

State of California
Air Resources Board

California Corporate Greenhouse Gas Reporting Regulation

*Standardized Regulatory Impact Assessment
(SRIA)*

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California Air Resources Board

1001 I Street

Sacramento, California 95814

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I. Introduction

In 2023, two pieces of legislation were signed into law: the Climate Corporate Data Accountability Act (Senate Bill (SB) 253, Wiener, Stats. 2023, ch. 382; codified in Health and Safety Code section 38532), and the Climate-Related Financial Risk Reporting Act (SB 261, Stern, Stats. 2023, ch. 383; codified in Health and Safety Code section 38533). In 2024, SB 219 (Wiener, Stats. 2024, ch. 766; codified in Health and Safety Code sections 38532 and 38533) amended both statutes, extending certain deadlines and making other administrative modifications.

Together, these laws mandate the creation of a comprehensive corporate climate disclosure program in California that requires greenhouse gas (GHG) emissions reporting and climate-related financial risk reporting for large entities based in the United States (U.S.) that do business in California. The laws continue the climate leadership of the State and the California Air Resources Board (CARB) by bringing greater transparency to corporate GHG emissions and climate-related financial risk. This information is not fully covered by existing climate programs at the state or federal level. These programs will help to ensure that accurate, comparable, and decision-useful climate information is made available to inform investors, lenders, insurers, consumers, and other stakeholders in the state.

The Climate Corporate Data Accountability Act requires U.S.-based entities with more than \$1 billion in annual revenue that do business in California to annually report all GHG emissions including direct emissions (Scope 1), indirect emissions from consumed energy (Scope 2), and indirect upstream and downstream GHG emissions along value chains (Scope 3, starting for reporting year 2027). The Proposed Regulation establishes the GHG reporting requirements under Health and Safety Code section 38532 beginning in reporting year 2027 and ongoing. Specifically, the Proposed Regulation establishes key definitions for GHG reporting, identifies the data that corporations are required to report, establishes the data collection and accounting methodologies permitted for reporting, establishes requirements for third-party assurance, establishes an annual reporting deadline for reporting starting in 2027, and sets rules for how reports should be submitted each year.

The Proposed Regulation is consistent with the Greenhouse Gas (GHG) Protocol standards and guidance, as directed by statute.¹ The GHG Protocol was initially developed for voluntary reporting and thus allows flexibility for certain aspects of reporting, such as setting organizational boundaries, selecting accounting methodologies, and excluding certain Scope 3 emission categories based on assessments of materiality or relevance. It has been formally incorporated within mandatory disclosure programs in other jurisdictions, including the European Union's (EU) Corporate Sustainability Reporting Directive (CSRD)² and programs

¹ These include the [Corporate Accounting and Reporting Standard \(2004\)](#) and the [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard \(2011\)](#) developed by the World Resources Institute and the World Business Council for Sustainable Development.

² European Union (2022) [Directive - 2022/2464 - EN - CSRD Directive - EUR-Lex](#) (Accessed May 12, 2026). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>.

that rely on the International Financial Reporting Standard (IFRS) S2 Climate-Related Disclosures Standard,³ which aligns with the GHG Protocol for emissions reporting guidelines. As of July 2026, twenty-two jurisdictions had finalized rules for climate and sustainability reporting through adoption of the IFRS standards.⁴ The Proposed Regulation implements the mandatory reporting requirements under Health and Safety Code section 38532 by balancing the flexibility of this framework with the clarity standards that are central to California administrative law.

Many of CARB's regulations result in quantifiable benefits from emissions reductions that have associated health benefits for the state of California. The Proposed Regulation, like climate disclosure programs in other jurisdictions, focuses on *disclosure* of GHG emissions and does not require reductions. Consequentially, a cost-benefit analysis for a disclosure regulation may appear asymmetric. However, disclosures confer important climate and investor benefits, even if not quantified in this analysis. Climate disclosure programs generate new, insightful information that stakeholders can use to guide and implement climate mitigation actions in corporate operations and supply chains. Evidence shows that voluntary emissions reductions follow the introduction of climate disclosure programs in other jurisdictions.^{5,6} Accurate measurement and transparency of corporate GHG emissions assists companies already interested in reducing their carbon footprint. Disclosures also provide investors with transparent, comparable data needed to accurately price climate-related risks, identify sustainable growth opportunities, and make more informed long-term capital allocation decisions. Taken together, the economic impacts of the Proposed Regulation to reporting entities and the broader California economy are relatively small. Even under conservative assumptions leading to higher costs, the average annual direct reporting cost to each reporting entity represents less than 0.02% of the \$1 billion minimum annual revenue threshold for entities to report under Health and Safety Code section 38532, and represents an average annual percent change that is less than 1% across macroeconomic indicators of gross state product, economic output, employment, personal income, and private investment. A summary of the statewide economic impacts of the Proposed Regulation as analyzed in this document are presented in Table 1.

This SRIA analyzes the costs of the greenhouse gas disclosure and assurance requirements established by Health and Safety Code 38532. CARB is promulgating the Proposed

³ IFRS (2026) *IFRS S2 Climate-related Disclosures* (Accessed May 12, 2026). <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/#about>.

⁴ IFRS (2026) *Use of IFRS Sustainability Disclosure Standards by jurisdiction* (Accessed July 30, 2026). <https://www.ifrs.org/ifrs-sustainability-disclosure-standards-around-the-world/use-by-jurisdiction/>.

⁵ Jouvenot, V., and Krueger, P. (2019) *Mandatory Corporate Carbon Disclosure: Evidence from a Natural Experiment*. Social Science Research Network (SSRN) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3434490.

⁶ Downar, B., Ernstberger, J., Rettenbacher, H., Schwenen, S., Zaklan, A. (2019) *Fighting climate change with disclosure? The real effects of mandatory greenhouse gas emission disclosure*. DIW Discussion Papers, No. 1795, <https://www.econstor.eu/bitstream/10419/203672/1/diw-dp1795rev.pdf>.

Regulation pursuant to specific statutory direction in Health and Safety Code section 38532. The Proposed Regulation aims to minimize the cost of this reporting program by providing reporting clarity and aligning requirements with widely used international reporting frameworks like the GHG Protocol. Moreover, many of the companies reporting to CARB under the Proposed Regulation are already reporting climate disclosures to other jurisdictions. The Proposed Regulation aligns reporting requirements with international frameworks with a goal of minimizing the marginal costs to comply with California’s legislation and regulatory implementation.

Importantly, the cost estimates provided below rely on the best publicly available data that may not capture the real cost to an individual company. Costs to specific companies will rely on several factors:

- Existence or rigor of existing systems, in-house expertise, and protocols to voluntarily report Scope 1, Scope 2, and Scope 3 emissions;
- Existing regulatory requirements to report similar data to other government agencies;
- Complexity, size, and sector-specific profile of the companies;
- Experience and access to cost-competitive assurance providers; and
- Experience with any subset or full reporting of Scope 3 categories.

Staff will continue to work with stakeholders and review public information that could help to further refine the cost estimates provided in this document and welcomes additional public information on costs for upfront and ongoing costs of reporting and third-party assurance.

Table 1. Summary of Statewide Impacts of the Proposed Regulation from 2027-2030

Category of Cost or Benefit	Value	Section in SRIA
Average Annual Direct Cost	\$403 Million	Section III
Average Annual Employment Impact	400 job increase	Section V
Average Annual Output Impact ⁷	\$60 Million increase	Section V

A. Regulatory History

1. Existing Regulatory Climate Disclosure Programs

Voluntary GHG reporting has been an active area of corporate disclosures for the past two decades, beginning with companies voluntarily disclosing emissions as part of Environmental, Social, and Governance (ESG) reporting. These disclosures have become more mainstream

⁷ The Average Annual Output Impact is the average of the annual impact on statewide economic output from 2027 to 2030.

for tracking corporate net-zero pledges and other market-based sustainability interventions in supply chains. In response to voluntary reporting activity, a variety of tools and disclosure frameworks have been developed to support and track corporate disclosures, including the World Resources Institute's GHG Protocol⁸ and the Carbon Disclosure Project.⁹

Building on the foundation created by voluntary GHG reporting efforts, mandatory corporate GHG reporting is being considered under climate disclosure programs in other jurisdictions, including the European Union (EU)¹⁰ and national governments such as the United Kingdom,¹¹ New Zealand,¹² Singapore,¹³ Hong Kong,¹⁴ Canada,¹⁵ Brazil,¹⁶ China,¹⁷ Australia,¹⁸ and Japan,¹⁹ and subnational entities like New York State,²⁰ New Jersey,²¹ and Washington State.²² There are variations in the scope, applicability thresholds, and implementation schedules of these different programs, but most require Scope 1 and 2 reporting, and include a

⁸ WRI (2026) *Greenhouse Gas Protocol | World Resources Institute*. <https://www.wri.org/initiatives/greenhouse-gas-protocol>.

⁹ CDP (2026) *CDP: Turning Transparency to Action*. <https://www.cdp.net/en>.

¹⁰ European Union (2022) *Directive - 2022/2464 - EN - CSRD Directive - EUR-Lex* (Accessed May 12, 2026). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>.

¹¹ Department for Business and Trade, Government of United Kingdom (2024) *UK Sustainability Reporting Standards - GOV.UK* (Accessed May 12, 2026). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>.

¹² External Reporting Board, Government of New Zealand (2023) *Aotearoa New Zealand Climate Standards » XRB* (Accessed May 12, 2026). <https://www.xrb.govt.nz/standards/climate-related-disclosures/aotearoa-new-zealand-climate-standards/>.

¹³ Singapore Exchange Regulation (2023) *Sustainability Reporting - Singapore Exchange (SGX)* (Accessed May 12, 2026). <https://www.sgx.com/sustainable-finance/sustainability-reporting>.

¹⁴ Hong Kong Exchange (2024) *Rules and Regulations* (Accessed May 12, 2026). https://www.hkex.com.hk/Listing/Sustainability/ESG-Academy/Rules-and-Regulations?sc_lang=en.

¹⁵ Office of the Superintendent of Financial Institutions, Government of Canada (2025) *Climate Risk Management* (Accessed May 12, 2026). <https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/climate-risk-management>.

¹⁶ Comissão de Valores Mobiliários, Government of Brasil (2023) *Resolução CVM nº 193* (Accessed May 12, 2026). <https://www.gov.br/cvm/en/foreign-investors/regulation-files/ResolutionCVM193.pdf>.

¹⁷ ESG Today (2026) *China Stock Exchanges Announce Mandatory Sustainability Reporting Requirements for Companies* (Accessed May 12, 2026). <https://www.esgtoday.com/china-releases-corporate-climate-reporting-standard/>.

¹⁸ Australian Accounting Standards Board, Australian Government (2024) *AASBS2_09-24 | AASB* (Accessed May 12, 2026). <https://standards.aasb.gov.au/aasb-s2-sep-2024>.

¹⁹ Financial Services Agency, The Japanese Government (2022) *Publication of "Supervisory Guidance on Climate-related Risk Management and Client Engagement"* (Accessed May 12, 2026). <https://www.fsa.go.jp/en/news/2022/20220715/20220715.html>.

²⁰ The New York State Senate (2026) *NY State Senate Bill 2025-S9072A* (Accessed May 12, 2026). <https://www.nysenate.gov/legislation/bills/2025/S9072/amendment/A>.

²¹ New Jersey Legislature (2025) *BillS4117* (Accessed May 12, 2026). <https://www.njleg.state.nj.us/bill-search/2024/S4117>.

²² State of Washington (2024) *SB 6092 - Greenhouse gas disclosures* (Accessed May 12, 2026). <https://lawfilesext.leg.wa.gov/biennium/2023-24/Pdf/Bills/Senate%20Bills/6092.pdf>.

“report or explain” approach for Scope 3 emissions, aligning with the GHG Protocol or the IFRS S2 Standard,²³ which aligns with the GHG Protocol for emissions reporting guidelines.

In addition, the U.S. Securities and Exchange Commission (SEC) adopted rules to enhance and standardize climate-related disclosures by public companies and in public offerings.²⁴ Although the regulation remains unenforced, the SEC received a series of written stakeholder comments and estimates on reporting costs from covered entities and practitioners that informed their economic analysis. CARB staff drew from this robust public feedback for the development of this Standardized Regulatory Impact Assessment for the Proposed Regulation. Due to the federal government’s deregulatory agenda under the current administration, the SEC has proposed repealing its climate disclosure rules.²⁵

Other U.S. reporting requirements related to GHG emissions also exist, but are limited to facility level reporting. At the state level, CARB has extensive experience administering GHG emissions reporting and verification programs, including the Low Carbon Fuel Standard²⁶ and the Mandatory Reporting Regulation (MRR),²⁷ and the compliance offset component of the Cap-and-Invest program.²⁸ This data informs the California Greenhouse Gas Inventory and is utilized to set allowances under the Cap-and-Invest program.

The GHG data that would be collected through the Proposed Regulation has a different scope than existing California regulatory programs. Existing programs target facility-level or sector-specific GHG emissions and do not focus on precise disaggregation across different emissions categories. Climate-related financial risk reporting provided to the California Department of Insurance (CDI) includes emission disclosure requirements that are similar to the requirements of Health and Safety Code section 38532, but not identical. The new requirements mandated by Health and Safety Code section 38532 have a different scope and purpose than existing climate programs in California by focusing on corporate supply chains, and are intended to improve transparency of climate disclosures for investors, consumers, and other stakeholders.

²³ IFRS (2026) *IFRS S2 Climate-related Disclosures* (Accessed May 12, 2026). <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/#about>.

²⁴ SEC (2024) *SEC Adopts Rules to Enhance and Standardize Climate-Related Disclosures for Investors*. <https://www.sec.gov/newsroom/press-releases/2024-31>; See SEC, *The Enhancement and Standardization of Climate-Related Disclosures for Investors, Final Rules*, 89 Fed. Reg. 21668 (Mar. 28, 2024); see also SEC, *The Enhancement and Standardization of Climate-Related Disclosures for Investors, Proposed Rule*, 87 Fed. Reg. 21335 (Apr. 11, 2022).

²⁵ SEC (2026) *Rescission of Climate-Related Disclosure Rules, Proposed Withdrawal of Final Rules*, 91 Fed. Reg. 33296 (June 3, 2026).

²⁶ CARB (2026) *Low Carbon Fuel Standard | California Air Resources Board*. <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard>.

²⁷ CARB (2026) *Mandatory Greenhouse Gas Reporting Regulation | California Air Resources Board*. <https://ww2.arb.ca.gov/mrr-regulation>.

²⁸ CARB (2026) *Cap-and-Invest Program | California Air Resources Board*. <https://ww2.arb.ca.gov/our-work/programs/cap-and-invest-program>.

2. Initial Regulation for CARB's Climate Disclosure Program

In February 2026, the Board voted to approve the California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation²⁹ (Initial Regulation) under Health and Safety Code section 38532. The Initial Regulation set August 10, 2026, as the deadline for submitting Scope 1 and Scope 2 emissions reports in 2026, established the administration fee, as well as specifying certain key applicability definitions necessary for developing the fee, such as “revenue” and “doing business in California.” CARB subsequently proposed moving the 2026 reporting deadline to November 10, 2026. Health and Safety Code section 38532 requires the assessment of a fee to fund program administration and implementation, expected to be approximately \$14 million by Fiscal Year (FY) 2026-27 and ongoing (including contract funding and resources required for program administration and implementation), according to CARB’s budget change proposal.³⁰ Health and Safety Code section 38532 establishes the Climate Accountability and Emissions Disclosure Fund for deposit of respective program fees. U.S. companies meeting \$1 billion USD annual revenue thresholds that also “do business in California” are considered reporting entities under Health and Safety Code section 38532. The Initial Regulation references California Revenue and Taxation Code sections 25120(f)(2) and 23101(b)(1)/23101(b)(2) for definitions of “revenue” and “doing business in California”, respectively.

B. Proposed Regulatory Actions and Statement of Need

Under Health and Safety Code section 38532, entities must report Scope 1, Scope 2, and Scope 3 emissions in 2027, and annually thereafter, as well as secure limited assurance for Scope 1 and Scope 2 emissions. Under the Proposed Regulation, entities would conduct GHG emissions accounting following a series of steps. First, entities must establish organizational boundaries to identify emissions attributable to their direct and indirect operations and classify these into Scope 1, Scope 2, and Scope 3 categories. Permissible consolidation approaches for setting organizational boundaries under the Proposed Regulation include operational control (i.e., emissions from any assets, operations, or facilities over which a reporting entity has full authority to implement operating policies), financial control (i.e., emissions from any assets, operations, or facilities over which a reporting entity can direct financial and operating policies resulting in economic benefits), and equity share (i.e., a reporting entity accounts for emissions according to its ownership stake in assets, operations, and facilities). Any of these approaches would be acceptable under the Proposed Regulation, but entities are required to disclose which boundary-setting approach they are using.

Next, entities would quantify emissions through direct measurement or by selecting a GHG calculation method and applying emission factors. Permissible GHG accounting methodologies

²⁹ CARB (2026) *California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation* | California Air Resources Board. <https://ww2.arb.ca.gov/rulemaking/2025/california-corporate-greenhouse-gas-reporting-and-climate-related-financial-risk>.

³⁰ California Department of Finance (2024) *Budget Change Proposal-Climate Corporate Data Accountability Act*. https://bcp.dof.ca.gov/2425/FY2425_ORG3900_BCP7505.pdf.

under the Proposed Regulation include spend-based (i.e., based on monetary values of goods and services), activity-based (i.e., based on physical measures of activity), supplier-specific (i.e., based on primary emissions or activity of suppliers), or hybrid (i.e., a combination of approaches). Emissions factors are representative values that quantify the amount of GHG emissions released per unit of activity. Entities must disclose the source and key attributes of emission factor selections for reporting under the Proposed Regulation, including the vintage, geographic and technological representativeness, and uncertainty. Entities may also use other models, including proprietary ones, if they appropriately disclose all emission factor sources along with the reasoning and scientific basis for their use.

Under the Proposed Regulation, reporting entities are required to disclose information, assumptions, and explanations about their selection of organizational boundaries, emission factors, the nature of business data used to calculate emissions, and quantification and accounting methodologies. The Proposed Regulation aligns with the broadly utilized frameworks for corporate GHG emissions reporting to ensure standardized and comparable data, and clarifies how reporting entities meet the requirements in Health and Safety Code section 38532.

1. Scope 1 and Scope 2 Reporting Requirements

The Proposed Regulation requires Scope 1 and 2 GHG emissions reporting in 2027 and subsequent years and describes the documentation and quantification requirements for accounting of these emissions. Staff released a preliminary Draft Scope 1 and Scope 2 reporting data field summary³¹ for public comment in October 2025. Staff have revised the data field summary based on initial feedback from stakeholders. The data field summary is intended to streamline and help clarify reporting, especially for entities disclosing GHG emissions for the first time. Reporting entities will have a voluntary option to claim emissions reductions associated with direct contracts for renewable electricity and renewable gas.

2. Scope 3 Reporting Requirements

Health and Safety Code section 38532 requires reporting entities to begin disclosing Scope 3 emissions, or indirect emissions upstream and downstream across a reporting entity's value chain, starting in 2027. Scope 3 emissions are commonly summarized across fifteen categories: (1) purchased goods and services, (2) capital goods, (3) fuel- and energy-related activities (not included in Scope 1 or Scope 2), (4) upstream transportation and distribution, (5) waste generated in operations, (6) business travel, (7) employee commuting, (8) upstream leased assets, (9) downstream transportation and distribution, (10) processing of sold products, (11) use of sold products, (12) end-of-life treatment of sold products, (13) downstream leased assets, (14) franchises, and (15) investments, or financed emissions.

The Scope 3 inventory covers a much broader set of emissions than Scopes 1 and 2, and reporting entities may need additional time to establish internal accounting protocols. In order

³¹ CARB (2025) [SB253_Draft_Scope1_2_GHG_Template.xlsx](https://ww2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx). https://ww2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx.

to fulfill statutory requirements and provide stakeholders, including investors, with important information, while giving reporting entities time to build GHG accounting and reporting capacity, staff are proposing to phase in Scope 3 reporting, starting with the five most commonly-reported Scope 3 categories: business travel (6), purchased goods and services (1), fuel- and energy-related activities (3), employee commuting (7) and waste generated during operations (5). Reporting entities may use any of the GHG accounting methodologies outlined in Section B to meet this requirement (spend-based, activity-based, supplier-specific or hybrid accounting approaches). Reporting entities may voluntarily choose to report Scope 3 emissions from the other ten categories, beyond the mandatory categories listed above. The proposed phase in approach is critical to reduce immediate costs for compliance, and to allow companies to plan for and establish protocols for more extensive reporting categories, while also obtaining important information that gives investors the transparent, comparable data needed to price climate risks and gives companies themselves the information to uncover operational efficiencies, strengthen risk management, and build long-term value. Other categories under Scope 3 are expected to require more resources and more information to report, which will likely lead to cost increases compared to reporting costs for the five most commonly reported categories.

3. Assurance

Health and Safety Code section 38532 requires limited assurance for Scope 1 and Scope 2 emissions in 2027. Assurance is the process through which an independent party examines and verifies the accuracy of an entity's GHG accounting and reporting. Limited assurance generally signifies moderate confidence that the disclosure is free of errors or material misstatement. Health and Safety Code section 38532 stipulates that an assurance engagement be performed by an independent third-party assurance provider with significant experience in GHG measurement, analysis, reporting or attestation, leaving to CARB's discretion the identification of acceptable assurance standards. The Proposed Regulation would allow assurance engagements from a broad set of assurance frameworks to minimize multiple provider engagements and align with other major reporting jurisdictions. The Proposed Regulation would accept assurance engagements performed in full conformance with one of the following standards: AA1000 Assurance Standard (AA1000AS v3),³² American Institute of Certified Public Accountants (AT-C Section 210 or AT-C Section 205),³³ ISAE 3410³⁴ applied

³² AccountAbility (2026) *AA1000 Assurance Standard (AA1000AS) | Sustainability Assurance* (Accessed May 12, 2026). <https://www.accountability.org/standards/aa1000-assurance-standard>.

³³ AICPA (2023) *U.S. Attestation Standards—AICPA (Clarified) [AT-C]* (Accessed May 12, 2026). <https://assets.ctfassets.net/rb9cdnjh59cm/49M1391nsNvsX6gou3EKW/d0e0475caf4596239d342b35acfabe4d/at-c-sections-100-300.pdf>.

³⁴ IAASB (2025) *IAASB Announces Withdrawal of ISAE 3410 for Assurance Engagements on Greenhouse Gas Statements* (Accessed May 12, 2026). <https://www.iaasb.org/news-events/2025-05/iaasb-announces-withdrawal-isae-3410-assurance-engagements-greenhouse-gas-statements>.

together with ISAE 3000³⁵ for engagements commencing before December 2026, or ISSA 5000³⁶ for engagements commencing on or after that date (both managed by the International Auditing and Assurance Standards Board, IAASB), and ISO 14064-3³⁷ applied together with ISO 14065³⁸ and ISO 14066.³⁹

4. Other Proposed Amendments

Additional provisions are proposed to clarify, simplify, and streamline reporting requirements and improve administrative efficiency, including report formatting and submission requirements. In response to board direction⁴⁰ to evaluate and address any potential data gaps between GHG emissions data already reported by insurance companies to the California Department of Insurance (CDI) and the requirements of Health and Safety Code section 38532, staff also propose removing the exemption in California Code of Regulations (CCR) Article 6, Subarticle 1, section 96071 for reporting entities subject to regulation by the Department of Insurance in California, or insurance companies in other states. CARB's Initial Regulation established a one-time 2026 Scope 1 and Scope 2 emissions reporting deadline and exempted insurance companies, who were providing this data to the state under an existing requirement implemented by CDI. Following direction provided to staff by the board in the February 26, 2026, Board Meeting resolution 26-1,⁴¹ staff, in coordination with CDI, investigated the existing disclosures required by CDI and concluded that some gaps in reporting may exist in what is required by CDI and what is required by Health and Safety Code

³⁵ IAASB (2013) *International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information* (Accessed May 12, 2026). <https://www.iaasb.org/publications/international-standard-assurance-engagements-isae-3000-revised-assurance-engagements-other-audits-or>.

³⁶ IAASB (2024) *International Standard on Sustainability Assurance 5000, General Requirements for Sustainability Assurance Engagements* (Accessed May 12, 2026). <https://www.iaasb.org/publications/international-standard-sustainability-assurance-5000-general-requirements-sustainability-assurance>.

³⁷ International Organization of Standardization (2019) *ISO 14064-3:2019 - ISO 14064 Part 3: Verification & validation of greenhouse gas statements* (Accessed May 12, 2026). <https://www.iso.org/standard/66455.html>.

³⁸ International Organization of Standardization (2020) *ISO 14065:2020 - General principles and requirements for bodies validating and verifying environmental information* (Accessed May 12, 2026). <https://www.iso.org/standard/74257.html>.

³⁹ International Organization of Standardization (2023) *ISO 14066:2023 - Validating and verifying environmental information — Competence requirements for teams* (Accessed May 12, 2023). <https://www.iso.org/standard/82544.html>.

⁴⁰ "The Board directs the Executive Officer or their designee to coordinate with the California Department of Insurance in order to evaluate and propose future regulatory requirements, as appropriate, to include insurance companies within the scope of Health and Safety Code section 38532, provided that they are not otherwise required to submit that emissions data to the California Department of Insurance. The Board further directs the Executive Officer to strive to minimize any duplicative reporting burden to the extent feasible." From the *Proposed California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation Resolution 26-1*.

⁴¹ CARB (2026) *Proposed California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation Resolution 26-1*. <https://ww2.arb.ca.gov/sites/default/files/barcu/board/res/2026/res26-1.pdf>.

section 38532. Disclosures required by CDI are based on the Task Force on Climate-Related Financial Disclosures (TCFD), which is related but distinct to the Scope 1, Scope 2, and Scope 3 emissions disclosure requirements of Health and Safety Code section 38532, which align with the GHG Protocol. Table 2 compares the disclosures required by CDI with the disclosures that CARB will require through implementing Health and Safety Code section 38532 in 2027 and beyond.

Table 2. Comparison of Disclosure Requirements Under CDI and Health and Safety Code Section 38532

Topic	TCFD / CDI-Aligned Disclosure	SB 253 + GHG Protocol Requirement
Nature of disclosure	Largely principles-based and flexible. Companies decide what information is material and how extensively to disclose it.	Prescriptive and standardized. Companies must report emissions using recognized accounting methodologies.
Scope 1 and Scope 2 reporting expectations	TCFD recommends disclosing Scope 1 and Scope 2 emissions and organizations may refer to the GHG Protocol. However, it also permits other national reporting methodologies.	SB 253 requires quantified Scope 1 and Scope 2 reporting aligned with the Greenhouse Gas Protocol.
Scope 3 reporting expectations	TCFD recommends Scope 3 disclosure where appropriate, but companies retain discretion regarding categories, estimation methods, and completeness.	Beginning in 2027, California Senate Bill 253 requires mandatory Scope 3 reporting for covered entities, substantially reducing discretion.
Verification and assurance	TCFD does not establish a defined assurance or audit structure for emissions accounting.	SB 253 includes assurance requirements intended to strengthen the reliability, consistency, and auditability of emissions data.

Staff propose allowing insurance entities to report to this program the GHG emissions data they are already submitting under CDI's program, plus any additional data needed by each

reporting entity to meet the reporting requirements established by Health and Safety Code section 38532. This approach avoids duplicative reporting while capturing the comprehensive data reporting directed in SB 253 to the state. The costs to insurance companies are included in the analyses in this document and not broken out separately.

C. Major Regulation Determination

Any agency that anticipates promulgating a regulation that will have an economic impact on California business enterprises and individuals in an amount exceeding \$50 million in any 12-month period between the date it is filed with the Secretary of State through 12 months after it is fully implemented (defined as major regulation) is required to prepare a Standardized Regulatory Impact Assessment (SRIA).⁴² The Proposed Regulation would be fully implemented in 2027 and is estimated to result in an annual economic impact exceeding \$50 million starting in 2027. Staff have estimated that the proposed amendments would result in direct annual costs to regulated entities of \$461 million in 2027, and \$383 million every year thereafter. See Chapter III for a description of the cost methodology and assumptions.

D. Baseline Information

The growing severity of climate risks is prompting more organizations to integrate emissions measurement and reduction into their core operations. Recent research finds that corporate GHG emissions disclosure is an increasingly mainstream practice. One study estimated the corporate disclosure frequencies of companies expected to be covered under Health and Safety Code section 38532 and found that 72% of companies are disclosing Scope 1 and Scope 2 emissions, 49% of companies are disclosing Scope 3 emissions, and 40% of companies are engaged in third-party assurance.⁴³ Another study found that more than 92% of S&P 500 companies are disclosing Scope 1 and Scope 2 emissions, and 78% are disclosing Scope 3 emissions.⁴⁴ Disclosure rates among a broader pool of the Russell 3000 companies—the 3,000 largest publicly held U.S. companies representing approximately 98% of the U.S. equity market—are somewhat different, with 54% of companies reporting Scope 1 and Scope 2 emissions, and 35% reporting Scope 3 emissions. This study also estimated that at least 62% of S&P 500 companies and 23% of Russell 3000 companies, respectively, are using external, third-party assurance to validate emissions data. Less data is available for GHG reporting among private companies, but a 2022 study found that private companies are

⁴² See Cal. Code Regs., tit. 1, § 2001, et seq.

⁴³ Dutta, S., Hwang, J., Patatoukas, P.N. (2026) *Full emissions disclosure under California Senate Bill 253 could change carbon evaluations and redirect investment*, *Communications Sustainability*, 1, 42. <https://doi.org/10.1038/s44458-026-00051-9>.

⁴⁴ Harvard Law School Forum on Corporate Governance (2025) *Corporate Climate Disclosures and Practices: Risk, Emissions, and Targets*. <https://corpgov.law.harvard.edu/2025/05/03/corporate-climate-disclosures-and-practices-risk-emissions-and-targets/>.

disclosing Scope 1 and Scope 2 emissions at roughly half the rate of public companies, and Scope 3 emissions at roughly 40% the rate of public companies.⁴⁵

Taken together, the widespread existing level of reporting and recent growth in reporting among public companies signals a growing readiness for compliance with regulatory mandates. Many of the reporting entities under the Proposed Regulation are already preparing and submitting GHG reports on a voluntary basis or for other jurisdictions with mandatory reporting programs. This is particularly true for the larger, consumer-facing corporations that will be subject to Health and Safety Code section 38532.

To establish a baseline scenario to reflect market conditions in the absence of the Proposed Regulation, staff use the previously cited estimates of existing reporting practices among the likely reporting entities⁴⁶ under Health and Safety Code section 38532 (Table 3). Staff interpret the higher rates of voluntary disclosures among S&P 500 companies to be an upper bound with regard to experience with climate disclosure, as these are assumed to be the largest companies with the most advanced reporting practices. "Upper bound" in this context means more experience with corporate greenhouse gas emissions reporting, which staff assumes to mean less marginal cost associated with the requirements of the Proposed Regulation. Staff consider the estimates among Russell 3000 companies as the lower bound, given that this group also includes smaller companies that may not be subject to the Proposed Regulation and may have more limited reporting experience. The Russell 3000 is ranked by market capitalization and includes some companies with annual revenues under \$1 billion.⁴⁷ Another estimate of existing disclosure practices comes from the Society for Corporate Governance's 2025 survey on SB 253 compliance costs among 77 public companies ranging from <\$2 billion to \$10 billion or more in market cap, and 5 private companies with at least \$300 million in revenues.⁴⁸ The survey indicates that 54% of companies are already disclosing emissions for at least some Scope 3 categories.⁴⁹ Staff assumes that the number of companies subject to Health and Safety Code section 38532 that already report Scope 1, Scope 2, and Scope 3 emissions and attain data assurance is similar to the estimates in Dutta et al. (2026),⁵⁰ as this

⁴⁵ Bain & Company (2022) *Closing the Public-Private Environmental Transparency Gap*. <https://www.bain.com/insights/closing-the-public-private-environmental-transparency-gap/>.

⁴⁶ Dutta, S., Hwang, J., Patatoukas, P.N. (2026) *Full emissions disclosure under California Senate Bill 253 could change carbon evaluations and redirect investment*, *Communications Sustainability*, 1, 42. <https://doi.org/10.1038/s44458-026-00051-9>.

⁴⁷ Disfold (2026) *Largest Russell 3000 Companies by Market Capitalization in 2026* (Accessed March 25, 2026). <https://disfold.com/stock-index/russell-3000/companies/?page=100>.

⁴⁸ Society for Corporate Governance (2026) *Comment Letter in Response to SB 253 Public Workshop: California Corporate Greenhouse Gas Reporting Program*. <https://ww2.arb.ca.gov/form/public-comments/submissions/59906>.

⁴⁹ In this survey, 34% reported disclosing data on all Scope 3 categories considered relevant under the GHG Protocol, and 20% indicated disclosing certain, but not all, relevant Scope 3 categories.

⁵⁰ Dutta, S., Hwang, J., Patatoukas, P.N. (2026) *Full emissions disclosure under California Senate Bill 253 could change carbon evaluations and redirect investment*, *Communications Sustainability*, 1, 42. <https://doi.org/10.1038/s44458-026-00051-9>.

study provides the best available estimate of the baseline reporting conditions for companies potentially covered under Health and Safety Code section 38532. Staff’s assumption for baseline reporting falls in the middle of the S&P 500 and Russell 3000 estimates (Table 3) and assumes existing Scope 3 reporting is less prevalent than respondents stated in the Society for Corporate Governance’s 2025 survey.

Staff acknowledge that there may continue to be shifts in reporting practices as companies respond to changes in the federal environment. There may be uncertainty not captured in the studies referenced in this section about how many companies are still preparing for mandatory reporting or still engaged in voluntary reporting, given the general rollback of federal support for environmental and climate initiatives, including greenhouse gas emissions reporting. However, a possible decline in climate disclosure rates does not necessarily mean that companies are losing reporting capacity or readiness, but could instead be foregoing or delaying voluntary reporting for other reasons, including delays in any federal mandatory corporate reporting requirements for the foreseeable future. Staff will continue to pursue any updated data on how many companies may still be moving forward with voluntary corporate disclosure reporting and integrate the information into any revised economic impacts for a formal staff proposal.

Table 3. Existing Corporate Reporting Practices for Baseline Scenario.

	Scope 1 and Scope 2	Scope 3	Assurance
S&P 500 Companies ⁵¹	92%	78%	62%
SB 253-Eligible Companies ⁵²	72%	49%	40%
Russell 3000 Companies ⁵³	54%	35%	23%

The values in Table 3 represent the percentage of companies estimated to be already reporting Scope 1 and Scope 2 emissions, reporting some Scope 3 emissions, and engaged in limited assurance. S&P 500 companies include a sample of 500 firms, SB 253-Eligible Companies include a sample of 2,427 firms, and Russell 3000 Companies include a sample of 3,000 companies.

⁵¹ Harvard Law School Forum on Corporate Governance (2025) *Corporate Climate Disclosures and Practices: Risk, Emissions, and Targets*. <https://corpgov.law.harvard.edu/2025/05/03/corporate-climate-disclosures-and-practices-risk-emissions-and-targets/>.

⁵² Dutta et al. (2026) identified 2,427 SB 253-eligible firms.

⁵³ Harvard Law School Forum on Corporate Governance (2025) *Corporate Climate Disclosures and Practices: Risk, Emissions, and Targets*. <https://corpgov.law.harvard.edu/2025/05/03/corporate-climate-disclosures-and-practices-risk-emissions-and-targets/>.

E. Public Outreach and Input

Staff have been engaging with the public on the development of the Proposed Regulation for more than a year through workshops, numerous meetings with individual stakeholders, and a variety of publicly issued resources. Staff held a series of public workshops in May, August, and November 2025 to provide clarity on components of Health and Safety Code sections 38532 and 38533, including the scope of the Initial Regulation and this Proposed Regulation. Public workshops specific to the Proposed Regulation were conducted on March 23, 2026, and July 21, 2026, to publicly present staff concepts on policy topics, updates on rulemaking timeline, and key elements of the cost-benefit analysis of the Proposed Regulation, including a solicitation of alternatives, as required under the SRIA process. Notices for the workshops were emailed to subscribers of the “Corporate Climate Disclosures” listserv in advance of each workshop, delivered to about 65,773 subscribed individuals or companies (as of April 7, 2026). Details for public workshops, including staff presentations, were posted to CARB’s *California Corporate Greenhouse Gas (GHG) Reporting and Climate Related Financial Risk Disclosure Programs Meetings and Workshops* webpage⁵⁴ prior to the workshops. During the workshops, staff presented concepts for public consideration and provided opportunities for stakeholders to provide verbal feedback, as well as opportunities to provide written public feedback for three or more weeks following most of the workshops. Written comments submitted to the public docket were posted publicly on the Meetings and Workshops webpage. All workshops were held virtually to allow for remote participation, which also accommodated the international business community tracking the Proposed Regulation. Additionally, CARB staff have released a variety of public resources to solicit feedback and provide more clarity on implementation, including an Enforcement Notice⁵⁵ in December 2024 for first-year reporting under Health and Safety Code section 38532, a Frequently Asked Questions (FAQ) document⁵⁶ in July 2025 that was updated in November 2025 clarifying the concepts and scope of the Initial Regulation, a preliminary list⁵⁷ of reporting entities posted in September 2025 accompanied by a stakeholder

⁵⁴ CARB (2026) *Climate Disclosure Meetings and Workshops*. <https://ww2.arb.ca.gov/our-work/programs/corporate-ghg-reporting/climate-disclosure-meetings-and-workshops>.

⁵⁵ CARB (2024) *The Climate Corporate Data Accountability Act Enforcement Notice Dec 2024*. <https://ww2.arb.ca.gov/sites/default/files/2024-12/The%20Climate%20Corporate%20Data%20Accountability%20Act%20Enforcement%20Notice%20Dec%202024.pdf>.

⁵⁶ CARB (2025) *California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Programs: Frequently Asked Questions Related to Regulatory Development and Initial Reports*. https://ww2.arb.ca.gov/sites/default/files/classic/FAQs%20Regarding%20California%20Climate%20Disclosure%20Requirements_Nov.pdf.

⁵⁷ CARB (2025) *SB 253_261_preliminary_list_092425.xlsx*. https://ww2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx.

feedback survey,⁵⁸ and voluntary Draft Scope 1 and Scope 2 GHG Reporting Data Fields⁵⁹ in October 2025 accompanied by a public docket for written feedback. Public input through the above engagements was used to inform and refine staff proposals in the Proposed Regulation, such as Scope 3 reporting requirements and assurance/verification requirements.

II. Benefits

The Proposed Regulation establishes corporate GHG reporting and assurance requirements. The primary, direct benefits of standardized disclosures are for enhanced corporate transparency. The reporting framework established by this Proposed Regulation will yield more rigorous, standardized, and verifiable emissions data, which will be more accessible and usable for investors, consumers, and other stakeholders' decision-making. Moreover, the Proposed Regulation provides clarity to reporting entities on how to meet the statutory requirements of Health and Safety Code section 38532, and therefore minimizes the associated costs of determining how to prepare reports.

The Proposed Regulation may also result in benefits to the reporting entities by creating a consistent market response to investor demand for climate-related information.^{60,61} Investors would have access to more consistent, comparable, and reliable disclosures with respect to climate-related risks, which is expected to enable investors to make more informed investment or voting decisions. It will also mitigate the challenges that investors currently confront in assessing the nature and extent of the climate-related risks faced by reporting entities and their impact on the reporting entities' business operations and financial condition. The Proposed Regulation, for reporting entities with publicly traded securities, may reduce information asymmetry both among investors, which can reduce adverse selection problems and improve stock liquidity, and between investors and firms, which can reduce investors' uncertainty about estimated future cash flows, thus lowering the risk premium they demand and therefore a the reporting entities' cost of capital. It could also mitigate certain agency problems between the firm's shareholders and management, which would strengthen investor protection. Also, by enabling climate-related information to be more fully incorporated into asset prices, the Proposed Regulation could allow climate-related risks to be borne by those who are most willing and able to bear them, thereby strengthening financial system resilience. The Proposed Regulation is expected to contribute to the efficient allocation of capital, capital formation, competition, and well-functioning capital markets for reporting entities. More consistent and comparable emissions data may also benefit from a standardized emissions dataset to reduce the burden of ad hoc climate related information requests from consumers or the public.

⁵⁸ CARB (2025) [CARB: SB 253/261 Stakeholder Survey](https://survey123.arcgis.com/share/0893ede53c234aac8d5334df0f091f36?portalUrl=https://gis.carb.arb.ca.gov/portal).
<https://survey123.arcgis.com/share/0893ede53c234aac8d5334df0f091f36?portalUrl=https://gis.carb.arb.ca.gov/portal>.

⁵⁹ CARB (2025) [SB253_Draft_Scope1_2_GHG_Template.xlsx](https://www2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx). https://www2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx.

⁶⁰ 87 Fed. Reg. at 21340.

⁶¹ Id. at 21413.

The Proposed Regulation helps support a program that involves further quantification and reporting of regulated entities' GHG emissions as directed in Health and Safety Code section 38532, which may ultimately result in beneficial voluntary reductions in GHG emissions following improved accounting, although the extent of any such GHG reductions is not quantifiable at this time. The Proposed Regulation does not mandate any quantifiable direct emissions reductions or health benefits. However, there are several potential secondary or indirect benefits that may result from mandatory climate disclosures by large corporations that do business in California. These benefits may include voluntary GHG emissions reductions, improved supply chain management and financial performance by firms, and lower transaction costs for companies, investors, and consumers. A qualitative overview of these benefits is provided in this section and in Table 4, including how they apply to typical businesses, small businesses, and individuals.

The Proposed Regulation requires large companies to measure, track, and report their GHG emissions over time and in close alignment with globally recognized standards. The consistency between the Proposed Regulation and the GHG Protocol helps ensure alignment with IFRS S2, which many other jurisdictions use as the basis for GHG reporting rules. The Proposed Regulation is expected to improve knowledge and decision-making for multiple categories of stakeholders through more standardized and comparable disclosures. Public reporting standards will increase companies' awareness of their emissions, and may support their voluntary efforts to reduce their emissions to meet consumer and investor demands and seek competitive advantages for positive corporate branding.⁶² The Proposed Regulation will yield data that can be used to assess the validity of corporate claims, prevent and identify misleading or fraudulent statements, and promote consistency and standardization in corporate disclosures.

1. Disclosures Reflect Changes in Emissions Over Time

Greenhouse gas emissions can change over time in response to many factors. Those can include macro-economic conditions, energy prices, subnational and national laws, divestiture or growth in companies, among other factors. While causality is not always clear, there are several econometric studies that have found evidence that firms voluntarily reduce their GHG emissions following the introduction of mandatory climate disclosure programs. At the company level, a study of a mandatory GHG disclosure law in the United Kingdom (U.K.) found that firms voluntarily reduced emissions by 16% compared to a control group of European firms, and that these reductions occurred in firms that were already voluntarily reporting their GHG emissions prior to regulation.⁶³ Another analysis of the same law found an 18% reduction in GHG emissions over three years.⁶⁴ At the facility level, a study of the impacts

⁶² Hanawalt, C., Fitch, A. (2025) *The Behavioral Effects of Corporate GHG Emissions Disclosures*, Sabin Center for Climate Change Law. https://scholarship.law.columbia.edu/sabin_climate_change/256/.

⁶³ Jouvenot, V., and Krueger, P. (2019) *Mandatory Corporate Carbon Disclosure: Evidence from a Natural Experiment*. Social Science Research Network (SSRN) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3434490.

⁶⁴ Downar, B., Ernstberger, J., Rettenbacher, H., Schwenen, S., Zaklan, A. (2019) *Fighting climate change with disclosure? The real effects of mandatory greenhouse gas emission disclosure*. DIW Discussion Papers, No. 1795, <https://www.econstor.eu/bitstream/10419/203672/1/diw-dp1795rev.pdf>.

of the U.S. Greenhouse Gas Reporting Program found that facilities reduced their GHG emissions by nearly 8% following disclosure of emissions.⁶⁵ The study also found evidence that these reductions were spurred by a “benchmarking” effect whereby facilities use publicly available disclosures of other facilities to compare against their own GHG performance. A recent review of the evidence base linking disclosures to emissions reductions shows that “mandatory, quantitative, and uniform disclosures tend to yield more meaningful emissions reductions than voluntary, qualitative, or open-ended disclosures.”⁶⁶ Moreover, company-wide data reporting (i.e., including scope 3 emissions) helps ensure identified emission reductions are accurately attributed to meaningful changes in corporate behavior, not only accounting strategies that nominally reduce emissions through outsourcing, sale of assets, or organizational boundary decisions. Importantly, a recent analysis of voluntary disclosure reporting also found that cost saving opportunities can be identified and result in economic benefit which is an important consideration for private companies. Specifically, the report found every dollar invested in emissions reduction generates an average of USD \$2.4 in return, and in some cases up to USD \$7 over its lifetime.⁶⁷

2. Financial and Organizational Performance Following Disclosures

There is also growing evidence that non-financial disclosures can lead to increased investment, firm valuation, and other financial benefits for companies. An econometric study controlling for confounding factors of changes in institutional ownership of E.U. firms two years before and after the introduction of the European Commission’s Non-Financial Reporting Directive found that foreign investment increased by more than 5% in companies affected by the disclosure mandate.⁶⁸ Another econometric study of proprietary data from PricewaterhouseCoopers U.K. found that higher liquidity and lower cost of capital were associated with mandated, higher quality disclosures, which the authors attributed to greater connectivity of financial and non-financial data.⁶⁹ Studies also show that higher quality disclosures can result in increased firm valuation, particularly for large firms with greater organizational and supply chain complexity.^{70,71}

⁶⁵ Tomar, S. (2023) *Greenhouse Gas Disclosure and Emissions Benchmarking*, *Journal of Accounting Research*, 61, 451-492. <https://doi.org/10.1111/1475-679X.12473>.

⁶⁶ Hanawalt, C., Fitch, A. (2025) *The Behavioral Effects of Corporate GHG Emissions Disclosures*, *Sabin Center for Climate Change Law*. https://scholarship.law.columbia.edu/sabin_climate_change/256/.

⁶⁷ Carbon Disclosure Project (2026) *Disclosure Dividend 2026*, <https://www.cdp.net/en/insights/disclosure-dividend-2026>.

⁶⁸ DeFond, M., Hung, M., Jing Wang, E. (2026) *The Impact of Mandatory Sustainability Reporting on Institutional Investment: The Role of Reporting Location*, *The Accounting Review*, 101(1), 285-313. <https://doi.org/10.2308/TAR-2023-0276>.

⁶⁹ Wang, R., Chua, W.F., Simnett, R., Zhou, S. (2024) *Is greater connectivity of financial and non-financial information in annual reports valued by market participants?* *The British Accounting Review*, 56(6), 101407. <https://doi.org/10.1016/j.bar.2024.101407>.

⁷⁰ Lee, K.W., Yeo, G.H.H. (2016) *The association between integrated reporting and firm valuation*, *Review of Quantitative Finance and Accounting*, 47, 1221-1250. <https://doi.org/10.1007/s11156-015-0536-y>.

⁷¹ Wang, B., Mirza, N., Umar, M., Shan, S. (2025) *Firm valuation under climate uncertainty: The role of climate risk exposure and disclosure practices*. *International Review of Financial Analysis*, 108, Part B, 104724. <https://doi.org/10.1016/j.irfa.2025.104724>.

The standardization and comparability of data generated by regulatory climate disclosures confers these financial benefits by reducing disclosure processing costs for investors, or the costs of monitoring, acquiring, and interpreting firm disclosures.^{72,73} Better quality data allows for more efficient investment screening based on GHG emissions, and leads to financial benefits for both firms and investors. For example, in 2022, the California State Teachers' Retirement System (CalSTRS) reported spending approximately \$2.2 million per year to estimate climate risks and opportunities for assets in their portfolio, including an estimated \$550,000 for staff and consultants to research climate risk disclosures, as there was a lack of reliable, consistent, and comprehensive data on climate risk associated with the investment opportunities they were evaluating.⁷⁴ Beyond investors, consumers and civil society also benefit from reduced disclosure processing costs by enabling stakeholders to find comparable data in one place, rather than searching disparate company reports and webpages.

The financial and organizational performance benefits described above may apply to typical businesses and other upstream and downstream suppliers or processors in the value chains of reporting entities, including business-to-business (B2B) entities (i.e., commerce conducted between companies rather than between companies and consumers) and investment firms. Other stakeholders who may benefit from the Proposed Regulation include third-party service providers, such as consulting firms assisting companies in preparing reports, and assurance providers verifying reports, given the expected increase in demand for reporting and assurance services.

Table 4. Summary of Potential Benefits of Proposed Regulation

Benefit Category	Examples	Stakeholders Benefitting
Standardized Data	- Reduced disclosure processing costs (transaction costs) - More comparable data - Improved accuracy of disclosures	- Typical Businesses - Investors - Suppliers / Small Businesses - Individuals (Consumers / Civil Society)
Organizational Performance	Enhanced supply chain management and traceability	

⁷² Blankespoor, E., deHaan, E., Marinovic, I. (2020) *Disclosure processing costs, investors' information choice, and equity market outcomes: A review*, *Journal of Accounting and Economics*, 70(2-3), 101344. <https://doi.org/10.1016/j.jacceco.2020.101344>.

⁷³ Simnett, R., Tan, Y., You, J., Zhou, S. (2025) *Australian Listed Entities' Preparedness for Mandatory Reporting and Assurance of Climate-related Disclosures*, *Abacus*. <https://doi.org/10.1111/abac.12363>.

⁷⁴ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

Benefit Category	Examples	Stakeholders Benefitting
Financial Performance	• Higher firm valuation • Increased liquidity • Increased investment • Lower cost of capital • Corporate branding	• Typical Businesses • Investors • Suppliers / Small Businesses • Individuals (Consumers / Civil Society)
Environmental Performance	• Reduced emissions	

A. Emission Benefits

The Proposed Regulation does not require emission reductions, only disclosures. However, evidence demonstrates there may be secondary or indirect emissions reductions benefits that result from more rigorous emissions tracking and standardized corporate GHG reporting. See overview in Section II.

B. Benefits to Typical Businesses

In the context of this Proposed Regulation, typical businesses are defined as those meeting applicability criteria under Health and Safety Code section 38532—i.e., U.S.-based companies doing business in California with annual revenue of \$1 billion or more. These reporting entities will have higher quality, comparable information on their associated greenhouse gas emissions, which make it easier and more cost effective for investors and others to research disclosures, enhance management and traceability throughout the supply chain, and improve financial performance. For an overview of these benefits, refer to Section II.

C. Benefits to Small Businesses

The applicability thresholds of Health and Safety Code section 38532 do not include small businesses. However, small businesses may still benefit from standardized data and enhanced organizational performance, particularly if they are suppliers of reporting entities or otherwise in the value chain of reporting entities. Small investors and business analysts may also benefit from access to standardized emissions data. Small businesses interested in setting their own climate-related goals may also benefit from increased transparency and standardization of corporate emissions as they make sourcing and sales decisions.

D. Benefits to Investors

Investors will be a primary beneficiary of the Proposed Regulation. The Proposed Regulation will require comprehensive and standardized climate disclosures that will enable investors to better assess material risks in climate-related reporting; provide investors with material metrics that will aid in the assessment of transition risk for those reporting entities that have identified a material climate risk, facilitating investor's evaluation of a reporting entities progress toward achieving material targets or goals and the attendant effects on the reporting entities' business,

results of operation, or financial condition; facilitate comparisons across firms over time; and make more informed long-term capital allocation decisions. Non-mandatory disclosures reduce transparency and impair investors' ability to effectively assess the potential financial impacts of a company's climate-related risks. Additionally, the Proposed Regulation would ensure that climate disclosures for large companies doing business in California can be reliably found within one centralized source, thereby reducing search costs for investors to render disparate climate-related disclosures useful for their decision-making. Relatedly, the consistent and standardized data produced each year under the Proposed Regulation may provide cost savings to investors that currently rely on third parties to provide ESG ratings. This may better position investors to assess and manage climate-related risk in their portfolios.⁷⁵

E. Benefits to Individuals

Consumers, members of civil society/community groups, and researchers are among the individuals that also benefit from the Proposed Regulation. Standardized and verified emissions data will allow individuals interested in climate impacts to make better-informed decisions. Civil society and community groups focused on climate impacts will have higher quality and more meaningful data to draw on. Likewise, researchers focused on climate impacts will have access to more standardized emissions data to inform their academic work. Individuals will also benefit from the potential indirect and voluntary emissions reductions that would help mitigate climate change. See overview in Section II.

III. Direct Costs

A. Direct Cost Inputs

Estimated direct costs of the Proposed Regulation include the costs of developing GHG reporting, and the cost of obtaining a third-party assurance engagement for limited assurance of Scope 1 and Scope 2 emissions. Reporting costs for reporting entities may include regulatory monitoring and interpretation of the rule, internal and external data collection, data analysis, developing GHG inventories, and preparing and submitting reports. Reporting entities' expenditures will likely accrue both internally through additional employee hours or personnel, and externally through third-party service providers, such as consultants or auditors. A portion of costs are considered fixed in that they do not scale with reporting entity size or its level of resources. These may include standardization, or tracking and interpretation of the regulation, as well as reporting submission costs. Additionally, entities who already report voluntarily under comparable standards will have lower marginal costs than first-time reporters, particularly if they choose to use the same operational or organizational boundaries already in place to track emissions in the voluntary space. Under the Proposed Regulation, staff propose to provide flexibility in the selection of accounting methods and emission factors. This built-in flexibility will help reduce costs since publicly available emissions models can be

⁷⁵ 87 Fed. Reg. at 21340.

used for most calculations and reporting entities will not be required to solicit data from suppliers.

Costs are separated into initial and ongoing costs. Initial, or Year 1 start-up costs, are higher than ongoing costs because they include the one-time cost of tracking and interpreting the regulation and establishing internal protocols and procedures for GHG reporting. Higher start-up costs may also reflect initial limitations in the supply of third-party verifiers and reporting services as new reporting demand is introduced. Once an entity's workflow and process is established, annual costs are expected to be lower beginning in Year 2. This cost reduction in Year 2 is reflected in other similar disclosure programs. For example, an estimate by the U.K. from an impact assessment for their mandatory disclosure program assumed a 25% reduction in cost estimates for the work required to comply with emissions reporting in Year 2 compared to Year 1, because initial implementation of the framework would not need to be repeated.⁷⁶ In addition, the final SEC emissions disclosure rule assumed a 60% reduction in reporting costs from Year 1 to Year 2, based on the upper and lower bounds of a range of cost estimates provided during public feedback.⁷⁷ The EU also estimated reductions of approximately 50% between initial and ongoing costs of reporting, and a 30% reduction between initial and ongoing assurance costs.^{78,79} The cost reduction factor between initial and ongoing costs may also vary depending on company size and operational complexity. This SRIA focuses on 2027-2030 and captures initial costs and ongoing costs; the average annual ongoing costs are expected to be the same starting in 2028 and will extend beyond 2030.

Other potential costs or variations in direct costs for reporting entities are not quantifiable; however, staff discuss these qualitatively. For example, under the Proposed Regulation, staff are proposing to allow flexibility on organizational boundary selection—i.e., reporting entities may select one of the three approaches to organizational boundaries (control approach, financial approach, equity-share approach) as long as they maintain that selection for each annual report or explain their reason for changing their organizational boundary. Staff anticipate that this will help streamline implementation and avoid costs for existing reporters by

⁷⁶ Department for Business, Energy, and Industrial Strategy, Government of the United Kingdom (2021) *Mandating climate-related financial disclosures by publicly quoted companies, large private companies and LLPs: Impact Assessment* (Accessed May 12, 2026). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1055931/tcfd-final-stage-ia.pdf.

⁷⁷ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

⁷⁸ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026). <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

⁷⁹ European Financial Reporting Advisory Group (2025) *Cost-Benefit Analysis on the Amended European Sustainability Reporting Standards* (Accessed May 12, 2026). <https://www.efrag.org/sites/default/files/media/document/2025-12/Cost-benefit%20Analysis%20on%20Draft%20Amended%20ESRS.pdf>.

allowing reporting entities to utilize existing organizational boundaries used for disclosures to other programs. More broadly, the alignment of reporting requirements under the Proposed Regulation with the GHG Protocol framework and climate disclosure programs in other jurisdictions indicates that companies already reporting will not bear the full direct costs estimated in this SRIA for incremental reporting under California's program.

In other considerations, smaller firms may have higher proportional fixed costs in meeting reporting requirements, which could place them at a disadvantage with larger firms. However, staff do not anticipate a sizeable effect given that all reporting entities, by definition, have an annual revenue of at least \$1 billion. Furthermore, firms from more energy-intensive sectors or larger firms with complex global supply chains may face higher compliance costs due to their more extensive disclosures. Nonetheless, industries with more significant GHG emissions and more material climate risks are also likely to be those that are already providing some form of voluntary or mandatory disclosures, or already have internal tracking processes in place.⁸⁰ Staff discuss the specific costs and assumptions for the Proposed Regulation below.

1. GHG Emissions Data Collection, Analysis, and Reporting

To help estimate the direct costs of GHG reporting, staff relied on data obtained as part of the economic analysis conducted to support SEC's final rule on the *Enhancement and Standardization of Climate-Related Disclosures for Investors*.⁸¹ The SEC analysis provides an appropriate proxy for direct costs under the Proposed Regulation as its initial version required reporting of Scope 1, Scope 2, and Scope 3 emissions, similarly following the GHG Protocol framework. Moreover, the SEC's rule required phasing in of assurance requirements beginning with limited assurance for Scope 1 and Scope 2 emissions, as would the Proposed Regulation. The SEC rule would have applied to nearly all U.S. publicly traded companies, including those with revenues of less than \$1 billion. Unlike the Proposed Regulation, the SEC rule would not have covered privately held companies. To account for any potentially underestimated costs associated with private companies and companies below the revenue threshold, staff take an upper-bound approach to cost estimates submitted during the SEC rulemaking, as described below.

During its rulemaking process, the SEC solicited estimates from companies on the costs and benefits of compliance, including the costs of Scope 1, Scope 2, and Scope 3 GHG reporting requirements. The compliance costs considered by SEC included costs related to the collection and reporting of GHG emissions data, including investments in the development and maintenance of information systems, staffing, and governance protocols for ongoing

⁸⁰ SEC (2022) *Proposed Rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11042). <https://www.federalregister.gov/documents/2022/04/11/2022-06342/the-enhancement-and-standardization-of-climate-related-disclosures-for-investors>.

⁸¹ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

reporting.⁸² These costs were presented in the final rule, even though the Scope 3 reporting requirements were ultimately removed. Cost information came from survey results, including an industry survey of 39 public companies,⁸³ estimates directly from identifiable companies and anonymous companies, general estimates based on industry experience and third-party service providers supporting many different companies, and similar rulemaking processes for existing climate-related disclosure policies in other jurisdictions (Table A1). These cost estimates represent a range of companies of different sectors, sizes, and GHG reporting maturity. Commenters provided estimates in financial resources—i.e., amounts paid for activities conducted both in-house and externally via consultants—or staff resource hours.

Estimated costs of ongoing Scope 1, Scope 2, and Scope 3 reporting in the SEC’s Final Rule (p. 754) range from \$25,600 to \$221,000 (2025\$) for each reporting entity.⁸⁴ CARB staff received feedback⁸⁵ from some industry and practitioner stakeholders following the public workshop held on March 23, 2026, that Scope 3 costs in the SEC analysis are underestimated. Stakeholder claims of higher costs than those cited in the SEC analysis remain unverified by empirical data;⁸⁶ nevertheless, CARB is taking a conservative approach by applying the upper bound of cost estimates rather than the midpoint value, resulting in an estimate of ongoing costs that is 58% higher than what SEC estimated.⁸⁷ Although some cost estimates submitted to the SEC represented initial (upper bound) and ongoing (lower bound) costs, all estimates were assumed to be ongoing costs for this analysis. Staff acknowledge that this will likely overestimate the reporting costs, but this remains a prudent estimate given the available data

⁸² SEC (2022) *Proposed Rule (Release No. 33-11042)*, p. 371, “The primary direct costs that the proposed rules would impose on registrants are compliance costs. To the extent that they are not already gathering the information required to be disclosed under the proposed rules, registrants may need to re-allocate in-house personnel, hire additional staff, and/or secure third-party consultancy services. Registrants may also need to conduct climate-related risk assessments, collect information or data, measure emissions (or, with respect to Scope 3 emissions, gather data from relevant upstream and downstream entities), integrate new software or reporting systems, seek legal counsel, and obtain assurance on applicable disclosures (i.e., Scopes 1 and 2 emissions).”

⁸³ ERM (2022) *Costs and Benefits of Climate-Related Disclosure Activities by Corporate Issuers and Institutional Investors*. <https://www.erm.com/globalassets/sustainability.com/thinking/pdfs/2022/costs-and-benefits-of-climate-related-disclosure-activities-by-corporate-issuers-and-institutional-investors-17-may-22.pdf>

⁸⁴ An outlier estimate of \$4.45 million (2025\$) was included in the analysis, but SEC states clarifies that “this estimate may be overstated because it includes the cost of third-party limited assurance for GHG emissions.”

⁸⁵ CARB (2026) *Public Comments to March 23, 2026 Climate Disclosure Workshop*. https://ww2.arb.ca.gov/approved-comments?entity_id=48841.

⁸⁶ See 89 Fed. Reg. at 21728, fn. 917. One commenter on the SEC rule indicated “We have published three years of our scope 3 financed emissions, starting in 2019. For 2021, this included our listed equities and fixed income assets under management. As a firm we track absolute emissions and emissions intensity across our lending and investment portfolios and understand where risks and opportunities present. We have done this work with modest cost to us, requiring some redirection of resources and modest consultant and data support. This work has not been cost prohibitive and builds on existing systems within the bank for reporting and disclosure.”

⁸⁷ See Appendix A. CARB staff’s interpretation of cost estimates submitted during the SEC rulemaking consists of taking the upper bound of those cost estimates, rather than the midpoint, and assuming that they represent ongoing costs only. This results in an estimate of direct, ongoing costs that is 58% higher than the SEC estimate of direct, ongoing costs (\$138,033 vs. \$87,498, 2025\$).

and input received on direct costs during the public process to support the Proposed Regulation.

For reporting costs, staff only consider the costs from the SEC rule that can be attributed to Scope 1, Scope 2, and Scope 3 greenhouse gas emissions reporting. For example, the ERM survey (2022) reported an average of \$237,000 for “GHG analysis and/or disclosures,” which included cost of analysis for setting science-based targets and other similar efforts to understand GHG emissions that are beyond the scope of the Proposed Regulation. The SEC rule estimated these target-setting costs to be \$54,015 and subtracted them from the overall reporting costs.⁸⁸ Dollar values from the SEC rule were converted from 2022\$ to 2025\$ using the California Consumer Price Index to adjust for inflation and rounded to the nearest dollar.⁸⁹

To determine the additional or incremental cost of Scope 3 reporting for the alternatives to phasing in Scope 3 reporting requirements presented in Section VI, staff calculate the difference between reporting costs for all three scopes and reporting costs for Scope 1 and Scope 2 only, as presented in the SEC final rule. Staff adopt the median value of ongoing Scope 1 and Scope 2 reporting cost estimates (p. 759),⁹⁰ or \$73,544 annually for each reporting entity. For the cost reduction factor between initial and ongoing reporting, staff apply the median value (48%) of estimates provided in the SEC analysis and estimates made for the European Sustainability Reporting Standard that implements the CSRD.^{91,92} See Appendix A for more details on cost estimates.

Based on the above assumptions, the Proposed Regulation estimates that the initial, first-year cost of reporting across all Scope 1, Scope 2, and Scope 3 GHG emissions is \$265,448 per entity, and the initial first-year cost of reporting only Scope 1 and Scope 2 emissions is \$141,431. Under these assumptions, the initial cost of Scope 3 reporting is \$124,017 and the ongoing cost is \$64,489 (i.e., 48% cost reduction from Year 1 to Year 2). These are the costs associated with Scope 3 reporting across all fifteen categories and apply directly to Alternative 2 outlined in Section VI.B. Under the Proposed Regulation, which would require reporting entities to report five of the fifteen Scope 3 categories, as outlined in Section I.B.2, the reporting costs of the five Scope 3 categories is assumed to be one third of the full Scope 3

⁸⁸ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

⁸⁹ California Consumer Price Index (2025) *California Consumer Price Index (1955-2026)*. <https://www.dir.ca.gov/oprl/CPI/EntireCCPI.PDF>.

⁹⁰ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

⁹¹ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

⁹² European Financial Reporting Advisory Group (2025) *Cost-Benefit Analysis on the Amended European Sustainability Reporting Standards* (Accessed May 12, 2026). <https://www.efrag.org/sites/default/files/media/document/2025-12/Cost-benefit%20Analysis%20on%20Draft%20Amended%20ESRS.pdf>.

reporting costs, or \$41,339 and \$21,496 for initial and ongoing, respectively. For annual cost calculations, staff assume the existing reporting practices summarized in Section I.D, specifically, 72% of entities will already be reporting Scope 1 and Scope 2 emissions, and 49% will already be reporting Scope 3 emissions (Table 3). For entities already reporting, staff assume the initial costs for Year 1 for these entities equals ongoing costs such that reporting costs are represented as ongoing across all years of implementation. Staff assume 2,551 total reporting entities based on a preliminary analysis⁹³ using the best available data of companies meeting the applicability criteria in Health and Safety Code section 38532.

Staff's proposed costs may be an overestimation under current industry practices. In response to stakeholder feedback on Scope 3 costs potentially being underestimated, staff assigned the upper bound of estimates, rather than the midpoint, and assumed these were ongoing costs only. This provided a reference point for calculating the higher, up-front initial costs of Scope 3 reporting and help account for differences in company maturity and GHG reporting experience at the time of regulatory implementation. Additionally, cost estimates from industry surveys submitted during the SEC rulemaking are four years old, and may not reflect cost-efficiencies gained since they were published; the corporate GHG reporting sector has built additional capacity and expertise over this time that could bring down costs. Specifically, the entry of more third-party service providers since the time of these estimates is expected to have reduced costs in the reporting sector. These assumptions are supported by research on innovation adoption among firms, which indicates that the barriers and costs of adopting new market innovations reduce over time through the effects of learning curves, networks, and economies of scale.^{94,95} Moreover, staff's estimates for the costs of reporting likely capture an "early movers" effect of companies with the most advanced reporting experience in the voluntary climate disclosure space.⁹⁶ This could result in a selection bias in this sample toward larger or more ambitious reporters with more thorough or rigorous reporting approaches (e.g., more activity-based or supplier-specific data for Scope 3 emissions), as well as companies from more energy-intensive sectors with higher Scope 1 reporting costs, potentially inflating estimates.⁹⁷ Costs of implementation could further be reduced in the future through organizational learning and the transition from external service providers to in-house

⁹³ CARB (2025) [SB 253_261_preliminary_list_092425.xlsx](https://www2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx). https://www2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx.

⁹⁴ Müller, M.L., Steinhauser, S. (2024) *Re-Examining Innovation Ecosystem S-Curves: Network Effects and the Pace of Technology Substitution*, *Proceedings of the Academy of Management*, 1. <https://doi.org/10.5465/AMPROC.2024.16282abstract> <https://doi.org/10.5465/AMPROC.2024.16282abstract>

⁹⁵ Pratama, Y.W., Gidden, M.J., Greene, J., Zaiser, A., Nemet, G., Riahi, K. (2025) *Learning, economies of scale, and knowledge gap effects on power generation technology cost improvements*, *iScience*, 2024, 28. <https://doi.org/10.1016/j.isci.2024.111644>.

⁹⁶ Rogers, E.M. (2003) *Diffusion of Innovations* (5th ed.) New York.

⁹⁷ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

reporting.⁹⁸ Under the Proposed Regulation, staff are proposing to provide flexibility in the selection of accounting methods and emission factors. This built-in flexibility will help reduce costs since publicly available emissions models can be used for most calculations and reporting entities will not be required to solicit data from suppliers.

Staff acknowledge the inherent variability in reporting costs that will be experienced across a diverse group of companies with different sizes, sector-specific considerations, supply chain complexities, Scope 3 specific category relevance, and overall reporting experience and readiness. These variations present challenges for estimating an average cost of reporting across all regulated entities. Given the confidential nature of cost information for companies, there is little academic research to draw on for estimating the direct costs experienced by companies. The best estimates of costs continue to be public feedback, company and practitioner surveys, and economic analysis associated with recent mandatory climate disclosure rulemakings, particularly the SEC analysis adapted in this SRIA, and the economic analysis conducted for the EU CSRD. Below, staff provide an overview of these cost estimates, as well as a cost survey conducted for a subset of potential companies subject to Health and Safety Code section 38532, to illustrate the variability of cost estimates across programs and survey respondents.

Under the CSRD, the highest costs of compliance are expected for the largest companies subject to the regulation, which the European Financial Reporting Advisory Group (EFRAG) estimated to be approximately \$370,000 (USD 2025\$) for ongoing costs based on a survey with 89 respondents.⁹⁹ The CSRD includes reporting requirements across a much broader set of sustainability criteria, of which Chapter E1 “Climate Change” is the only section with GHG emissions reporting requirements, in addition to other climate-related financial risk disclosures. EFRAG estimates that approximately 28% of total costs are attributed to reporting requirements under this chapter (\$103,565), and that Scope 1, Scope 2, and Scope 3 emissions disclosure requirements (E1-6) account for 8.4% of the total cost (\$31,069).¹⁰⁰ EFRAG also highlights the wide variability of estimated costs that were considered in their economic analysis. An ongoing 2026 survey among expected SB 253 reporting entities conducted by the Society for Corporate Governance indicates higher cost estimates for a subset of 30 mid- to large-cap¹⁰¹ publicly traded companies across a wide variety of

⁹⁸ Attewell, P. (1992) *Technology Diffusion and Organizational Learning: The Case of Business Computing*, *Organization Science*, 3(1), 1-158. <https://doi.org/10.1287/orsc.3.1.1>.

⁹⁹ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

¹⁰⁰ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

¹⁰¹ According to the comment letter, mid-cap companies have a market cap of \$2-10 billion, and large-cap companies have a market cap of \$10 billion or more.

industries.¹⁰² In this survey, current reporting costs were <\$50,000 for 7% of respondents, \$100,000 to \$249,000 for 26% of respondents, \$250,000 to \$2 million for 30% of respondents, and >\$2 million for 11% of respondents.¹⁰³ This subset of mid- to large-cap companies may represent a selection bias of larger reporting entities that may not be representative of costs for smaller entities closer to the \$1 billion revenue threshold under Health and Safety Code section 38532.

Staff recognize that there may be certain limitations with relying on existing cost surveys and economic analyses from other jurisdictions. Given the unique Scope 3 reporting phase-in approach under the Proposed Regulation, there are additional challenges and uncertainties with estimating costs, as other regulations and existing survey data do not reflect this type of phase-in approach. Moreover, the cost estimates that supported the SEC analysis were provided under a previous federal administration that was moving forward with mandatory corporate disclosures. With recent rollbacks of support for environmental and climate change initiatives, there is a degree of uncertainty about how many companies may still be preparing for mandatory reporting or still engaged in voluntary reporting. Taken together, this suggests that other available estimates will not provide a more accurate portrayal of compliance costs under the Proposed Regulation. Given the limited cost data available and data quality issues described above, staff used the estimates from the SEC analysis as the basis for the economic analysis for the Proposed Regulation, but has included other studies and estimates in this SRIA to illustrate the range of possible costs. The SEC analysis remains more aligned with the Proposed Regulation than other programs, and the cost estimate data is more robust and reproducible for quantification of compliance costs compared to other surveys or academic cost discussions. Staff invite stakeholders to provide more data and information that can help to refine this analysis of potential compliance costs with a limited Scope 3 reporting obligation for only the five most commonly reported categories.

2. Limited Assurance for Scope 1 and Scope 2 Emissions

For annual, ongoing estimates of assurance costs in the Proposed Regulation, staff align with the estimate from the SEC final rule for limited assurance of Scope 1 and Scope 2 emissions (p. 763),¹⁰⁴ or \$55,213 per entity. This cost is derived from estimates of eighteen individual companies and one industry survey of 39 public companies. Despite previous estimates of a 30% reduction in assurance costs between Year 1 and Year 2 for a related climate disclosure

¹⁰² Society for Corporate Governance (2026) *Comment Letter in Response to SB 253 Public Workshop: California Corporate Greenhouse Gas Reporting Program*. <https://ww2.arb.ca.gov/form/public-comments/submissions/59906>

¹⁰³ The comment letter does not state how the remaining 26% of respondents reported costs.

¹⁰⁴ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

program,¹⁰⁵ CARB staff take a more conservative approach in this Proposed Regulation and do not apply a cost reduction factor between initial and ongoing assurance costs.

Staff also conservatively assumed that no reporting entities would already have assurance engagements on their Scope 1 and 2 reports. In other words, all entities are assumed to bear the full cost of obtaining assurance annually, despite the fact that submissions of assurance engagements to other jurisdictions would be allowed to enhance alignment with disclosure programs in other jurisdictions. An estimated 40% of reporting entities currently obtain third-party assurance.¹⁰⁶ While staff do not factor this baseline into cost estimates, the assurance costs attributable to the Proposed Regulation would be lower for these reporting entities. Staff expect the cost of assurance will further decrease as the availability of assurance providers increases and the quality of reporting improves. The assurance cost estimates from the SEC rule are likely conservative; more third-party providers have entered this sector in response to the establishment of mandatory reporting programs in other jurisdictions since these estimates were made, which staff expect to have increased capacity and made costs more competitive.

3. Total Costs

For the total costs reported in this section, staff apply the above assumptions regarding initial and ongoing costs, and existing reporting practices. Staff calculate the costs for existing reporters and new reporters each year of implementation and divide this by the total number of reporting entities (n = 2,551) to generate a total average annual cost estimate per entity. These direct costs to reporting entities of complying with the Proposed Regulation will apply annually and ongoingly in subsequent years. Under the Proposed Regulation and Alternative 2 in section VI.B, the cost of Scope 3 reporting applies equally across all reporting entities. Under Alternative 1 in section VI.A, Scope 3 costs vary by sector. Staff use the total average annual cost per entity to compare the cost impacts across these options. Pursuant to CCR, title 1, section 2002(c)(5), the economic analysis must cover costs and benefits through 12 months after the estimated date the proposed regulation will be fully implemented. CARB went beyond this requirement and analyzed the first 4 years of implementation to demonstrate that the ongoing costs are expected to remain the same for reporting entities in subsequent years.

Total annual costs (Thousands of 2025\$)

Y1 2027 (initial reporting + assurance): \$126 + \$55 = \$181 per entity

Y2 2028 (ongoing reporting + assurance): \$95 + \$55 = \$150 per entity

¹⁰⁵ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

¹⁰⁶ Dutta, S., Hwang, J., Patatoukas, P.N. (2026) *Full emissions disclosure under California Senate Bill 253 could change carbon evaluations and redirect investment*, *Communications Sustainability*, 1, 42. <https://doi.org/10.1038/s44458-026-00051-9>.

Y3 2029 (ongoing reporting + assurance): \$95 + \$55 = \$150 per entity

Y4 2030 (ongoing reporting + assurance): \$95 + \$55 = \$150 per entity

Average Annual Cost Per Entity (2027-2030) = \$158

Total Cost of Proposed Regulation (2027-2030) = \$1.61 billion

Table 5. Annual Direct Costs for the Proposed Regulation

Year	Reporting Costs (2025\$M)	Assurance Costs (2025\$M)	Total Costs (2025\$M)
2027	\$320	\$141	\$461
2028	\$242	\$141	\$383
2029	\$242	\$141	\$383
2030	\$242	\$141	\$383
Annual Average	\$262	\$141	\$403
Total	\$ 1,048	\$563	\$1,611

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

B. Direct Costs on Typical Businesses

Typical businesses are those meeting applicability criteria under Health and Safety Code section 38532—i.e., U.S.-based companies doing business in California with annual revenue of \$1 billion or more. Table 6 describes the share of costs broken down by business type (North American Industry Classification System, or NAICS Level 2). The values presented in Table 6 are derived from the best available data at the time of the analysis.

Table 6. Share of Costs by Business Type

Business Type (NAICS)	Number of Entities	Estimated Share of Total Costs (%)
Accommodation and Food Services	32	1.25%
Administrative and Support and Waste Management and Remediation Services	94	3.68%
Agriculture, Forestry, Fishing and Hunting	8	0.31%
Arts, Entertainment, and Recreation	5	0.20%
Construction	88	3.45%
Finance and Insurance	361	14.15%

Business Type (NAICS)	Number of Entities	Estimated Share of Total Costs (%)
Health Care and Social Assistance	192	7.53%
Information	156	6.12%
Management of Companies and Enterprises	11	0.43%
Manufacturing	742	29.09%
Mining, Quarrying, and Oil and Gas Extraction	33	1.29%
Other Services (except Public Administration)	21	0.82%
Professional, Scientific, and Technical Services	152	5.96%
Real Estate and Rental and Leasing	67	2.63%
Retail Trade	162	6.35%
Transportation and Warehousing	105	4.12%
Utilities	136	5.33%
Wholesale Trade	186	7.29%
Total	2,551	100.00%

During the regulatory outreach described in Section I.E of this document, staff heard concerns from some stakeholders that smaller companies, who may play a role in the overall corporate supply chain for larger reporting entities, might incur significant costs to collect and provide data required by reporting entities pursuant to the Proposed Regulation. Given the flexibility in emissions quantification methods allowed in the Proposed Regulation, staff do not expect the Proposed Regulation to increase costs for smaller companies in corporate supply chains. Scope 3 flexibility in the Proposed Regulation allows for spend-based emissions quantification, which enables reporting entities to calculate their Scope 3 emissions using emissions factors and expenditure data that they already possess, rather than collecting detailed data from suppliers.

C. Direct Costs on Small Businesses

Staff do not expect direct cost impacts to small businesses from the Proposed Regulation. “Small business” is defined in California Government Code section 11346.3 to mean “a business that is all of the following: (1) Independently owned and operated. (2) Not dominant in its field of operation. (3) Has fewer than 100 employees.”¹⁰⁷

¹⁰⁷ Gov. Code § 11346.3.

Given the high annual revenue threshold of \$1 billion, it is reasonable to assume that regulated entities do not meet the definition of a “small business” as used in California Government Code section 11346.3.

D. Direct Costs on Individuals

The Proposed Regulation would not impose any direct costs on individuals.

IV. Fiscal Impacts

A. Local Government

The Proposed Regulation is not expected to have any fiscal impact on local government, as federal, state, and local government entities are exempted from the Proposed Regulation.

B. State Government

1. CARB

The Proposed Regulation will result in fiscal impact on CARB only. No other state agencies would be impacted, as the scope of Health and Safety Code section 38532 applies exclusively to business entities and solely directs CARB to implement reporting requirements. The fiscal impacts to CARB from the Proposed Regulation were summarized and accounted for in Form 399 of the Initial Regulation, which assessed annual fees on covered and reporting entities for implementation of the authorizing statutes.¹⁰⁸ Implementation costs and fee revenues to cover these costs were covered in the initial regulation and are not included in the SRIA for the Proposed Regulation. The total revenue increase to CARB associated with Health and Safety Code section 38532 is estimated to be \$40,252,000 from FY 2027-28 to FY 2030-31 due to the collection of fees to cover 24.5 permanent positions and contract funds.¹⁰⁹ This amount consists of an annual revenue increase of \$12,064,000 from FY 2027-28 to FY 2028-29 and annual revenue increase of \$8,620,000 from FY 2029-30 to FY 2030-31. At the same time, these revenues will be fully expended to implement Health and Safety Code section 38532. The implementation cost to CARB is estimated to be \$12,064,000 annually from FY 2027-28 to FY 2028-29 and \$8,620,000 annually from FY 2029-30 to FY 2030-31.

V. Macroeconomic Impacts

This section explains how staff estimate the statewide economic impacts of the Proposed Regulation, the inputs and assumptions used, the expected changes to key economic indicators, and how to interpret the results. Overall, the regulation is expected to have small

¹⁰⁸ CARB (2026) *California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation | California Air Resources Board*. <https://ww2.arb.ca.gov/rulemaking/2025/california-corporate-greenhouse-gas-reporting-and-climate-related-financial-risk>.

¹⁰⁹ California Department of Finance (2024) *Budget Change Proposal-Climate Corporate Data Accountability Act*. https://bcp.dof.ca.gov/2425/FY2425_ORG3900_BCP7505.pdf.

and positive statewide economic impacts—less than 0.01% of the baseline levels of employment, output and gross state product and income in the absence of the Proposed Regulation.

A. Methods for Determining Economic Impacts

This section describes the methodology to estimate the macroeconomic impacts of the Proposed Regulation on California economy. The Proposed Regulation will impose reporting and assurance costs on the regulated entities. Staff estimate economic performance assuming full implementation of the Proposed Regulation compared to a baseline by using cost data from Section III of the SRIA. Staff then estimate yearly changes in major indicators—employment, output growth, and Gross State Product (GSP)—for 2027–2030. The years of the analysis are used to simulate the Proposed Regulation through at least 12 months beyond full implementation.

To make these estimates, staff use the Regional Economic Models, Inc. (REMI) Policy Insight Plus (v3.3.1) Model. REMI is a widely used economic model that combines several approaches (input–output, general equilibrium, econometrics, and regional analysis) to forecast how policies affect economies over time.¹¹⁰ For this analysis, staff use a two-region model (California and the rest of the U.S.) and update REMI’s baseline to match the most recent California Department of Finance (DOF) economic and demographic projections. Specifically, the REMI model’s National and Regional Controls were updated to conform to the DOF economic forecasts, which include U.S. real gross domestic product, income and employment, as well as California civilian employment by industry, released with the Governor’s Budget on January 9, 2026,^{111,112,113,114} and DOF demographic forecast for California population, last updated in September 2025. After DOF’s forecast period ends in 2030, staff assume variables continue to grow at REMI’s baseline rates.

B. Inputs and Assumptions of the Assessment

Results depend on the modeling assumptions. The key modeling assumptions are:

- Staff model the Proposed Regulation’s reporting and assurance costs as production cost increases in the affected industries.
- Because many regulated companies operate both in California and elsewhere in the U.S., staff split the cost impacts between the two regions based on each industry’s revenue share in each region.

¹¹⁰ <https://www.remi.com/model/pi/>.

¹¹¹ California Department of Finance. Economic Research Unit. National Economic Forecast – Annual & Quarterly. Sacramento: California. January 2026.

¹¹² California Department of Finance. Economic Research Unit. California Economic Forecast – Annual & Quarterly. Sacramento: California. January 2026.

¹¹³ California Department of Finance. Economic Research Unit. National Deflators: Calendar Year averages: from 1947. Sacramento: California. November 2025.

¹¹⁴ California Department of Finance. Demographic Research Unit. Report P-3: Population Projections, California, 2020-2070 (Baseline 2024 Population Projections; Vintage 2025 Release). Sacramento: California. September 2025.

- Staff assume an increase in demand for reporting and assurance services tied to compliance.
- Staff estimate that 14% of the GHG reporting service would be provided by California companies and 86% would be supplied by out-of-state companies. In addition, staff expect 38% of the assurance service to be in California and 62% in the rest of US.¹¹⁵

Table 7 shows how those cost and demand changes are allocated across industries and the corresponding changes in final demand for the industry supplying the services.

Table 7. Sources of Changes in Production Cost and Final Demand by Industry

Source of Cost or Savings	Industries with Changes in Production Cost or Final Demand (NAICS)
Reporting Requirements	<i>Production Cost:</i> All industries with regulated entities. <i>Final Demand:</i> Management, Scientific, and Technical Consulting Services (5416)
Assurance Requirements	<i>Production Cost:</i> All industries with regulated entities. <i>Final Demand:</i> Management, Scientific, and Technical Consulting Services (5416)

C. Results of the Assessment

REMI estimates the incremental impact of the regulation each year versus the baseline. California's economy is expected to grow from 2027 to 2030 in the model baseline. A negative impact means growth is slower than the baseline; a positive impact means growth is faster than the baseline. Overall, the Proposed Regulation is estimated to have small and positive impacts on California economy.

1. California Employment Impacts

Table 8 reports net changes in total jobs across all industries. From 2027–2030, the model shows higher job growth, largely due to increased demand for services needed to comply with the reporting and assurance requirements. The average annual job impact of the Proposed Regulation is an increase of about 400 additional jobs.

Table 8. Total California Employment Impacts of the Proposed Regulation

Year	California Employment (Thousands)	% Change in Total Jobs	Change in Total Jobs (Individuals)
2027	25,759	0.00%	500
2028	25,838	0.00%	300

¹¹⁵ Staff conducted sensitivity analysis using the industry's revenue shares in each region. The magnitudes of the macroeconomic impacts change slightly but remain positive and small (near zero percent of the baseline levels).

Year	California Employment (Thousands)	% Change in Total Jobs	Change in Total Jobs (Individuals)
2029	25,928	0.00%	300
2030	26,019	0.00%	300
Annual Average	25,886	0.00%	400

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

Figure 1 shows estimated employment trends by sector. The service sector sees the largest job gains due to the increase in demand for reporting and assurance services. The manufacturing sector experiences the largest job losses. This reflects the fact that the manufacturing sector has the largest expected number of regulated entities and this sector will face slight production cost increase due to reporting and assurance requirements. These impacts, however, are relatively small compared to their baseline industry size.

Figure 1. Employment Impacts of the Proposed Regulation by Major Sector



2. California Business Impacts

Gross output measures the value of goods and services sold across all stages of production. It moves up or down with changes in costs and demand. The model projects an overall increase in output growth from 2027–2030, reflecting the positive impacts from higher demand for reporting and assurance services. The largest statewide increase is an estimated \$96 million in

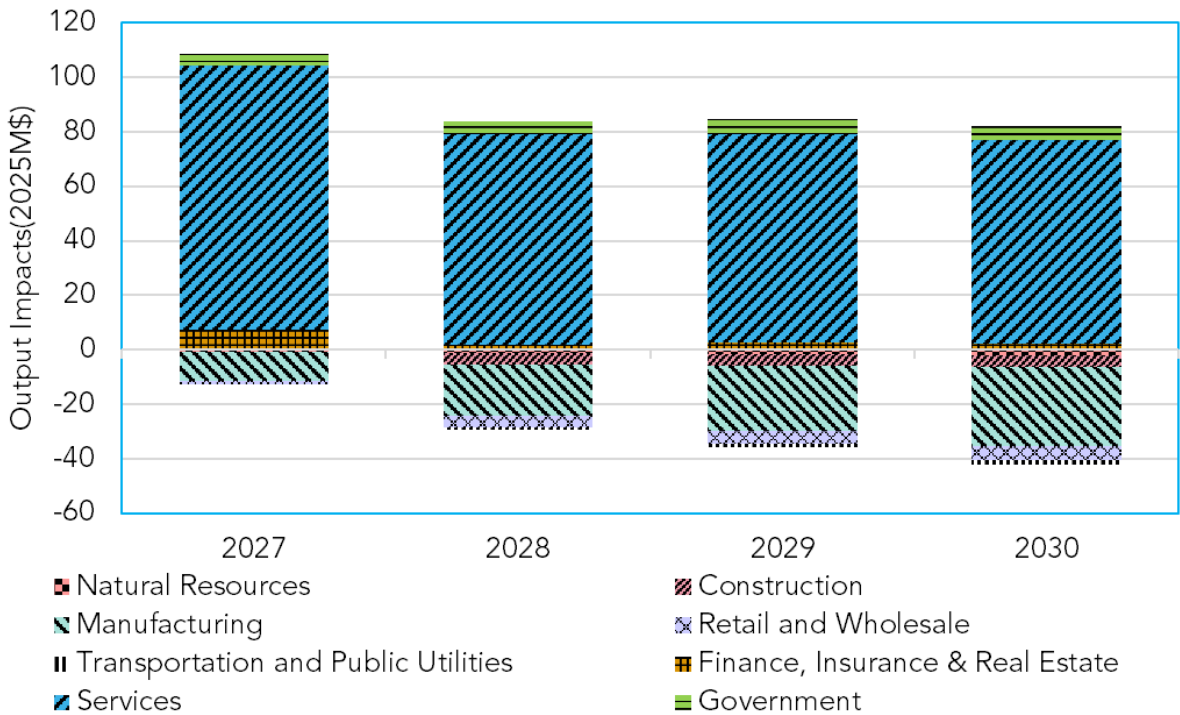
2027 (see Table 9). In 2030, the size of the increase is expected to be about \$40 million. Figure 2 shows California output by sector, with the service sector experiencing the highest increase in output.

Table 9. Total California Output Impacts of the Proposed Regulation

Year	California Output (Million 2025\$)	% Change	Change in Total Output (Million 2025\$)
2027	6,729,593	0.00%	96
2028	6,847,153	0.00%	54
2029	6,969,219	0.00%	49
2030	7,086,373	0.00%	40
Annual Average	6,908,085	0.00%	60

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

Figure 2. California Output Impacts of the Proposed Regulation by Major Sector



3. Impacts on Investments in California

Private domestic investment includes spending on residential and nonresidential structures, equipment, and software by businesses and nonprofits. It is used as a proxy for future economic capacity. Table 10 shows a \$2 million decrease in investment in 2027, followed by decreases between \$7 million to \$9 million from 2028 and 2030. The negative impacts estimated by REMI are from the slight increases in production costs due to the reporting

requirements. These changes are extremely small and account for a negligible percentage of baseline investment at any point.

Table 10. Impacts on Gross Domestic Investment in California

Year	California Investment (Million 2025\$)	% Change	Change in Total Investment (Million 2025\$)
2027	622,235	0.00%	-2
2028	636,925	0.00%	-7
2029	655,098	0.00%	-8
2030	673,613	0.00%	-9
Annual Average	646,968	0.00%	-7

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

4. Impacts on Individuals in California

The regulation does not directly charge individuals; compliance obligations fall on regulated businesses. However, business costs can indirectly affect individuals through broader economic changes. One way to estimate this is by modeling real personal income. Table 11 shows personal income changes from 2027 to 2030. Total personal income rises by about \$58 million in 2027, and then between \$47 million and \$48 million from 2028 to 2030. This change is extremely small compared to the overall size of personal income levels. It represents a negligible percentage of baseline personal income in any given year. The total change in per capita or household income is correspondingly small.

Table 11. Income Impacts on Individuals in California

Year	California Personal Income (Million 2025\$)	Change in Personal Income (Million 2025\$)	% Change in Personal Income	Per Capita Change (2025\$)	Per Household Change (2025\$)
2027	3,861,446	58	0.00%	1	4
2028	4,044,088	47	0.00%	1	2
2029	4,228,491	48	0.00%	1	2
2030	4,422,822	47	0.00%	0	1
Annual Average	4,139,212	50	0.00%	1	2

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

5. Impacts on Gross State Product (GSP)

GSP is the total market value of goods and services produced in California and is a core measure of growth. Table 12 shows GSP growth increasing by about \$59 million in 2027, \$34 million in 2028 and then \$31 million and \$26 million in 2029 and 2030, respectively. These statewide impacts are small and account for a negligible percentage of the baseline GSP.

Table 12. Impacts on California Gross State Product

Year	California GSP (Billion 2025\$)	% Change	Change in GSP (Million 2025\$)
2027	4,024,706	0.00%	59
2028	4,092,182	0.00%	34
2029	4,163,643	0.00%	31
2030	4,235,582	0.00%	26
Annual Average	4,129,028	0.00%	38

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

6. Creation or Elimination of Businesses

The REMI model does not directly estimate how many businesses are created or eliminated. Instead, staff look at changes in jobs and output as indicators. As shown in Table 8 and Table 9, statewide impacts remain negligibly small (nearly zero percent of the baseline levels). Individual industries may be affected differently; for example, there may be an increase in demand for reporting and assurance service activities, with a simultaneous decrease in manufacturing due to slightly higher production costs.

7. Incentives for Innovation

The Proposed Regulation is not expected to provide direct incentives for innovation. As CARB collects more information on GHG emissions from reporting entities and consumers are made more aware of the climate impacts of products, reporting entities may encounter new or strengthened incentives to reduce GHG emissions from their supply chains. This could further incentivize innovation in GHG reductions at the corporate level. A recent report evaluating voluntary disclosure reporting by a subset of approximately 11,000 companies identified that every dollar invested in emissions reduction generates an average of USD \$2.4 in return, and in some cases up to USD \$7 over its lifetime.¹¹⁶ Healthy return on clean energy and technology investments can drive clean energy research, development, and deployment for improvements in existing and emerging technologies.

8. Competitive Advantage or Disadvantage

The Proposed Regulation is not expected to significantly affect the overall competitiveness of California's businesses due to its negligible impacts (near-zero percent) relative to the baseline. As shown in Figure 1 and Figure 2, the Proposed Regulation is estimated to have slightly positive impacts on the service sector due to the increase in reporting and assurance service demand and slightly negative impacts on the manufacturing sector due to slightly higher production costs. However, the overall impacts on California economy are slightly positive.

¹¹⁶ Carbon Disclosure Project (2026) *Disclosure Dividend 2026*, <https://www.cdp.net/en/insights/disclosure-dividend-2026>.

D. Summary and Agency Interpretation of the Assessment Results

Table 13 summarizes the macroeconomic results. Staff estimate the Proposed Regulation will not have a significant impact on California's overall economy. Across major indicators—employment, GSP, output, investment, and personal income—annual changes remain negligibly small, generally nearly zero percent of the baseline. Staff expect growth in the service industry as these companies provide reporting and assurance services to support reporting entities as they comply with the Proposed Regulation. The analysis also shows small and positive overall impacts on California's overall economy.

Table 13. Summary Impacts on Major Economic Indicators

Macroeconomic Variables		2027	2028	2029	2030	Annual Average
GSP	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	59	34	31	26	38
Personal Income	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	58	47	48	47	50
Employment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change in Jobs	500	300	300	300	400
Output	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	96	54	49	40	60
Private Investment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	-2	-7	-8	-9	-7

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

VI. Alternatives

Staff solicited public input regarding alternatives to the Proposed Regulation at a workshop held on March 23, 2026.¹¹⁷ Staff received feedback on costs and several stakeholders proposed alternatives. Staff analyzed two economic alternatives to the Proposed Regulation. One alternative reduces the stringency of Scope 3 reporting requirements by prioritizing reporting from specific sectors for 2027-2030 reporting. The other alternative increases the stringency of Scope 3 reporting requirements by requiring all reporting entities to report emissions across all fifteen Scope 3 categories or explain the rationale for their exclusion.

¹¹⁷ CARB (2026) *CARB Virtual Public Workshop on California Corporate Greenhouse Gas Reporting*. <https://ww2.arb.ca.gov/events/carb-virtual-public-workshop-california-corporate-greenhouse-gas-reporting>.

A. Alternative 1

Alternative 1 adjusts Scope 3 reporting requirements compared to the Proposed Regulation. Under this Alternative, 2027-2030 Scope 3 reporting requirements would only apply to reporting entities in the Transportation and Industrial sectors—the largest sources of statewide GHG emissions as identified in the California GHG Emission Inventory Program.¹¹⁸ Entities would be required to report across all fifteen Scope 3 categories. Scope 1 and 2 reporting would still be required for all entities meeting Health and Safety Code section 38532 applicability definitions. Using staff's preliminary list¹¹⁹ of reporting entities which identified 2,551 applicable entities under Health and Safety Code section 38532, staff use (North American Industry Classification System (NAICS) level 2 code classifications to determine 968 reporting entities in the Transportation and Industrial sectors. Under this Alternative, only these reporting entities, 38% of the total, would be subject to Scope 3 reporting requirements beginning in 2027.

1. Costs

Alternative 1 costs \$1.65 billion, approximately 2% more than the Proposed Regulation, but the majority of entities (62%) would face lower reporting costs compared to the Proposed Regulation. Overall costs are comparable to the Proposed Regulation because 38% of reporting entities are incurring the full cost of Scope 3 reporting under Alternative 1, whereas all reporting entities incur approximately one-third of the cost of Scope 3 reporting (5 of 15 categories) under the Proposed Regulation. There is still some uncertainty about the real costs of reporting under Alternative 1 and the Proposed Regulation, due to limited availability of empirical cost data for reporting a subset of Scope 3 categories. Incremental reporting across the full set of fifteen Scope 3 categories may not scale linearly, as staff have assumed in this analysis due to limited availability of information. The remaining ten Scope 3 categories are less commonly reported, and therefore cost information is less available, which introduces uncertainty.

Under Alternative 1, first year (initial) reporting costs for all three scopes are \$130,125 per entity and Scope 1 and Scope 2 limited assurance costs are \$55,213 per entity. In Year 2, annual ongoing costs become \$98,015 per entity for reporting.¹²⁰ The same baseline assumptions are applied for existing reporting practices among reporting entities, as described in Section I.D. Specifically, 72% of entities will already be reporting Scope 1 and Scope 2 emissions and 49% will already be reporting Scope 3 emissions. For entities already reporting, staff will set initial costs equal to ongoing costs for Year 1 such that reporting costs are

¹¹⁸ CARB (2023) [Current California GHG Emission Inventory Data](https://ww2.arb.ca.gov/ghg-inventory-data). <https://ww2.arb.ca.gov/ghg-inventory-data>.

¹¹⁹ CARB (2025) [SB 253_261_preliminary_list_092425.xlsx](https://ww2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx). https://ww2.arb.ca.gov/sites/default/files/2025-10/SB253_Draft_Scope1_2_GHG_Template.xlsx.

¹²⁰ Staff calculated the total, aggregate cost of Scope 1-3 reporting across all entities and divide by the number of entities (n = 2,551) to estimate the average annual per entity costs presented in the Proposed Regulation. See Appendix A for more details on cost estimates.

represented as ongoing across all years of implementation. The total annual costs are reported in Table 14.

Table 14. Annual Direct Costs for Alternative 1

Year	Reporting Costs (Million 2025\$)	Assurance Costs (Million 2025\$)	Total Costs (Million 2025\$)
2027	\$332	\$141	\$473
2028	\$250	\$141	\$391
2029	\$250	\$141	\$391
2030	\$250	\$141	\$391
Annual Average	\$271	\$141	\$411
Total	\$ 1,082	\$563	\$1,645

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

2. Benefits

Typical businesses are those meeting applicability criteria under Health and Safety Code section 38532—i.e., U.S.-based companies doing business in California with annual revenue of \$1 billion or more. These reporting entities will have higher quality, comparable information on their associated greenhouse gas emissions, which can help guide operations, planning, and investments/acquisitions. This Alternative focuses on industrial sectors with significant Scope 3 contributions and would provide beneficial insights for California investors, consumers, and other stakeholders with an interest in understanding the full range of emissions from those sectors. Staff have qualitatively identified potential benefits of the Proposed Regulation for typical businesses, which include standardized data (e.g., reduced disclosure processing costs), organizational performance (e.g., enhanced supply chain management and traceability), financial performance (e.g., increased investment, firm valuation, and liquidity), and environmental performance (e.g., reduced emissions). For an overview of these benefits, refer to Section II. The full range of these benefits would apply to reporting entities reporting Scope 1, Scope 2, and Scope 3 emissions. Thus, under this Alternative, a smaller subset of reporting entities (38%) would access the full potential benefits compared to the Proposed Regulation.

3. Economic Impacts

The macroeconomic impact analysis results are reported in Table 15. Similar to the Proposed Regulation, Alternative 1 is estimated to result in small increases in GSP, output, and employment from 2027 to 2030, with the largest impacts occurring in 2027.

Table 15. Summary of Macroeconomic Impacts of Alternative 1

Macroeconomic Variables		2027	2028	2029	2030	Annual Average
GSP	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	60	36	33	28	39
Personal Income	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	60	48	49	49	51
Employment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change in Jobs	500	300	300	300	400
Output	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	98	57	51	43	62
Private Investment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	-2	-7	-8	-9	-7

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

4. Cost-Effectiveness

In making comparisons of cost-effectiveness across alternatives, staff use the average reporting cost per regulated entity as the metric for evaluating cost-effectiveness. Table 16 presents the annual average reporting cost per regulated entity for the Proposed Regulation and the two regulatory alternatives. Based on this measure, Alternative 1 is slightly less cost-effective than the Proposed Regulation across all years evaluated.

Table 16. Comparison of Cost-Effectiveness (Cost per Reporting Entity) Among Proposed Regulation and Alternatives

Year	Proposed Regulation (Thousand 2025\$)	Alternative 1 (Thousand 2025\$)	Alternative 2 (Thousand 2025\$)
2027	\$181	\$185	\$247
2028	\$150	\$153	\$193
2029	\$150	\$153	\$193
2030	\$150	\$153	\$193
Annual Average	\$158	\$161	\$207

5. Reason for Rejecting

Alternative 1 would leave the majority of reporting entities, an estimated 62 percent, with no Scope 3 disclosure obligation at all. While this alternative generates important Scope 3 emissions and supply chain data for key sectors of the statewide GHG inventory where other mobile source and industrial regulations and policies are also focused, the Proposed Regulation has the added benefits of focusing on all sectors across the entire economy. By taking a whole economy approach, the Proposed Regulation ensures that reporting capability

is being built across all sectors in the state of California to prevent the emergence of gaps in reporting across sectors over time. Given the need to build entities' Scope 3 reporting, staff consider it important that all reporting entities begin putting in place protocols and building capacity for supply chain traceability needs from the outset of this reporting program.

Additionally, there are practical limitations to the implementation of Alternative 1 in a regulatory setting. Many of the reporting entities subject to this regulation are large, global companies that span multiple sectors. Alternative 1 could lead to unintended consequences by incentivizing companies to reclassify themselves to avoid reporting. For example, a retailer with a significant in-house logistics and fleet operation, or a manufacturer with an integrated distribution subsidiary, could plausibly contest classification under the Transportation and Industrial sectors. As a result, enforcement of Alternative 1 would incur major challenges and considerable investment of staff resources to determine which reporting entities should be classified under the Transportation and Industrial sectors, and to continue to monitor these classifications under each year's reporting cycle. Furthermore, no other mandatory climate disclosure program has adopted sector-specific implementation of Scope 3 reporting. Alternative 1 would raise major issues for interoperability between CARB's program and mandatory climate disclosure programs in other jurisdictions, which would go against the direction of Health and Safety Code section 38532.

B. Alternative 2

Alternative 2 adjusts Scope 3 reporting requirements compared to the Proposed Regulation. Under this Alternative, 2027-2030 Scope 3 reporting requirements would apply to all reporting entities. Reporting entities would be required to report across all fifteen Scope 3 categories listed in Section I.B.2 or justify their exclusion.

1. Costs

Alternative 2 costs \$2.11 billion, approximately 31% more than the Proposed Regulation. This is because all reporting entities would be required to report GHG emissions across all fifteen Scope 3 categories. There is uncertainty about the real costs of Scope 3 reporting, particularly for less commonly reported categories for which data and quantification methods may not be as mature. Incremental reporting across the full set of fifteen Scope 3 categories may not scale linearly, as staff have assumed in this analysis due to limited information. The remaining ten Scope 3 categories are less commonly reported, and therefore cost information is less available, which introduces uncertainty.

Under Alternative 2, first year (initial) reporting costs for all three scopes are \$191,568 per entity and Scope 1 and Scope 2 limited assurance costs are \$55,213 per entity. In Year 2, annual ongoing costs become \$138,033 per entity for reporting. The same baseline assumptions are applied for existing reporting practices among reporting entities, as described in Section I.D. Specifically, 72% of entities will already be reporting Scope 1 and Scope 2 emissions and 49% will already be reporting Scope 3 emissions. For entities already reporting, staff assumed that initial costs would be equal to ongoing costs for Year 1 such that reporting costs are represented as ongoing across all years of implementation. The total annual costs are reported in Table 17.

Table 17. Annual Direct Costs for Alternative 2

Year	Reporting Costs (Million 2025\$)	Assurance Costs (Million 2025\$)	Total Costs (Million 2025\$)
2027	\$489	\$141	\$630
2028	\$352	\$141	\$493
2029	\$352	\$141	\$493
2030	\$352	\$141	\$493
Annual Average	\$386	\$141	\$527
Total	\$ 1,545	\$563	\$2,108

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

2. Benefits

Typical businesses are those meeting applicability criteria under Health and Safety Code section 38532—i.e., US-based companies doing business in California with annual revenue of \$1 billion or more. These reporting entities will have higher quality, comparable information on their associated greenhouse gas emissions, which can help guide operations, planning, and investments/acquisitions. Moreover, Alternative 2 would provide beneficial insights to investors, consumers, and other stakeholders with an interest in accessing Scope 3 information from all reporting entities across all categories. Staff have qualitatively identified potential benefits of the Proposed Regulation for typical businesses, which include standardized data (e.g., reduced disclosure processing costs), organizational performance (e.g., enhanced supply chain governance and traceability), financial performance (e.g., increased investment, firm valuation, and liquidity), and environmental performance (e.g., reduced emissions). For an overview of these benefits, refer to Section II. These benefits would be maximized under Alternative 2, as this approach requires the most complete level of Scope 3 reporting among the options considered in this Proposed Regulation.

3. Economic Impacts

The macroeconomic impact analysis results in Table 18 show that Alternative 2 would result in slightly larger impacts on employment and output compared to the Proposed Regulation, attributable to its more stringent reporting requirements. Similar to the Proposed Regulation, Alternative 2 is estimated to result in small increases in GSP, output, and employment from 2027 to 2030, with the largest positive impact occurring in 2027.

Table 18. Summary of Macroeconomic Impacts of Alternative 2

Macroeconomic Variables		2027	2028	2029	2030	Annual Average
GSP	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	64	30	27	21	35
Personal Income	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	67	48	49	48	53
Employment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change in Jobs	600	300	300	300	400
Output	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	104	46	40	29	55
Private Investment	% Change	0.00%	0.00%	0.00%	0.00%	0.00%
	Change (2025M\$)	-5	-13	-14	-15	-12

Note: Numbers are rounded to reflect the inherent uncertainty in modeling inputs and results. Totals may not add up due to rounding.

4. Cost-Effectiveness

In making comparisons of cost-effectiveness across alternatives, staff use the average reporting cost per regulated entity as the metric for evaluating cost-effectiveness. As shown in Table 16, Alternative 2 is significantly less cost-effective than the Proposed Regulation. The average reporting cost per entity is projected to be 31% greater than the Proposed Regulation and 28% greater than Alternative 1.

5. Reason for Rejecting

Staff received stakeholder feedback about the current state of challenges associated with conducting Scope 3 emissions inventories, which include building internal expertise and capacity and collecting various data on internal and external operations. Several Scope 3 emissions categories may be particularly challenging to calculate or are currently underreported, such as category 10 (processing of sold products), category 11 (Use of Sold Products), and category 15 (Financed Emissions), due to data unavailability or lack of mature quantification methods. Staff have acknowledged the uncertainty around the scaling of Scope 3 reporting costs for these less common (and more challenging) categories. Given this uncertainty, staff is rejecting Alternative 2 to provide reporting entities more time to prepare for full Scope 3 reporting. The Proposed Regulation allows reporting entities to focus on the more widely reported Scope 3 categories and gives reporting entities more time to build knowledge and expertise for reporting on other emissions categories, which staff anticipate will bring down the costs of future reporting across the full set of Scope 3 categories. The Proposed Regulation requires reporting entities to disclose a designated subset of Scope 3 emissions categories. By focusing on these select categories, the framework establishes a practical baseline that prepares all sectors for broader Scope 3 reporting while providing a more rigorous foundation than Alternative 1. For many reporting entities, only a subset of the fifteen Scope 3 categories may be relevant, and thus many reports will likely include a subset of Scope 3 categories given the variations in business models and supply chain configurations.

This suggests that disclosure reports submitted under the Proposed Regulation may be comparable to reports submitted under Alternative 2 and will be achieved at lower cost. Staff do not anticipate substantial tradeoffs for interoperability between Alternative 2 and the Proposed Regulation. Voluntary reporting across all fifteen Scope 3 categories is still permitted under the Proposed Regulation, and entities already reporting full Scope 3 emissions to other jurisdictions can use existing reports for CARB's program, given that they adhere to the other requirements of the Proposed Regulation.

Appendix A: Methodology for Estimating Direct Costs

The main costs of the corporate GHG reporting regulation are for companies to report Scope 1, Scope 2, and Scope 3 emissions and obtain limited assurance for Scope 1, and Scope 2 emissions. To estimate the direct costs on typical businesses for the SRIA, staff referenced cost estimates submitted by stakeholders during the 2022 Securities and Exchanges Commission (SEC) climate disclosure rulemaking.¹²¹

There are several factors to consider with cost inputs and assumptions:

- Initial vs. Ongoing Costs—Reporting costs become cheaper over time after reporting protocols and procedures are established. Staff refer to this difference between initial and ongoing costs as the “cost reduction factor” in this document.
- Ranges of Cost Estimates—Stakeholders typically present a range of costs, particularly service providers. These ranges could reflect different levels of company maturity (initial vs. ongoing), or differences in company size, business model, supply chain complexity, or sectoral emissions intensity.
- Baseline Assumptions—There are existing reporting practices under voluntary programs and regulations in other jurisdictions. We apply assumptions from a study focusing on potential SB 253 companies, which estimated that 72% of reporting entities are already reporting Scope 1 and Scope 2 emissions and 49% are already reporting some Scope 3 emissions.¹²²
- Cost Uncertainty—The real costs of compliance, particularly for Scope 3 emissions reporting, are expected to vary significantly according to differences in company profiles, reporting experience, and readiness. Moreover, cost uncertainty is likely to vary by Scope 3 category, with the costs of reporting more commonly reported categories being more certain. This uncertainty is reflected in the wide range of cost estimates available from company surveys, and the differences in cost analyses across mandatory reporting programs.

Reference cost estimates from SEC analysis (2022)

Scope 1 & Scope 2. SEC estimates costs for Scope 1 and Scope 2 emissions reporting based on seven estimates from companies and trade organizations. They use midpoints of costs presented as ranges, and/or derive different cost reduction factors based on stakeholder estimates to estimate the *ongoing* costs for Scope 1 and Scope 2 reporting. To back calculate initial costs, they apply the midpoint of the cost reduction factor estimates received (56%).

¹²¹ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

¹²² Dutta, S., Hwang, J., Patatoukas, P.N. (2026) *Full emissions disclosure under California Senate Bill 253 could change carbon evaluations and redirect investment*, *Communications Sustainability*, 1, 42. <https://doi.org/10.1038/s44458-026-00051-9>.

Median value of ongoing cost estimates (2025\$) = **\$73,544**

Scope 3. The SEC analysis does not estimate the costs of Scope 3 reporting directly. It presents the *ongoing* costs of measuring Scope 1, Scope 2, and some Scope 3 emissions, based on eight estimates from four individual companies, one survey of average costs reported by 39 public companies, and three third-party service providers that offer GHG accounting for companies (Table A1). For cost estimates provided as a range from these commenters, SEC uses the midpoint value and applies a 60% reduction from initial to ongoing costs. The 60% discount between initial and ongoing costs is based on a commenter that provided a range of costs according to “high-maturity” companies (i.e., those that are already measuring Scope 1, Scope 2, and Scope 3 emissions) and “low-maturity” companies that do not already have emissions-measuring systems and processes in place. The SEC analysis did not consider baseline reporting practices in its cost estimates.

Median value of ongoing cost estimates (2025\$) = **\$87,498**

Assurance. The SEC analysis estimates the cost for limited assurance of Scope 1 and Scope 2 emissions based on 17 stakeholder estimates. For data presented as cost ranges, it uses the midpoint value and does not apply a cost reduction factor between Year 1 and Year 2.

Median value of cost estimates (2025\$) = **\$55,213**

Cost estimates in the Proposed Regulation

Staff received some feedback following the March 23 (2026) workshop that SEC Scope 3 costs are underestimated. In response, staff adjusted its Scope 3 cost estimates by using the upper bound value of cost estimate ranges from the SEC analysis, rather than the midpoint value. Staff assume that this value represents the *ongoing* costs only (rather than the cost range representing ongoing to initial costs, as assumed in the SEC analysis). Staff’s interpretation is that the range of cost estimates provided by stakeholders during the SEC rulemaking, if not specified, could also be representing the range of costs based on company size and complexity (not just high-maturity vs. low-maturity costs, or initial vs. ongoing costs). Under this interpretation, the inflation-adjusted median value of ongoing Scope 1, Scope 2, and Scope 3 costs is \$138,033, and the ongoing, incremental cost of Scope 3 reporting is \$64,489.

To calculate the initial cost of Scope 1, Scope 2, and Scope 3 reporting, staff apply a cost reduction factor of 48% (compared to 60% in the SEC analysis). This is the median value of six estimates of cost reduction factors between initial and ongoing GHG emissions reporting from

the SEC rulemaking,¹²³ the EU analysis of ESRS,^{124,125} and the UK analysis of their climate disclosure program.¹²⁶ For consistency, staff also apply this cost reduction factor to calculate initial Scope 1 and Scope 2 reporting costs. Staff do not include a cost reduction factor for assurance costs, keeping this cost fixed across years. The same assumptions of baseline reporting practices are applied (72% of reporting entities are already reporting Scope 1 and Scope 2 emissions and 49% are already reporting Scope 3 emissions).

Staff's median estimate of direct Scope 3 reporting costs is more than quadruple the incremental cost of Scope 3 reporting from the SEC analysis (\$13,953), and Scope 3 costs are 47% of the total cost of emissions reporting under the Proposed Regulation. To estimate the costs of different Scope 3 phase-in options in this SRIA, staff calculate the incremental cost of Scope 3 reporting and apply a subset of the costs according to the policy scenario. Staff acknowledge that there are potential limitations with relying on a linear reporting cost assumption for estimating the cost of reporting a subset of Scope 3 categories. Given the wide range of available estimates of Scope 3 reporting costs in general, and the specific lack of data on reporting a subset of Scope 3 categories, staff had limited alternatives for how to estimate incremental reporting across Scope 3 categories. Costs for the top five, most widely reported categories under the Proposed Regulation may potentially be less than one-third of the total Scope 3 reporting costs, given existing familiarity and the relatively lower burden of data and calculation requirements. As the other ten categories are less widely reported, there is limited information on their relative cost in comparison to total Scope 3 reporting, and inclusion of these categories could potentially increase costs significantly compared to the costs of reporting for the top five categories under the Proposed Regulation.

Other available cost estimates

The ranges of compliance costs from industry surveys and mandatory reporting in other jurisdictions reflects the uncertainty associated with estimating costs under the Proposed Regulation. For example, the costs of reporting Scope 1, Scope 2, and Scope 3 emissions under the initial CSRD were estimated by the EU to be approximately \$31,000 (2025\$), based

¹²³ SEC (2024) *Final rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors* (Release No. 33-11275). <https://www.sec.gov/files/rules/final/2024/33-11275.pdf>.

¹²⁴ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

¹²⁵ European Financial Reporting Advisory Group (2025) *Cost-Benefit Analysis on the Amended European Sustainability Reporting Standards* (Accessed May 12, 2026). <https://www.efrag.org/sites/default/files/media/document/2025-12/Cost-benefit%20Analysis%20on%20Draft%20Amended%20ESRS.pdf>.

¹²⁶ Department for Business, Energy, and Industrial Strategy, Government of the United Kingdom (2021) *Mandating climate-related financial disclosures by publicly quoted companies, large private companies and LLPs: Impact Assessment* (Accessed May 12, 2026). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1055931/tcfd-final-stage-ia.pdf.

on a survey of 89 respondents.^{127, 128} The EU also highlights the wide variability of estimated costs that were considered in their economic analysis. A 2026 survey among expected SB 253 reporting entities conducted by the Society for Corporate Governance indicates higher cost estimates for a subset of 30 mid- to large-cap¹²⁹ publicly traded companies across a wide variety of industries.¹³⁰ In this survey, current reporting costs were <\$50,000 for 7% of respondents, \$100,000 to \$249,000 for 26% of respondents, \$250,000 to \$2 million for 30% of respondents, and >\$2 million for 11% of respondents.¹³¹ This subset of mid- to large-cap companies may represent a selection bias of larger reporting entities that may not be representative of costs for smaller entities closer to the \$1 billion revenue threshold under Health and Safety Code section 38532.

Given the limited availability of cost data, the SEC analysis remains more aligned with the Proposed Regulation than other programs, and the cost estimate data is more robust and reproducible for quantification of compliance costs compared to other surveys or academic cost discussions. Staff invite stakeholders to provide more data and information that can help to refine this analysis of potential compliance costs with a limited Scope 3 reporting obligation for only the five most reported categories.

Table A1: Cost input data for ongoing Scope 1, Scope 2, and Scope 3 reporting. SEC analysis estimates are midpoint values of stakeholder estimates as calculated by SEC, whereas the Proposed Regulation estimates are

¹²⁷ European Financial Reporting Advisory Group (2022) *Draft European Sustainability Reporting Standards* (Accessed May 12, 2026) <https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/05%20EFRAGs%20Cover%20Letter%20on%20the%20Cost-benefit%20analysis.pdf>.

¹²⁸ For the largest companies subject to the CSRD that were expected to bear the highest costs of compliance, the European Financial Reporting Advisory Group (EFRAG) estimated approximately \$370,000 (USD 2025\$) for ongoing costs. The CSRD includes reporting requirements across a much broader set of sustainability criteria, of which Chapter E1 “Climate Change” is the only section with GHG emissions reporting requirements, in addition to other climate-related financial risk disclosures. EFRAG estimates that approximately 28% of total costs are attributed to reporting requirements under this chapter (\$103,565), and that Scope 1, Scope 2, and Scope 3 emissions disclosure requirements (E1-6) account for 8.4% of the total cost (\$31,069).

¹²⁹ According to the comment letter, mid-cap companies have a market cap of \$2-10 billion, and large-cap companies have a market cap of \$10 billion or more.

¹³⁰ Society for Corporate Governance (2026) *Comment Letter in Response to SB 253 Public Workshop: California Corporate Greenhouse Gas Reporting Program*. <https://ww2.arb.ca.gov/form/public-comments/submissions/59906>

¹³¹ The comment letter does not state how the remaining 26% of respondents reported costs.

the upper bound of stakeholder estimates submitted during the SEC rulemaking. Note stakeholder estimates are in 2022\$ and median values are in 2025\$

Stakeholder estimates (2022\$)	SEC Analysis	Proposed Regulation
Persefoni	\$50,000	\$125,000
S&P Global	\$40,000	\$125,000
South Pole	\$23,184	\$105,380
Air Products	\$4,032,000	\$4,032,000
ERM Survey (median of 39 companies)	\$182,985	\$182,985
Society for Corporate Governance (Company #9)	\$200,000	\$200,000
Society for Corporate Governance (Company #10)	\$83,472	\$83,472
Society for Corporate Governance (Company #11)	\$75,000	\$75,000
Median value (2025\$)	\$87,498	\$138,033

Table A2: Cost assumptions for the Proposed Regulation

Assumption	Proposed Regulation
Cost reduction factor for reporting	48%
Cost reduction factor for assurance	0%
Baseline Scope 1-2 reporting	72%
Baseline Scope 3 reporting	49%
Baseline assurance engagement	0%

Appendix B: Macroeconomic Modeling Inputs

Table B1: Macroeconomic Modeling Inputs (Million 2022\$)

REMI Policy Variable	Industry	Region	2027	2028	2029	2030
Production Cost	Accommodation and food services	Rest of US	4.6	3.8	3.8	3.8
Production Cost	Administrative, support, waste management, and remediation services	Rest of US	13.5	11.2	11.2	11.2
Production Cost	Arts, entertainment, and recreation	Rest of US	0.7	0.6	0.6	0.6
Production Cost	Construction	Rest of US	12.8	10.6	10.6	10.6
Production Cost	Finance and insurance	Rest of US	54.1	45.0	45.0	45.0
Production Cost	Forestry, fishing, and hunting	Rest of US	1.0	0.8	0.8	0.8
Production Cost	Health care and social assistance	Rest of US	27.5	22.9	22.9	22.9
Production Cost	Information	Rest of US	19.7	16.4	16.4	16.4
Production Cost	Management of companies and enterprises	Rest of US	1.6	1.3	1.3	1.3
Production Cost	Manufacturing	Rest of US	107.8	89.6	89.6	89.6
Production Cost	Mining	Rest of US	5.3	4.4	4.4	4.4
Production Cost	Other services (except public administration)	Rest of US	3.0	2.5	2.5	2.5
Production Cost	Professional, scientific, and technical services	Rest of US	21.0	17.5	17.5	17.5
Production Cost	Real estate and rental and leasing	Rest of US	9.7	8.0	8.0	8.0
Production Cost	Retail trade	Rest of US	23.3	19.4	19.4	19.4
Production Cost	Transportation and warehousing	Rest of US	15.0	12.5	12.5	12.5
Production Cost	Utilities	Rest of US	20.0	16.6	16.6	16.6
Production Cost	Wholesale trade	Rest of US	26.9	22.3	22.3	22.3
Production Cost	Accommodation and food services	California	0.6	0.5	0.5	0.5
Production Cost	Administrative, support, waste management, and remediation services	California	1.9	1.6	1.6	1.6
Production Cost	Arts, entertainment, and recreation	California	0.1	0.1	0.1	0.1
Production Cost	Construction	California	1.6	1.4	1.4	1.4

REMI Policy Variable	Industry	Region	2027	2028	2029	2030
Production Cost	Finance and insurance	California	4.9	4.1	4.1	4.1
Production Cost	Forestry, fishing, and hunting	California	0.4	0.3	0.3	0.3
Production Cost	Health care and social assistance	California	3.9	3.3	3.3	3.3
Production Cost	Information	California	5.8	4.8	4.9	4.9
Production Cost	Management of companies and enterprises	California	0.2	0.2	0.1	0.1
Production Cost	Manufacturing	California	13.7	11.3	11.3	11.4
Production Cost	Mining	California	0.1	0.1	0.1	0.1
Production Cost	Other services (except public administration)	California	0.4	0.3	0.3	0.3
Production Cost	Professional, scientific, and technical services	California	3.9	3.2	3.2	3.2
Production Cost	Real estate and rental and leasing	California	1.3	1.1	1.1	1.1
Production Cost	Retail trade	California	3.2	2.7	2.7	2.6
Production Cost	Transportation and warehousing	California	2.1	1.8	1.8	1.8
Production Cost	Utilities	California	2.2	1.9	1.9	1.9
Production Cost	Wholesale trade	California	3.6	3.0	3.0	3.0
Exogenous Final Demand	Management, scientific, and technical consulting services	California	89.1	79.2	79.2	79.2
Exogenous Final Demand	Management, scientific, and technical consulting services	Rest of US	328.5	267.9	267.9	267.9

Note: The values are in 2022\$ due to the modeling requirement in REMI.