September 8, 2025

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California Air Resources Board
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RE: Response to California Air Resources Board Virtual Public Workshop on SB 253, SB 261, and SB 219, held on August 21, 2025

Thank you to the California Air Resources Board (CARB) for hosting the two workshops held in May and August of this year, and for giving stakeholders multiple opportunities to provide input to the CARB rulemaking process for SBs 253 and 261, as amended by SB 219.

XBRL US is a nonprofit data standards organization, with a mission to improve the efficiency and quality of reporting in the U.S. by promoting the adoption of business reporting standards. Our organization is a jurisdiction of XBRL International, the nonprofit consortium responsible for developing and maintaining the technical specification for XBRL, which is a free and open data standard widely used around the world for reporting by public and private companies, as well as government agencies. Our members include accounting firms, public companies, software, data, and service providers, and other nonprofits and standards organizations.

This comment letter addresses specific topics that were raised during the August workshop and reiterates our recommendation that CARB include digital (structured, standardized, machine-readable) reporting requirements in the proposed rule.

Workshop Topics

Reporting Templates for Scope 1 and 2

On slide 34 of the August Workshop presentation, it was noted that "*Staff will post draft reporting templates for Scope 1 and 2 reporting by the end of September 2025 for public feedback*".

We agree with the approach of providing templates for those entities that are not required to report GHG emissions to other regulators. However, we urge CARB to allow companies with a global footprint and that are already reporting sustainability data for regulatory purposes to CSRD or a regulator in an IFRS reporting country, to submit the same document they are already submitting to the non-US regulator to satisfy California requirements. This will reduce reporting burden on those entities with more than one regulatory requirement.

For *non-global reporting entities,* CARB-provided spreadsheet- or CSV-based templates can streamline the process and can be prepared in such a way to align with data reported by global entities, thus ensuring interoperability of data reported by all complying businesses.

Interoperability means that data users can extract and use data from any reporting entity into the same dataset and tools and ensure consistency and comparability across all reported information.

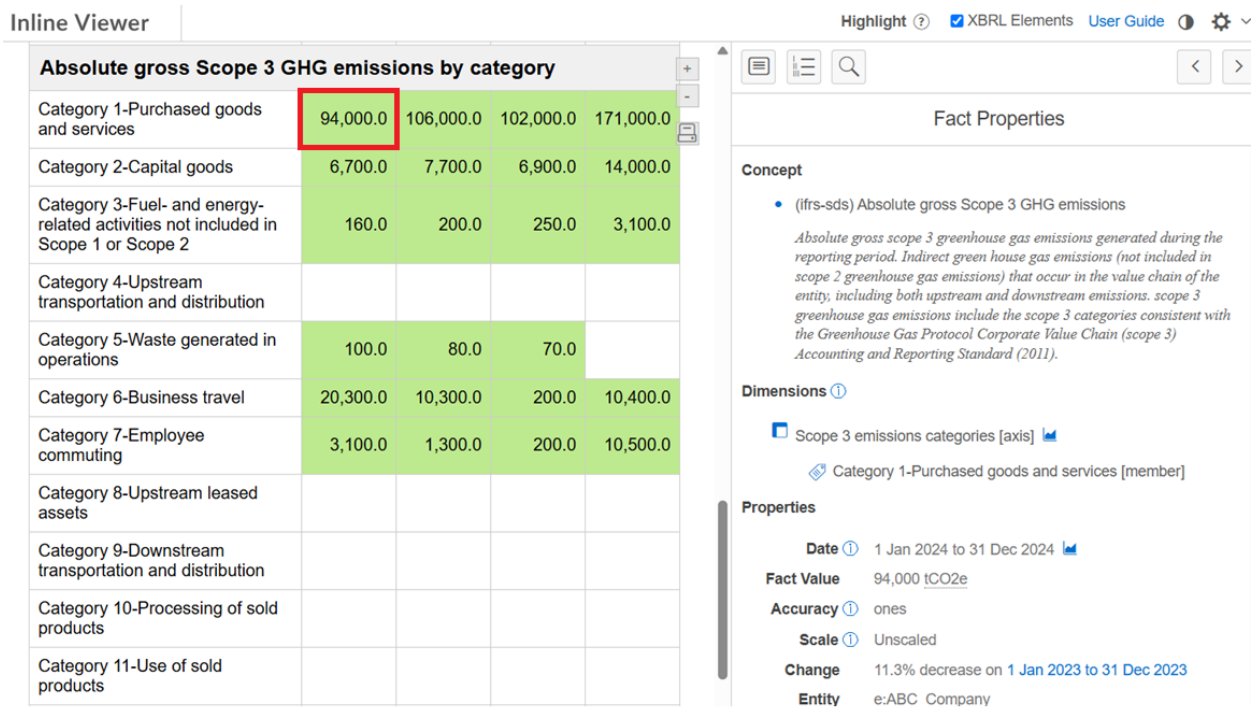
To synchronize reporting requirements with global regulators, CARB can follow the same digital reporting requirements being used by CSRD and supported by the ISSB for IFRS jurisdictions. These global regulators call for data to be reported in structured, standardized, Inline XBRL (eXtensible Business Reporting Language) format.

As a proof-of-concept to evaluate how a template could be developed to help non-global entities comply, we created an open-source template and conversion tool that can be used to generate machine-readable emissions data that is interoperable with global climate reporting mandates. The partial pre-formatted spreadsheet shown below, allows a reporting entity to input their GHG emissions data and other identifying information. We assume this is similar to what CARB referenced in the August workshop.

1	**GHG Emissions Report**	Version: 1.0			
39					
40	**Absolute gross Scope 3 GHG emissions by category**				
41	Category 1-Purchased goods and services	94,000	106,000	102,000	171,000
42	Category 2-Capital goods	6,700	7,700	6,900	14,000
43	Category 3-Fuel- and energy-related activities not included in Scope 1 or Scope 2	160	200	250	3,100
44	Category 4-Upstream transportation and distribution				
45	Category 5-Waste generated in operations	100	80	70	
46	Category 6-Business travel	20,300	10,300	200	10,400
47	Category 7-Employee commuting	3,100	1,300	200	10,500
48	Category 8-Upstream leased assets				
49	Category 9-Downstream transportation and distribution				
50	Category 10-Processing of sold products				
51	Category 11-Use of sold products				

In the open-source application we created, the entity would then upload the completed spreadsheet to a web portal which transforms it into a file that is both machine-readable and human-readable. The file (called Inline XBRL) can be submitted directly to CARB to satisfy SB 253 regulatory obligations. The data generated is prepared in accordance with standards established by the IFRS Foundation's International Sustainability Standards Board (ISSB) digital dictionary of terms (taxonomy).

To check that their data was reported correctly, the entity can select a button on the conversion tool labeled "Open Viewer file in browser" which brings up the file in HTML as seen below. Each reported fact, like 94,000 highlighted below, can be clicked on to bring up a popup box that shows the properties of the fact, for example, that it represents direct GHG Emissions Scope 3 in Category 1, Purchased goods and services.



CARB receives the file, confirms the entity identifier and date, and publicly posts the file. It is already machine- and human-readable and can be used by interested parties. Data and analytics providers can automatically consume CARB submitted regulatory data into their applications.

CARB will not need to provide querying and analytics tools for public access. Because the data is free and easily accessible, there is incentive for providers of commercial and open-source tools to extract the data and provide it to policy-setters, academics, investors, researchers, and businesses at a low cost. Relying on the competitive marketplace maximizes the efficiency of data distribution and reduces the cost of analysis.

We encourage CARB to review the open-source materials we have made available which can be built upon to meet CARB requirements. Read here for an explanation of the tool. Visit this page to download the template and test the tool.

CARB Costs for Implementation and Maintenance

On slide 24, the cost of SBs 253 and 261 were estimated at $20.7 million for the initial annual implementation cost, and $13.9 million for the annual ongoing maintenance cost.

While we do not know what is included in the CARB cost estimates, the economies of scale generated by data standards implementations usually ensure that costs are low for all stakeholders, particularly after the initial implementation.

By way of comparison, the Federal Energy Regulatory Commission (FERC) recreated its eForms data collection system in 2021 with a one-time implementation cost of $7.4 million[1]. eForms collects financial statement data for public utilities, including natural gas and electric companies, oil pipeline companies, centralized service, and electric transmitting companies. The program relies on a digital XBRL taxonomy that represents all the information to be reported. The budgeted amount covered these tasks:

- Built a taxonomy to represent eleven FERC forms (statements) with hundreds of corresponding schedules.
- Converted 10 years of historical forms data into XBRL format.
- Built a back-end database.
- Rolled out an XBRL API for use by both internal and external FERC data users.
- Built a forms submission portal.
- Created validation rules that check data integrity on submission.
- Created software to automatically render submitted filings into human-readable documents which involved defining HTML templates for each FERC form schedule to generate Inline XBRL and creating an Inline XBRL generator (FERC renderer)
- Implemented taxonomy development environment for ongoing use by the Program Office.
- Built taxonomy publication, testing, public comment collection, and change management infrastructure.
- Conducted outreach and testing.
- Conducted training programs for FERC staff, filing community and software vendors supporting the initiative.

We estimate the ongoing annual maintenance cost to be around $750,000, not including help desk support. Generally, standards programs are much less expensive after the initial outlay because there is significant flexibility to adapt the program over time. For example, the program management office can revise reporting requirements and instructions with no IT involvement. When a change is made in the taxonomy it is automatically communicated to reporting entities and data users because everyone references the taxonomy each time they use it.

Furthermore, the regulator does not need to build querying and analytics tools to allow the public to access the data. Analytics staff at FERC today use APIs and spreadsheet templates based on APIs to extract data from their own datasets. They are starting to investigate how they can use artificial intelligence sourcing their own structured, standardized data to further improve efficiencies in their analytical process. Data in structured, standardized format is a more reliable data source for AI than unstructured data. (See AI determinants of success and failure: The case of financial statements.)

We recognize that the FERC and CARB programs are different. FERC has fewer entities reporting than CARB ultimately will, but FERC reports are significantly more complex, variable, and lengthier than the data that will need to be reported to CARB for SBs 253 and 261. FERC also collects different data depending on the type of reporting entity.

[1] https://www.usaspending.gov/award/CONT_AWD_89603019P0018_8960_-NONE-_-NONE-

We know from experience that large, system-wide implementations with a standards foundation, can be implemented at minimal cost and tend to have much lower ongoing maintenance costs because standards enable economies of scale. Standards based programs are built to grow and adapt to changes over time and never lock a regulator into a single contractor or tool or system.

Need for Digital Reporting

We urge the CARB to adopt a digitized approach to this implementation. This is a proven method that is used in 220+ programs worldwide. The gains for regulators include:

- Immediate access to machine-readable data
- Eliminates the need to provide querying and analytics systems
- Better quality data because validation rules can be built more easily with structured data
- Optimizes use of artificial intelligence because structured, standardized data is a more reliable resource for better AI outcomes

Gains for reporting entities:

- Can reduce duplicate reporting for those complying with multiple regulators
- Simplifies report preparation because the taxonomy provides deep contextual information that clarifies what needs to be reported
- Provides good quality, inexpensive data on peers and their own company to gauge and monitor climate impact and goals

Gains for all data users:

- Reduces cost of analysis, eliminates manual data processing
- Provides access to good quality, timely, automated data that is interoperable with corporate data across the world

Thank you for the opportunity to provide input to your work in preparing regulations to satisfy SBs 253 and 261. We would be happy to discuss our recommendations in greater detail. I can be reached at (917) 582-6159 or Campbell.Pryde@XBRL.US.

Sincerely,

Campbell Pryde
President and CEO, XBRL US