-specific standard emissions databases).

• Justification:

Ensures consistent and robust estimation of Scope 3 emissions, especially from purchased goods/services and transportation.

Cross-Cutting Standardization Recommendations (All Scopes):

1. Baseline Year and Recalculations

• Recommendation:

Require standardized guidelines on defining and maintaining a baseline year. Mandate recalculation criteria when material structural changes (e.g., mergers, divestitures, acquisitions) or methodological changes occur.

• Justification:

Enables meaningful year-over-year comparisons and reliable tracking of emission reduction progress.

2. Reporting Units

• Recommendation: Require emissions to be reported consistently in metric tons CO₂-equivalent (tCO₂e).

Justification:

Standardizes reporting format, simplifying aggregation and comparison.

3. Third-party Assurance Standards

• Recommendation:

Establish standardized minimum criteria for third-party assurance providers and the specific assurance standards (e.g., ISO 14064-3, AA1000AS, ISAE 3000) that must be used.

Justification:

Ensures consistency and reliability of independent assurance.

4. Reporting Format and Platform

• Recommendation:

Mandate standardized electronic reporting formats or data schemas compatible with CARB's reporting system or the contracted external reporting organization, ensuring efficient data collection, verification, analysis, and public access.

• Justification: Streamlines data submission, review, and disclosure processes.

Summary of Priority Areas for Standardization:

Scope Recommended Areas for Standardization

Scope 1 Organizational boundary approach, mandatory GHGs, standardized emission factors

Scope 2 Dual location/market-based reporting, REC treatment, standardized emission factors



Scope Recommended Areas for Standardization

Scope 3 Mandatory Scope 3 categories, data quality and estimation methods, apportionment rules, standardized emission factors

All Baseline year recalculations, reporting units (tCO₂e), third-party assurance criteria, Scopes standardized reporting formats

By standardizing these specific aspects of Scopes 1, 2, and 3 emissions reporting, CARB can ensure the credibility, comparability, accuracy, and overall effectiveness of California's climate disclosure framework under SB 253.

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 assurance2" in MRR be utilized, and if not why?

Below are clear recommendations addressing the selection of third-party verification options for Scope 3 emissions under SB 253 and the appropriate assurance standards CARB should adopt.

8(a) Options for Third-Party Verification or Assurance of Scope 3 Emissions:

Given the complexity of Scope 3 emissions (indirect upstream and downstream), entities will require assurance providers with **specialized expertise and proven methodologies**. The following options exist and should be considered by CARB:

1. Established Assurance Standards for Scope 3 Emissions

Entities currently rely on globally recognized standards for Scope 3 assurance, including:



• ISAE 3410 (International Standard on Assurance Engagements 3410):

- Widely used internationally to provide assurance on greenhouse gas statements.
- Applicable specifically for GHG emissions reporting, including Scope 3.
- ISO 14064-3:2019 (International Organization for Standardization):
 - o Defines standards for validating and verifying greenhouse gas assertions.
 - Offers robust and widely-accepted frameworks for all scopes, including Scope 3.
- AA1000 Assurance Standard (AA1000AS v3):
 - Provides comprehensive framework focusing on sustainability reporting and stakeholder engagement.
 - Useful for combined assurance of emissions data and broader ESG reports.

Recommendation:

CARB should explicitly allow or require Scope 3 verification based on **ISAE 3410 or ISO 14064-3**. These frameworks are rigorous, well-established globally, and widely adopted by assurance providers and corporations.

2. Recognized Assurance Providers (Existing Market Providers):

CARB should encourage (or mandate) using well-established third-party assurance providers with demonstrated capability and experience, such as:

- "Big Four" accounting and auditing firms (Deloitte, EY, KPMG, PwC)
- Environmental and sustainability specialist firms (e.g., ERM, Bureau Veritas, DNV GL, SGS, LRQA, Apex Companies)
- Established nonprofit registries and reporting organizations (e.g., The Climate Registry, CDP-accredited verifiers)

Recommendation:

CARB should establish clear qualification criteria to ensure assurance providers have demonstrated expertise specifically in Scope 3 emissions reporting and verification.

3. Accreditation of Assurance Providers:

CARB should require or strongly prefer third-party providers accredited by recognized accreditation bodies, such as:

- ANSI National Accreditation Board (ANAB)
- California Air Resources Board (CARB) existing accredited verification bodies under the Mandatory Reporting Regulation (MRR)
- International Accreditation Forum (IAF) members

Recommendation:

Require or prioritize CARB-accredited or ISO 14065-accredited verifiers to maintain consistent and reliable assurance standards.



8(b) Defining Limited Assurance and Reasonable Level of Assurance:

SB 253 distinguishes between two levels of assurance: **limited assurance** (starting in 2026) and **reasonable assurance** (required beginning in 2030). CARB should adopt clear definitions consistent with recognized international assurance frameworks.

Recommended Definitions:

• Limited Assurance:

Limited assurance provides a moderate level of assurance. The assurance provider's conclusion is expressed negatively, stating that nothing has come to their attention indicating that the emissions statement is materially misstated.

• Typical language:

"Based on our limited assurance procedures, nothing has come to our attention causing us to believe the entity's GHG emissions inventory is materially misstated."

• Reasonable Assurance:

Reasonable assurance provides a higher degree of assurance, offering positive assurance that the emissions inventory is free from material misstatements, as established through more rigorous and extensive testing and validation procedures.

• Typical language:

"In our opinion, the entity's GHG emissions inventory has been prepared, in all material respects, in accordance with the GHG Protocol standards."

Standards Recommended for Adoption:

CARB should explicitly adopt the following recognized international standards to define levels of assurance clearly:

Assurance Level	Recommended Standard
Limited Assurance	ISAE 3410, ISO 14064-3, AA1000AS v3
Reasonable Assuranc	e ISAE 3410, ISO 14064-3

Should the existing definition for "reasonable assurance" under MRR be utilized?

The existing definition of "reasonable assurance" under California's **Mandatory Reporting Regulation** (**MRR**) is:

"Reasonable assurance means a high degree of confidence that submitted data and statements are valid."



Recommendation:

While MRR's definition provides a concise general statement, CARB should instead use definitions aligned directly with **internationally recognized assurance standards (ISAE 3410 or ISO 14064-3)** for clearer alignment, comparability, and transparency, specifically because:

- **Consistency:** International standards explicitly define detailed requirements, procedures, and materiality thresholds.
- **Global Recognition:** Widely understood and already utilized by global corporations, facilitating consistency in emissions reporting and third-party verification processes.
- Robustness and Clarity: Explicit definitions in ISAE 3410 and ISO 14064-3 provide clearer guidance and less ambiguity compared to the MRR definition, reducing potential misunderstandings or discrepancies.

Example of recommended formal definition for CARB regulations:

• "Reasonable assurance is an assurance engagement wherein the assurance provider applies rigorous procedures and obtains sufficient and appropriate evidence to express a positive opinion on the completeness and accuracy of a GHG emissions statement, providing a high level of confidence consistent with ISAE 3410 or ISO 14064-3."

Summary of Recommendations:

Aspect	Recommendation
Scope 3 Assurance Options	Require assurance aligned with ISAE 3410 or ISO 14064-3 standards.
Assurance Providers	Require accredited providers (e.g., CARB, ANAB, ISO 14065) with demonstrated expertise in Scope 3.
Limited Assurance Definition	Adopt standard definitions aligned with ISAE 3410 or ISO 14064-3, emphasizing "negative-form conclusions."
Reasonable Assurance Definition	Adopt standard definitions aligned with ISAE 3410 or ISO 14064-3, emphasizing "positive-form conclusions."
Existing MRR Definition	Replace or enhance the existing MRR definition with internationally accepted standards (ISAE 3410, ISO 14064-3) to ensure clarity and alignment.

By clearly adopting international assurance standards, specifying qualified assurance providers, and setting well-defined assurance levels, CARB can ensure robust, consistent, and credible GHG reporting under SB 253.



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

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

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

Below are clear recommendations and insights on how existing voluntary emissions reporting practices can inform CARB's implementation of SB 253, specifically focusing on frequency, data availability timelines, and common software platforms.

How Voluntary Emissions Reporting Should Inform CARB's Approach:

Voluntary emissions reporting by entities, such as those reporting through CDP, TCFD-aligned disclosures, or sustainability reports aligned with GRI or ISSB standards, can significantly inform CARB's regulatory design for SB 253. CARB should leverage established voluntary reporting frameworks and practices to:

- Establish practical timelines based on existing reporting cycles.
- **Minimize burden and redundancy** by aligning new reporting requirements closely with voluntary practices where possible.
- **Provide guidance** clearly referencing or compatible with widely used existing voluntary frameworks (GHG Protocol, CDP, TCFD, GRI).
- Encourage consistency by aligning with global reporting standards.

9(c) Frequency and Reporting Period Used Currently:

Typical Reporting Frequency:

- Most voluntary GHG emissions reporting is done **annually**, which is standard practice across frameworks such as:
 - CDP (Carbon Disclosure Project)
 - GRI (Global Reporting Initiative)
 - Corporate Sustainability Reports (CSR)
 - ESG or Sustainability disclosures aligned with TCFD and ISSB standards

Reporting Periods:

- Nearly all entities use a **12-month reporting period**, generally aligned with the entity's fiscal year (Jan-Dec or company-specific fiscal year such as Apr-Mar, Jul-Jun).
- A standardized reporting year (e.g., calendar year) is common and facilitates comparability and benchmarking.



Recommendation to CARB:

CARB should adopt an **annual reporting cycle aligned with entities' fiscal years or standardized calendar-year reporting**, consistent with global voluntary reporting norms.

9(d) Availability of Prior-Year Data for Reporting:

Typical Data Availability Timeline:

- Scope 1 and 2 emissions data typically become available and reliable for reporting approximately 3 to 6 months after the end of the fiscal year.
- Entities commonly finalize and publish voluntary emissions reports between **March and June** following a December 31 year-end.

Common Examples:

- CDP disclosure cycle typically requires submission around **July**, reflecting prior-year data finalized between March and June.
- Annual corporate sustainability reports (CSRs) commonly published between March and June, reflecting prior-year data.

Key Factors Affecting Availability:

- Financial auditing and year-end reconciliations (e.g., utility bill finalizations for Scope 2 data).
- Verification and assurance timelines.
- Internal data collection and validation processes.

Recommendation to CARB:

Establish a regulatory reporting deadline of approximately **6 months after fiscal year-end** (e.g., June 30 for calendar-year entities) to align closely with current voluntary reporting practices, ensuring data completeness and integrity.

9(e) Common Software Systems Used for Voluntary Reporting:

Entities commonly use specialized sustainability software and platforms to facilitate accurate GHG accounting, data aggregation, analysis, and disclosure. Popular software and digital reporting platforms include:

Widely Adopted Commercial Software Platforms:

Greenly (via DEKRA):

Provides comprehensive emissions reporting, climate disclosure management, and advanced analytics through an intuitive digital platform designed to simplify carbon accounting and sustainability reporting.

- Sphera (formerly thinkstep / GaBi software): Advanced emissions accounting, life-cycle assessments, and ESG integration.
- Persefoni:

Cloud-based emissions accounting software aligned with GHG Protocol, TCFD, SEC, and ISSB standards, particularly robust for Scope 3 calculations.



- Salesforce Net Zero Cloud (formerly Salesforce Sustainability Cloud): Integrated within Salesforce CRM; widely used for robust, auditable Scope 1, 2, and 3 emissions tracking.
- EcoVadis: Broad ESG sustainability platform, highly used for Scope 3 supply chain emissions reporting.
- Workiva ESG Reporting Platform: Robust ESG and emissions-reporting platform, widely used for regulatory compliance and voluntary reporting.
- Envizi (an IBM company): Comprehensive emissions reporting, particularly for Scope 1 and 2 energy data.
- Measurabl: ESG data management and emissions tracking, commonly used in real estate and corporate sustainability reporting.
- SAP Sustainability Control Tower: Integrated emissions and ESG platform for large organizations using SAP's ERP systems.
- Intelex (ESG Reporting software): Sustainability reporting, particularly for heavy industry and complex emissions accounting.
- **Microsoft Cloud for Sustainability**: Emissions tracking and reporting integrated within broader Microsoft cloud ecosystem.

Common Non-commercial Platforms:

- CDP Online Response System (ORS): Widely used platform for annual CDP disclosures (Scope 1, 2, 3).
- The Climate Registry's CRIS platform (Climate Registry Information System): Widely recognized, transparent registry system for voluntary emissions reporting.

Recommendation to CARB:

CARB should ensure regulatory reporting platforms are compatible with or easily integrated into commonly used software solutions. Alternatively, CARB could recommend or certify certain software platforms to streamline reporting, validation, and verification processes.

Summary of Recommendations:

Area	CARB Recommendation
Frequency	Annual reporting aligned with fiscal/calendar years, consistent with voluntary frameworks (CDP, GRI, TCFD).
Reporting Period	Standardized 12-month period aligned with financial accounting periods, ensuring ease of comparability.
Data Availability	Reporting deadlines should be set approximately 6 months after year-end (e.g., June 30), reflecting typical data availability timelines (March-June).
Software Platforms	Ensure compatibility or easy integration with widely adopted platforms (Sphera , Persefoni, Salesforce, EcoVadis, Workiva, Envizi, CDP ORS, TCR CRIS), or certify recommended software to ease regulatory burden.



Leveraging existing voluntary emissions reporting practices, timelines, and software platforms will greatly facilitate SB 253 implementation, reduce compliance burden, and enhance overall regulatory effectiveness and efficiency for CARB and reporting entities alike.

Below are your questions repeated, followed by clear and detailed responses addressing each aspect.

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?

Answer:

The recommended timeframe is to set the biennial reporting deadline approximately 6 to 9 months after the close of the prior reporting year (e.g., reports due between June 30 and September 30).

- This ensures sufficient time (typically 3–6 months) for entities to compile, analyze, verify data, and conduct robust assurance and internal review.
- Aligning the timeframe with voluntary or existing regulatory reporting deadlines (such as June-July for CDP or SEC reports) would streamline reporting obligations.

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.)?

Answer:

CARB should require a **standardized reporting year** (e.g., reports due consistently every two years: 2027, 2029, 2031, etc.).

- Standardized biennial reporting increases consistency, comparability, and regulatory clarity across entities.
- Allowing flexibility (any time within a two-year period) could complicate benchmarking, stakeholder interpretation, and CARB's regulatory oversight and enforcement processes.

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?

Answer:

Entities newly meeting the revenue threshold within the two-year reporting period should, at minimum, disclose:

• **Qualifying year:** Clearly indicate the fiscal year in which they first surpassed the revenue threshold.



- **Initial risk assessment:** A foundational climate-related financial risk assessment, aligned with TCFD's core recommendations (governance, strategy, risk management, metrics, and targets), even if limited in scope initially.
- **Plans for full disclosure:** Clearly outline planned steps and timeline for preparing complete TCFD-aligned disclosures in future reporting cycles.
- **Explanatory note:** If unable to fully meet all required disclosures initially, entities should clearly explain the gaps, reasons, and intended approach to close them in subsequent reports.

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

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

Answer:

Entities commonly prepare climate financial risk disclosures through several existing voluntary and regulatory frameworks, including:

- Task Force on Climate-related Financial Disclosures (TCFD) aligned reports
- CDP Climate Questionnaires (annual disclosures on climate risks and management)
- Sustainability/ESG reports aligned with Global Reporting Initiative (GRI) standards
- SEC proposed Climate Disclosure rules
- ISSB (International Sustainability Standards Board) sustainability disclosures
- EU Corporate Sustainability Reporting Directive (CSRD) aligned disclosures (for multinational firms)
- Annual financial (Form 10-K) climate risk disclosures (for publicly traded companies)

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

Answer:

Covered entities currently employ a variety of standardized reporting approaches, primarily:

- TCFD Framework: Governance, Strategy, Risk Management, Metrics, and Targets
- CDP Climate Risk Disclosure Questionnaires: structured and detailed risk reporting
- Scenario analysis: Stress-testing financial impacts under various climate scenarios (e.g., 1.5°C or 2°C aligned scenarios, Net Zero pathways, IPCC scenarios)
- **Qualitative and Quantitative reporting:** Combination of narrative disclosure and quantitative metrics (e.g., financial impacts, carbon intensity, GHG emission metrics, targets)



• Integrated annual financial reporting: Incorporating climate disclosures into traditional financial reports (e.g., SEC Form 10-K or Annual Reports)

h. 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?

Answer:

Current voluntary climate financial risk disclosures sometimes differ from TCFD recommendations in these common areas:

• Scenario Analysis:

Many companies currently provide only high-level qualitative scenario analysis or limited scenario testing, rather than robust quantitative financial impact assessments suggested by TCFD.

• Metrics & Targets:

Some companies disclose general metrics (emissions targets), but fewer fully integrate metrics related directly to financial risk impacts.

• Scope of Risk:

Many entities primarily disclose risks related to direct operations (Scopes 1 and 2), while TCFD recommends comprehensive inclusion of upstream/downstream risks, market risks, and transition risks.

• Time Horizons:

TCFD emphasizes short-, medium-, and long-term risk horizons; many voluntary disclosures still focus heavily on shorter-term risks only.

i. If not consistent with the Final Report of Recommendations of the Task Force on Climaterelated 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?

Answer:

Yes, many companies rely on other existing regulatory or exchange listing requirements when reporting climate-related financial risks, including:

- SEC Proposed Climate Risk Disclosure Rules (U.S.) (Once finalized, these will mandate detailed climate risk disclosures for publicly traded companies in the U.S., closely aligned with TCFD.)
- EU Corporate Sustainability Reporting Directive (CSRD) Requiring detailed sustainability/climate-risk disclosures from companies operating or listed in Europe.
- International Sustainability Standards Board (ISSB) Recently developed global sustainability disclosure standards (IFRS S1 & S2), designed to align closely with TCFD.



- UK FCA (Financial Conduct Authority) listing rules: Mandating TCFD-aligned disclosures for UK-listed entities.
- Japan's Financial Services Agency (FSA) guidelines Strongly encouraging or requiring TCFD-aligned disclosures for listed companies.
- Hong Kong Exchanges and Clearing Limited (HKEX): Requires ESG/climate disclosures aligned closely with TCFD.
- Australia Securities Exchange (ASX): Recommended climate-risk disclosures for listed entities aligned with TCFD.

Summary of Recommendations for CARB:

Question Recommended Approach

- 10 Set reporting deadlines 6–9 months after prior year-end (e.g., June-Sept following reporting year).
- 11 Require standardized biennial reporting years (e.g., 2027, 2029, 2031).
- 12 Mandate initial baseline risk assessments with clear statements on disclosure limitations and plans for future full compliance.
- **13(f)** Leverage existing practices (CDP, TCFD, GRI, ISSB, SEC) to inform CARB's framework.
- **13(g)** Recognize existing use of TCFD frameworks, scenario analyses, and integrated financial reporting approaches.
- **13(h)** Address current gaps (scenario analysis, quantitative metrics, full-scope risks, time horizons) clearly in CARB guidance.
- **13(i)** Align CARB requirements closely with international frameworks (ISSB, CSRD, SEC) to ease compliance burden and increase global comparability.

These recommendations ensure effective and efficient implementation of SB 261 aligned closely with global best practices, maximizing relevance, comparability, and regulatory clarity for entities subject to reporting.