



Members, California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

RESPONSE: Comments on California Corporate Greenhouse Gas Reporting – March 23rd Workshop

Schneider Electric, a global leader in advanced energy management and automation technologies, with more than 23,000 employees across the U.S., is pleased to submit the following response to the California Air Resources Board (CARB) regarding California's Corporate Greenhouse Gas (GHG) Reporting Program.

Recognized as the world's most sustainable company by *TIME Magazine*, *Statista*, and *Corporate Knights*, Schneider's dedication to addressing climate change underpins our ambitious climate goals. By 2050, we aim to achieve net-zero emissions across our entire value chain without reliance on carbon offsets, leading the way not only in emissions reductions and sustainability, but also in transparency.

Schneider also supports other organizations working to translate sustainability, energy, and digital transformation targets into actionable outcomes through the Schneider Electric Advisory Services. Our approach combines deep technical and regulatory expertise, global implementation capabilities, and AI-enabled software solutions to advance energy and enterprise risk management, decarbonization strategies, nature-based solutions, operational efficiency, and digital transformation.

We strongly support CARB's proposal to mandate climate-related disclosures and commend CARB's leadership in advancing transparency and climate risk awareness for the investor community. Consistent reporting standards help organizations make better operational decisions, uncover efficiencies, manage long-term risk, and provide investors and customers with better insights. When designed well, these frameworks reward innovation, transparency, and measurable progress. We recognize that the proposed rule will have important implications for both our clients and our own operations, and our perspective reflects this dual insight. In response to CARB's request for information, we respectfully submit the following comments for consideration.

Below are the questions that CARB has requested feedback for from the workshop held on March 23rd related to SB253 proposed guidance; please see our organization's responses and recommendations for each:

- **Are there other approaches to organizational boundary setting that CARB should consider?**

CARB should align its organizational boundary requirements with the Greenhouse Gas Protocol (GHGP), which recognizes the equity share, financial control, and operational control approaches. These boundary setting methods are widely used across industries, well understood by reporting entities, and already embedded in many mandatory and voluntary reporting frameworks. Alignment

with GHGP will promote consistency, comparability, and interoperability across reporting regimes, while reducing duplicative or conflicting accounting requirements.

At the same time, CARB may wish to provide additional clarification on how these approaches should be applied in practice, particularly for complex ownership and operating structures such as joint ventures, leased assets, and outsourced operations. Clear guidance on how to interpret “control” in these contexts would help ensure more consistent implementation and reduce interpretive variability across reporting entities. By anchoring organizational boundary requirements in established GHGP approaches while offering practical implementation guidance, CARB can support high quality emissions reporting without introducing unnecessary complexity or burden for reporters.

- **How should entities explain their choice of organizational boundary?**

Entities should explain their choice of organizational boundary by clearly justifying the selected consolidation approach (equity share, financial control and operational control) based on their business structure, governance arrangements, and reporting objectives. To support consistent and comparable disclosures, CARB should provide clear guidance on the level of detail expected in an entity’s explanation of its organizational boundary choice. Such guidance could include, at a minimum: the boundary approach selected and rationale for its use; a brief description of entities, assets, and operations included and excluded from the boundary; quantification of boundary coverage (e.g., percentage of emissions, revenue, or operations included); and disclosure of consistency with prior reporting periods or explanation of any changes over time. Establishing clear expectations would promote transparency, comparability, and consistent implementation across reporting entities.

- **What additional information for Scope 1 and 2 reporting should CARB consider when developing final reporting templates?**

Per our organization’s submitted comments regarding the ‘SB 253 Draft Reporting Template’, we reiterate our following recommendations, from our prior public comment dated October 27th, 2025 linked [here](#) and summarized below:

1. Global Warming Potential (GWP) Values – AR4 vs AR6: CARB currently specifies the use of GWP values from the IPCC Fourth Assessment Report (AR4). However, the latest scientific consensus is reflected in the Sixth Assessment Report (AR6)
2. Scope 2 Emissions Reporting – Lack of Distinction Between Methodologies: The current template does not provide separate fields for reporting total market-based and location-based Scope 2 emissions (see row 54 in template)
3. Reporting of S2 Contractual Instruments vs Carbon Offsets: Clarification is needed on where to report carbon offsets. Additional guidance/template fields are needed to distinguish between

report out of offsets vs other S2 contractual instruments such as RECs. A field is needed to report total Scope 1 and 2 emissions and reductions from renewable electricity or gas usage.

4. Parent-Subsidiary Reporting: Lines 27-28 ask whether subsidiaries are reporting separately from the parent company. While this implies that parent companies can consolidate the reporting of their subsidiaries, we urge CARB to be explicit on this point.
5. Row-Level Guidance: The current template lacks sufficient guidance per row.
6. Test/Free Text Fields – Character Limits
7. Verification Documentation: CARB should provide an option to attach verification reports, such as an upload of the final Assurance Statement/Letter
8. Non-Compliance Qualifier: Clarification is needed on whether a “No” response to including a specific scope or emissions stream in the reporting boundary constitutes non-compliance.
9. Confidentiality and Public Disclosure: Further clarity is needed on whether disclosures marked as Trade Secret Information (TSI) will be protected from public release
10. Private Companies’ Revenue-Based Intensity Metrics: CARB must specify acceptable alternatives to revenue-based intensities.
11. Emission Factor (EF) Source Selection: The current dropdown in row 62 is limited and allows only one selection. This is problematic when multiple EF sources or years are used.
12. Scope 2 Emission Factor Differentiation: There is a need to distinguish between emission factors used for market-based and location-based Scope 2 electricity.
13. Methodology Questions: For questions such as “Describe the calculation approach you are using,” additional guidance is requested to understand expected content.
14. Data Quality Rating: The optional field asking companies to “Rate the quality of the data” is currently open to interpretation. We recommend CARB provide standardized criteria and a rating scale to ensure consistency.
15. Third-Party Verification Clarification: We recommend CARB provide clear guidance on verification thresholds, acceptable methodologies, and any allowable exclusions.
16. Gap-Filling and Estimation Methodologies: It is unclear whether entities are required to disclose gap-filling or estimation methods when direct data is unavailable. We recommend adding a field to disclose assumptions, proxies, or models used.

- **Should CARB consider allowing other accounting methods? If so, which ones and why?**

CARB should continue to allow a range of greenhouse gas (GHG) accounting methods, consistent with the Greenhouse Gas Protocol (GHGP), including activity-based, spend-based, supplier or asset specific, and hybrid or allocation-based approaches. Given the diversity of business models, value chains, and data maturity across reporting entities, flexibility in accounting methods is essential to ensure feasible reporting. CARB should provide clear expectations and guidance for companies to disclose the accounting method(s) applied within their reporting disclosures.

- **What criteria should emission factors meet to be used in this program?**

Emission factors used under the SB 253 reporting program should meet a clear set of quality, transparency, and governance criteria to ensure credible, comparable, and decision-useful emissions data. At a minimum, emission factors should be science based, methodologically sound, transparent, relevant to the reporting context, and consistently applied across reporting entities and time periods. A note on accessibility: Please refer to elements from the GHG Protocol's latest Scope 2 public consultation, which promotes the concept of accessibility for emission factor sources. Accessible emission factors are defined as publicly available, free to use, and from credible sources. As the GHGP states, reporting organizations are not required to use any factors above and beyond those that can be freely accessed in the public domain. CARB should adhere to this principle; companies should not be required to pay for any emission factor dataset to be compliant with the regulation. However, companies should also be allowed to use paid emission factor sets if they desire.

Regarding emission factor dataset quality, CARB should consider establishing the following criteria for quality emission factors:

- **Methodological soundness:** Emission factors should be developed using scientifically accepted methods and aligned with recognized standards (e.g., GHGP, IPCC, ISO). Assumptions, calculation methods, and system boundaries should be clearly documented and defensible.
- **Transparency and documentation:** Reporting entities should have access to sufficient documentation to understand the data source, system boundaries, time horizon, and limitations of the emission factor. Blackbox or undocumented factors undermine comparability and assurance.
- **Relevance and representativeness:** Emission factors should be appropriate for the specific geography, sector, technology, and time period to which they are applied. Where possible, factors should reflect recent data and regional conditions rather than overly generic or outdated averages.
- **Data quality and reliability:** Emission factors should be derived from credible data sources, quality controlled datasets, and peer reviewed or authoritative publications where available. CARB may wish to reference data quality indicators (e.g., completeness, accuracy, temporal relevance) consistent with GHGP guidance.
- **Consistency over time:** Entities should apply emission factors consistently across reporting periods, with changes made only when improved data or methodologies become available. Any changes in emission factors should be disclosed and explained to preserve trend integrity.
- **Suitability for assurance:** Emission factors should be sufficiently documented and traceable to support third-party review and, over time, limited or reasonable assurance under SB 253 requirements.

By clearly defining minimum criteria for emission factors rather than prescribing a single set of required values, CARB can promote high-quality, consistent reporting while retaining flexibility for companies to use the most appropriate and reliable data available for their operations and value chains.

- **How should reporters document and explain their use of a particular emission factor, including proprietary models?**

CARB should specify clear, proportional disclosure requirements for the use of emission factors, including those derived from proprietary models, with the goal of supporting transparency and assurance without creating unnecessary or duplicative reporting burdens.

At a minimum, CARB could require reporters to disclose:

- the type and source of the emission factor (e.g., public dataset, life cycle assessment study, supplier specific data, or proprietary model);
- the name of the dataset, database, or model used and the applicable version, reference year, or publication date; and
- the scope of applicability of the emission factor (e.g., geography, sector, technology, or utility specific).

Where emission factors are sourced from publicly available datasets with established documentation, CARB should allow reporters to meet disclosure requirements through citation alone, without requiring a separate methodological description, as the underlying methods are already transparent and accessible. Requiring duplicative summaries of public methodologies would add limited value while increasing reporting burden.

For proprietary or nonpublic emission factors, CARB should allow reporters to provide a high-level description of methodological alignment with recognized standards (e.g., GHGP, IPCC), along with versioning and governance information, without requiring disclosure of confidential inputs, algorithms, or proprietary processes. This approach would preserve transparency and comparability while protecting commercially sensitive information and supporting third-party review.

- **How should reporters document and explain when changing EFs from a prior year?**

The recommendation would be for CARB to maintain consistency with Greenhouse Gas Protocol (GHGP) standards regarding emission factor and methodology changes.

Consistent with GHGP requirements, changes resulting solely from routine annual updates to an emissions factor should not require additional explanation. However, changes driven by

methodological updates or the selection of a different emissions factor source, such as switching datasets due to improved appropriateness, should be documented, along with clear information on the rationale and the resulting impact. CARB should provide clear guidance on what organizations are expected to disclose and the format in which this information should be provided

- **Should reporting entities be able to report as de minimis certain categories due to lack of relevance/materiality and/or feasibility?**

Reporting entities should be permitted to identify and treat certain Scope 3 categories as de minimis where they are not relevant or material to the entity's emissions profile and where reasonably accurate estimation is not feasible despite good faith efforts. Allowing such exclusions, when clearly defined and well justified, supports more accurate, decision useful reporting by focusing resources on the most emissions intensive and policy relevant sources.

To promote consistent interpretation and avoid misuse, CARB should provide clear guidance on the criteria for de minimis determinations. Such criteria could include:

- the category's relative contribution to total Scope 3 emissions;
- its relevance to the entity's business activities, value chain, or climate related risk profile; and
- the feasibility of obtaining reasonably accurate data, taking into account data availability, cost, and the effectiveness of documented good faith efforts to collect or estimate emissions.

CARB should also articulate clear expectations for justification and disclosure, including how entities document their de minimis assessments and whether excluded categories must be explicitly identified as immaterial. Establishing transparent thresholds and disclosure requirements would help ensure consistent implementation across reporting entities while preserving the integrity and credibility of Scope 3 reporting.

- **What specific thresholds, definitions, or decision frameworks should CARB use to determine when a Scope 3 category is considered de minimis to be reported?**

CARB should align their definition of materiality and what constitutes a "de minimis" Scope 3 Category with the latest Greenhouse Gas Protocol (GHGP) guidance, and consistently apply the definition across reporting entities. Several entities dictate a 5 percent materiality threshold, such as the GHG Protocol in its suggested revisions from the latest Scope 3 Phase 1 Progress Update. CARB should select a reasonable and widely understood benchmark for determining whether a Scope 3 category may be considered de minimis for reporting purposes.

Regardless of the specific threshold selected, it is critical that CARB explicitly define how materiality is

to be assessed. This should include clear guidance on the calculation methodology, such as a standardized formula with defined numerator and denominator components, and the cadence at which companies are expected to perform materiality assessments (e.g., bi-annually or per reporting cycle). Such clarity would promote comparability across entities, reduce interpretive variability, and facilitate assurance readiness.

Additionally, CARB should clarify expectations regarding documentation and disclosure of immaterial categories. It is currently unclear whether Scope 3 categories deemed immaterial must be explicitly identified as such in disclosures or assurance statements, and what constitutes sufficient evidence to support a determination of immateriality. Providing guidance on acceptable documentation or disclosure practices for de minimis categories would reduce uncertainty for reporting entities and auditors while maintaining the credibility of Scope 3 reporting.

- **How should CARB weigh reporting flexibility against alignment with current mandatory and voluntary practices and other international standards?**

CARB should balance reporting flexibility and alignment with existing mandatory, voluntary, and international standards through a phased implementation approach that is clearly grounded in widely accepted frameworks. A phased, standards aligned approach allows CARB to maintain interoperability with prevailing practices while recognizing that many entities—particularly first-time reporters—face legitimate data, system, and governance constraints in early reporting years.

We support CARB's efforts to provide initial flexibility where it meaningfully reduces implementation burden, such as by not requiring a standardized reporting template or limited assurance in the first reporting year. At the same time, CARB should clearly signal an expectation that entities progressively move toward higher quality; globally aligned methodologies as data maturity improves. Additionally, CARB may wish to explicitly account for sector level differences in data availability, emissions profiles, and value chain complexity by providing targeted guidance or examples by industry. This approach would preserve comparability and credibility over time while ensuring that early-stage flexibility does not impede alignment with established international standards or long-term policy objectives.

- **Are these the appropriate categories to prioritize for initial reporting based on data availability and relevance across sectors?**

Categories 1, 3, 5, 6, and 7 are generally appropriate priorities for an initial, phased in reporting approach, as they are relevant across most sectors and can often be estimated with existing data sources. These categories typically represent a meaningful portion of Scope 3 emissions and are consistent with approaches taken in other reporting frameworks that emphasize early focus on broadly

applicable and material categories.

However, based on our experience supporting first-time reporters, CARB should be aware that Category 1 (Purchased Goods and Services) can require significantly more effort than other prioritized categories, particularly for companies without mature Scope 3 systems. Category 1 reporting often necessitates extensive spend data collection, data normalization, supplier mapping, and the exclusion of nonrelevant or non-emissions intensive expenditures, which can be resource intensive in an initial reporting year. CARB may wish to consider additional guidance, flexibility, or targeted implementation support for Category 1 during early phases to ensure data quality while avoiding unnecessary reporting burden for first-time reporters.

- **What factors are driving assurance costs, and how do costs vary across entity size, sector, and assurance level?**

Factors driving assurance costs include the size of the organization, the number of sites, its carbon accounting control approach (whether financial or operational), the number of emissions sources in the organization, the complexity of the activity datasets related to the emissions calculation, the complexity of the emissions calculation itself and the cost of any site visit required. Sector complexity is not generally as significant a factor in assurance costs. The emissions total can also be a cost driver, as a larger footprint will carry a higher risk to the verifier should it be misstated (although conversely, errors in the disclosure are less likely to materially affect the totals reported). Public companies tend to have higher costs than private companies, generally due to disparate management approaches in large organizations and sometimes a lack of clarity of data ownership, evidence availability, and reporting / management structures.

A Reasonable Assurance requirement can increase total assurance costs by 33-50%, as the increased confidence required to form a positively phrased assurance opinion requires a significantly enhanced level of scrutiny of evidence, a deeper understanding of data management, and likely interviews with data owners and other key personnel, to ascertain their own understanding of the data, its sources and its managements prior to its inclusion in the corporate emissions calculation.

Additional comments on verifier independence: CARB should clearly define its thinking and requirements on verifier independence; for a consulting led company such as Schneider Electric Advisory Services, the clear delineation of legal entities is generally accepted as sufficient evidence of verifier independence from any other part of the Shneider Electric business. However, without clear and unambiguous guidance on this subject from the relevant regulatory body, it creates a risk for multi-service clients that their compliance with the regulations may be called into question when their verification and e.g. calculation provider have the same parent company name.



Thank you for the opportunity for Schneider Electric to provide responses to this solicitation and we look forward to continued engagement with the California Air Resources Board on the development of the Corporate Greenhouse Gas Reporting Program. Please do not hesitate to reach out to me directly with any questions at Amy.Mmagu@se.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy Mmagu", followed by a long, horizontal, wavy line that extends to the right.

Amy Mmagu
California Government Relations Manager
Schneider Electric