California Air Resources Board
1001 I Street
Sacramento, CA 95815
RE: California Climate-Disclosure Information Solicitation

Dear California Air Resources Board,

Thank you for the opportunity to provide input regarding the implementation of Senate Bills 253 and 261, as amended by Senate Bill 219. We appreciate the agency's leadership in implementing such an important policy and hope our comments will provide helpful feedback on how to ensure the program's effectiveness.

This document represents RMI (founded as Rocky Mountain Institute) and EDF's joint response to the solicited information *solely in relation to oil and gas methane emissions reporting*. Additionally, EDF is separately submitting other comments that address broader topics related to implementation.

EDF and RMI (together "Commentors") have been engaged in the important work of measurement-based oil and gas methane emissions inventories in a number of jurisdictions including Colorado's methane emissions verification rulemaking and are happy to help provide thoughts here based on that experience. Overall, we feel that these approaches must include measurement technology choices that are validated for that site type (i.e., fit for purpose), and widely available to be deployed at scale. Fit for purpose validation must be based on (1) controlled release testing; (2) supporting data of the technology in a measurement system as applied in the field for a given site type; and (3) published reports (e.g., scientific papers) demonstrating the technology has been independently evaluated for the given site type.

Commentors are aware of the difficulties involved in requiring oil and gas companies to verifiably disclose scope three emissions.[1] These comments are limited in scope to the accurate reporting of methane emissions associated with the production of oil and gas. These emission disclosures may be included as part of an entity's scope 1, 2, or 3 reporting, depending on the reporting entity.

[1] If CARB is interested in exploring OCI+ available Scope 3 data tool, it provides emissions estimates for Oil & Gas scope 3 emissions at the field level. https://ociplus.rmi.org/

RMI transforms energy systems through market-driven solutions to secure a prosperous, resilient, clean energy future for all. We work with businesses, policymakers, and communities to drive investment in the world's most critical geographies to scale renewable energy solutions, reduce energy waste, and boost access to affordable clean energy.

EDF is an international membership organization with more than 3 million members and activists worldwide and almost half a million in the state of California, many of whom are deeply concerned about the pollution emitted from oil and natural gas development and operations. EDF brings a strong commitment to sound science, collaboration, and market-based solutions to our most pressing environmental and public health challenges.

Please find our joint comments below, and do not hesitate to reach out with any questions or comments in return.

Sincerely,
Cayla Calderwood, Manager, RMI, Ccalderwood@rmi.org
Jon Goldstein, Associate Vice President, Energy Transition, EDF, jgoldstein@edf.org

Questions:

General: Applicability

1) **Not Answering**

2) **Not answering**

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?**

If CARB wanted to ensure that the regulation addresses California-specific needs, it would ensure that it receives the most reliable data that is practically feasible for oil and gas methane emissions. To do this, CARB could point to protocols and/or standards that incorporate robust, measurement-based data.

One way that CARB may ensure regulation remains current is to establish a regular review period. Reviewing the regulation every five years, *at a minimum*, to review and align with adopted external standards and protocols would be in line with update schedules for other emissions inventory standards, such as the ISO 1400 series[2]. Additionally, for certain emissions reporting, CARB could include language like Oregon Department of Environmental Quality 's Extended Producer Responsibility (EPR legislation) (DEQ 20-2024) which specifically calls out using best available information[3].

For methane measurement and monitoring of oil and gas supply chains, CARB could choose to leverage or incorporate Oil and Gas Methane Partnership 2.0 (OGMP2.0) Level 5 procedures and standards to synchronize regulatory requirements with voluntary commitments from leading oil and gas producers.

    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**

[2] https://www.iso.org/news/ref2685.html

[3] Department of Environmental Quality : Recycling 2024 : Rulemaking at DEQ : State of Oregon

under other mandatory programs and under SB 253 or 261 reporting requirements?

The requirement to report scope 3 methane emissions under SB 253 has little overlap with existing reporting requirements in California. However, implementation of SB 253 provides an opportunity for CARB to strengthen out-of-state emissions reporting required under AB 2195 (passed in 2018). If CARB chose to increase the accuracy and reliability of the report required under AB 2195, CARB could require that scope 3 methane emissions reported under SB 253 be incorporated into the annual report produced to meet AB 2195.

Similarly, CARB could choose to increase the accuracy of fuel pathway carbon intensities calculated under the Low Carbon Fuel Standard program through the incorporation of emissions data reported under SB 253, including harmonization of requirements for the use of primary data.

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?**

If CARB were to incorporate flexible reporting methods into its regulations, then CARB could consider requiring reporting entities to identify the reporting method they have chosen and provide reasoning for their choice. If a reporting entity wished to change methodologies, this would be acceptable with a justification for the methodology change and a re-baselining of its emissions inventory to ensure continued comparability[4]. Reporting entities that select a new reporting method could be required to report their emissions using both the new methodology and previously used methodology for at least one year. For example, if a reporting entity chose methodology A to report its emissions inventory in 2026 and 2027 and changed to methodology B for a more streamlined reporting process in 2028, then the reporting entity would need to provide an emissions inventory for 2028 using both methodologies A and B and then could report using methodology B only in 2029. Additionally, as referred to in response to question 3a, CARB may incorporate a regular 5-year review and update period at which time new acceptable methodologies could be added as technology evolves over time.

General: Data Reporting

4) Not Answering

[4] https://ghgprotocol.org/corporate-standard-frequently-asked-questions#question%20seventeen (question 17)

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

Commentors do not offer comments on whether CARB should require direct reporting or contract out to another organization, however, Commentors do provide comments on factors that could inform how a reporting program could be established. If CARB wishes to create durable and accessible emissions and climate risk records for reporting entities, CARB would need to ensure its reporting program will be ready within statutory timelines and that the program allow the public to access reports fully and freely. The program would include publicly accessible data from all previous reporting years and allow for comparison within and between reporting entities. CARB may consider funding durability and potential shifts in organizational mission when involving third party reporting organizations.

6) **Not Answering**

SB 253: Climate Corporate Data Accountability Act

7) **Entities must measure and report their emissions of greenhouse gases in conformance with the GHG Protocol[5], 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?**

If CARB wanted to ensure that it receives accurate information regarding methane emissions from the production of natural gas and petroleum, it could recommend that, when such data is provided (whether it is in the scope 1, 2, or 3 context), it includes clear emissions reporting boundaries, including data quality requirements.

One way that CARB could collect an emissions inventory allowing for comparison across companies and with voluntary reporting initiatives is by requiring reporting entities to specify and justify reporting boundaries used. These boundaries could be set using the equity share, financial control, or operational control boundaries as outlined in the GHG Protocol. CARB could require that reporting entities use the same chosen boundaries each year. If a reporting entity chooses to change its reporting boundary, it could be required to re-calculate previous years' reports to be consistent with the newly chosen approach to allow for comparison between years. Equity share boundaries would make reporting entities' reporting boundaries consistent with OGMP 2.0 Gold Standard boundary guidelines, while the European Sustainability Reporting Standards (ESRS) require the use

[5] https://ghgprotocol.org/

of operational control boundaries. By allowing for flexibility in reporting boundaries, CARB would reduce administrative burden for companies and allow for interoperability between voluntary initiatives and CARB requirements. CARB could also require re-evaluation of boundary setting standards every five years to ensure standards reflect up-to-date best practices and allow for emissions comparisons across time and between companies.

If CARB wishes to ensure the inclusion of all major sources of greenhouse gas emissions in emissions reporting, CARB would likely need to require reporting entities to identify priority activities based on the magnitude of greenhouse gas emissions approach outlined in the GHGP and to include fugitive methane emissions in reporting of emissions associated with extraction, production, and transportation of fuels.

CARB would also need to set data quality standards if it wishes to collect the most accurate emissions inventory possible. At minimum, requiring reporting entities to request primary data from Tier 1 suppliers is considered minimal best practice, aligned with GHG Protocol requirements[6]. CARB may also encourage entities to expand data collection efforts beyond Tier 1 suppliers to identify emissions hotspots. Additionally, reporting entities would be required to report share of primary versus secondary data used in scope 3 reporting and CARB would set improvement standards relative to the previous years' performance that require improvement year-to-year on the share of verified primary data. This would ensure emissions inventories reflect actual supply chain activity. CARB can also rely on third party data quality indicators, like MiQ's Supply Chain Protocol, which provides data quality indicators across the entire natural gas supply chain.

For secondary data used in scope 3 reporting, reporting entities could be required to provide data quality scores at a minimum and reporting entities could increase their data quality scores over time[7]. These scores would be based on geographic specificity, sectoral relevance, and temporal reliability. CARB could also recommend that reporting entities ask suppliers to adopt consistent and sector-specific methodologies that are aligned with GHG Protocol for emissions reporting and start measuring uncertainty in reported data. GHG Protocol is also considering incorporating data uncertainty measures in the next version. CARB could consider adopting the relevant measures when they become available[8].

8) SB 253 requires that reporting entities obtain "assurance providers." An assurance provider is required to be third-party, independent, and have significant

[6] https://ghgprotocol.org/sites/default/files/2022-12/Scope%203%20Detailed%20FAQ.pdf question 8
[7] https://ghgprotocol.org/sites/default/files/2022-12/Scope%203%20Detailed%20FAQ.pdf question 9
[8] https://ghgprotocol.org/sites/default/files/2025-03/S3-GroupA-Meeting6-Presentation-20250220.pdf

experience in measuring, analyzing, reporting, or attesting in accordance with professional standards and applicable legal and regulatory requirements.

a) **Not Answering**

b) **For purposes of implementing SB 253, what standards should be used to define limited assurance and reasonable level of assurance? Should the existing definition for "reasonable assurance[9]" in MRR be utilized, and if not why?**

i) EPA Data Quality Indicator Process Review definitions (EPA/600/R-16/096, June 2016) may be considered for definitions of reasonable and limited assurance.

ii) Though not officially standards, the Partnership for Carbon Transparency (PACT) Framework concepts of Data Quality Ratings (DQR) and Primary Data Share (PDS) have alignment with GHGP and related standards (ISO) with broad buy-in and may be key considerations for defining limited assurance and reasonable assurance.

SB 261: Climate Related Financial Risk Disclosure

9) **Not Answering**

10) **Not Answering**

11) **Not Answering**

12) **Not Answering**

13) **Not Answering**

Respondents may also provide any additional information they feel is important to inform staff's work to implement the statutes.

Methane emissions indicate health and safety risks, operating efficiency, regulatory fees, and climate risks that poses financial risks in markets that penalize methane leakage as acknowledged by insurers and banks[10],[11]. If CARB were to incorporate specific direction on reflecting methane-related financial risks in climate-related financial risk reporting, then

[9] "Reasonable Assurance" under MRR means a "high degree of confidence that submitted data and statements are valid."

[10] https://about.chubb.com/citizenship/chubb-methane-resource-hub.html

[11] https://www.jpmorgan.com/content/dam/jpm/cib/complex/content/redesign-custom-builds/carbon-compass/JPMC_methane.pdf

oil and gas assets that flare, vent, and leak methane gas should be noted, including marginal wells. Methane abatement projects could also be reported.

Additionally, companies could report the consequence and likelihood of unexpectedly high methane leakage in their supply chains as climate-related financial risks. This could be achieved through applying a double materiality standard to methane reporting requirements for key sectors. Key sectors would likely include the largest consumers and producers of oil and gas including, but not limited to, oil and gas producers, utilities, chemicals, shipping, and financial institutions that own/finance marginal well assets. Reporting could include requiring separate reporting of methane emissions from bundled CO2e across all scopes. Confidence and uncertainty in reported methane emissions could be included if data quality scores are not reported as outlined in response to question 7.

In addition to these climate-related financial risks, companies could report methane abatement projects as part of their climate-related financial risk mitigation. This could include projects by oil and gas companies like replacing gas driven pneumatics with electric motors and purchases of certified low leak methane gas by non-oil and gas producing companies that utilize gas for fuel or feedstock in their businesses.