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Submitted via [CARB Comment Submittal Form](#)
and by email to CARB staff

Re: WSPA Comments on Proposed Cap-and-Invest Program and Mandatory Reporting Regulation Amendments

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the California Air Resources Board's (CARB) Proposed 2026 Amendments to the Cap-and-Invest Regulation¹ and Mandatory Reporting Regulation (MRR) of Greenhouse Gas (GHG) Emissions (Proposed Amendments).² WSPA is a non-profit trade association that represents companies that safely explore for, produce, refine, transport, and market petroleum, petroleum products, natural gas, and other energy supplies in California, Washington, Oregon, Nevada, and Arizona.

We are deeply concerned with these Proposed Amendments, as I described in my recent letter to Governor Newsom and State policymakers.³ This proposal would impose severe costs on California's few remaining refineries with little regard for economic viability, workforce stability, or consumer impacts at a time when energy affordability is a pressing issue for many Californians – and despite petroleum stabilization efforts directed by Governor Newsom. He had directed the California Energy Commission to work with industry to ensure that “refiners continue to see the value in serving the California market...”⁴ CARB's proposal represents a stark contrast. Ultimately, California must choose between refining fuel locally under the world's strictest standards to meet demand for decades to come, or becoming increasingly dependent on fuel from other places around the world thereby consciously allowing economic and environmental leakage to occur because of the Cap-and-Invest program.

In sum, WSPA urges CARB to revise the Proposed Amendments to address the following key issues:

- Ensure the allowance budgets are based on achievable emissions reductions within the compliance period, particularly in the near-term.
- Minimize emissions leakage while preserving allowance supply, market stability, and affordability for covered entities.
- Establish stable, long-term Cap Adjustment Factors (CAFs) for the petroleum sector to support in-state fuel production and the investments necessary to meet California's ongoing fuels demand.
- Implement incentives that reduce the petroleum industry's investment costs without displacing existing cost-containment tools.
- Explicitly recognize petroleum refineries, crude extraction operations, and biorefineries as high-leakage-risk sectors and include them in the proposed manufacturing decarbonization incentives.
- Consider implementing new or existing regulatory mechanisms to better prevent leakage and stabilize California's petroleum sector.
- Ensure that carbon capture, utilization, and storage (CCUS) and carbon dioxide removal (CDR) projects are eligible to reduce covered emissions and are reflected in MRR net emissions reporting.
- Allow refiners to choose between use of the complexity weighted barrel (CWB) or liquid hydrocarbon fuel (LHF) methodologies.

¹ CARB. Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market- Based Compliance Mechanisms Regulation. Available at: <https://ww2.arb.ca.gov/rulemaking/2026/cap-and-invest2026>. Accessed: February 2026.

² CARB. Cap-and-Invest Program Workshop, (Oct. 29, 2025) (“Cap-and-Invest Presentation”). Available at: <https://ww2.arb.ca.gov/rulemaking/2026/mrr2026>. Accessed: February 2026.

³ See WSPA President & CEO Jodie Muller February 24, 2026, “Urgent Economic Concerns with Proposed Cap-and-Invest Regulations” letter.

⁴ See Office of the Governor April 21, 2025, letter to California Energy Commission Vice Chair Siva Gunda.

- Streamline reporting requirements, align MRR with federal GHG reporting standards, and maintain exemptions for biogenic fuels to reduce administrative burden.
- CARB should clarify the type of operations to be included under a liquefied petroleum gas receiving facility.
- Preserve offset programs and the Greenhouse Gas Reduction Fund (GGRF) by preventing double-counting and promptly returning unused allowances to maintain market liquidity.
- Eliminate MRR requirements that duplicate California’s Low Carbon Fuel Standard (LCFS)-specific data already reported under existing programs.
- Streamline reporting for certain allowance trades to minimize unnecessary administrative burden.
- Permit fuel suppliers to report emissions from liquefied petroleum gas (LPG) using a default emission factor and specify reportable process vents under hydrogen production requirements.

WSPA identified the need for strong cost containment mechanisms prior to the post-2020 reauthorization. In 2017, Assembly Bill (AB) 398 provided a 100% assistance factor to the petroleum sector, established allowance price controls, and required CARB to align the issuance of allowances with the cap.⁵ However, by 2024, increasingly stringent State policies significantly impacted the availability of in-state refining capacity, to the point where California no longer has sufficient in-state refining capacity to meet its own demand. Announced refinery closures would only exacerbate this situation.⁶ As AB 1207 (2025) properly moved to focus on affordability and minimizing leakage risk in California, simply maintaining a status quo approach through 2031 is not a viable option given the significant changes to California’s refining outlook.

WSPA supports CARB’s objective to adopt a 2030 reduction target for the Cap-and-Invest (formerly “Cap-and-Trade”) program that maintains an affordable, steady, and stable carbon market in California pursuant to Senate Bill (SB) 32 (2016). Market-based approaches such as the Cap-and-Invest program can facilitate significant progress toward California’s emissions reduction goals while ensuring that these reductions are cost-effective and technologically feasible. However, as explained in our previous comment letters, WSPA reiterates that CARB’s proposed program updates must be consistent with the requirements of AB 32 (2006), SB 32, AB 398 (2017), SB X1-2 (2023), AB X2-1 (2024), AB 1207, and SB 840 (2025); should integrate carbon-negative technologies; and should limit cost impacts consistent with other legislative policies aimed at mitigating consumer burdens related to petroleum and alternative transportation fuel products. Additionally, WSPA agrees with CARB that significant federal changes would likely impact technology deployment and associated costs considered during the development of the Agency’s 2022 Scoping Plan Update.⁷ Accordingly, programmatic modifications should avoid over-reliance on technologies or policies that are unlikely to achieve meaningful GHG emissions reductions by at least 2035.

CARB’s authority to adopt and implement the Cap-and-Invest program is governed by AB 32, SB 32, AB 398, AB 1207, and SB 840. AB 32, the California Global Warming Solutions Act of 2006, sets ambitious GHG emission reduction goals that would continue to position the State as a global leader in developing new technologies. In carrying out these goals, AB 32 directs CARB to adopt regulations to achieve the maximum technologically feasible GHG emissions reductions while placing key limits on CARB’s broad regulatory authority. Specifically, AB 32 requires CARB to minimize the leakage potential of its actions, ensure that GHG emissions reductions are technologically feasible *and* cost-effective, and ensure that any GHG emissions reductions achieved are real, permanent, quantifiable, verifiable, and enforceable.⁸ SB 32, the California Global Warming Solutions Act of 2016, builds on and expands the requirements of AB 32, while reiterating that reduction measures must be technologically feasible and cost-effective.⁹ AB 398 outlines specific requirements for the Cap-and-Invest program through 2030 intended to limit the program’s cost impacts on consumers and industry, including a price ceiling, price containment points,

⁵ See CARB Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms at Table 8-1, Assistance Factors and Covered Industrial Sectors. Available at: https://ww2.arb.ca.gov/sites/default/files/2021-02/ct_reg_unofficial.pdf.

⁶ Phillips 66 announced it will permanently cease conventional crude oil processing at its Wilmington, California refinery by the end of 2025, and Valero has announced plans to idle or cease refining operations at its Benicia, California refinery by April 2026.

⁷ See ISOR at 11 (explaining that the 2022 Scoping Plan Update “charted a cost-effective and technological feasible path to achieving carbon neutrality by 2045”).

⁸ AB 32. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32. Accessed: February 2026.

⁹ *Ibid.*

and industry assistance factors.¹⁰ In particular, when setting a price ceiling, CARB must consider any adverse impacts on businesses, 2020 tier prices of the allowance price containment reserve (APCR), leakage potential, the auction reserve price, and the cost per metric ton of GHG emissions reductions, among other factors. In extending CARB's legislative authorization for the Cap-and-Invest program through 2045, AB 1207 emphasized the importance of maintaining a "cost-effective, market-based approach to reduce emissions of greenhouse gases" and directed that this program should "minimize ratepayer impacts."¹¹ In furtherance of these goals, AB 1207 directed CARB to "consider additional actions to ensure consumers are protected," including but not limited to "adjustment to the allowance price containment reserve or the price ceiling" and to evaluate "additional compliance offset protocols... including carbon dioxide removal."¹² As WSPA stated in 2018, the current Cap-and-Invest cost containment price tiers are not set at levels that will adequately protect against adverse program impacts to businesses. Therefore, in amending the Cap-and-Invest program, CARB is statutorily obligated to carefully consider these factors and account for these legislative priorities, including impacts on affordability, cost-effectiveness, and minimizing leakage. WSPA looks forward to reviewing CARB's latest analysis to quantify and assess potential consumer impacts and leakage risks under the proposed scenarios.

CARB is further obligated to address potential conflicts between proposed Cap-and-Invest amendments and other legislative policies seeking to minimize consumer burdens associated with transportation fuels. For example, SB X1-2 directs State agencies to evaluate measures to ensure that petroleum and alternative transportation fuels are adequate, affordable, reliable, and equitable. In enacting SB X1-2, the California Legislature recognized the importance of addressing ongoing supply constraints for transportation fuels, as energy affordability continues to be a pressing priority for many Californians. However, according to the California Energy Commission, the existing Cap-and-Invest program and the LCFS together add approximately 38 cents per gallon to the cost of gasoline.¹³ However, CARB's Proposed Amendments are likely to increase these already-significant burdens and potentially conflict with the statutory direction set forth in SB X1-2. In particular, WSPA is concerned that the Proposed Amendments could exacerbate existing negative impacts by further compromising the supply reliability of critical transportation fuels, leading to increased energy costs and potentially further burdening California drivers. Accordingly, CARB must consider the impacts to gasoline costs when updating the Cap-and-Invest program and seek to minimize those costs, consistent with SB X1-2's mandate.

To avoid additional refinery sector impacts and to stabilize California's transportation fuel supply, WSPA strongly encourages CARB to avoid unnecessary cost increases without clear consumer benefits, to set practical timelines, and to align investment risks with what investors are willing to accept for energy infrastructure improvements in evaluating Cap-and-Invest program amendments. CARB should incorporate considerations for ongoing and realistic consumer-driven investment needs, as a longer, more complex timeline is expected.¹⁴

In response to these Proposed Amendments and the accompanying Mandatory Reporting Regulation, WSPA respectfully offers the following comments.

¹⁰ California Legislative Information. Assembly Bill No. 398. Available at: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398. Accessed June 2024. See Attachment A.

¹¹ California Legislative Information. Assembly Bill No. 1207. Available at: https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202520260AB1207#95CHP. Accessed: February 2026.

¹² *Ibid.*

¹³ CEC. 2026. California Oil Refinery Cost Disclosure Act Monthly Report: Aggregated Data Reported. December 2025. Available at: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/california-oil-refinery-cost-disclosure>. Accessed: February 2026.

¹⁴ CARB recently sought to adopt an Emergency Vehicle Emissions Regulation, in response to Federal disapprovals of three preemption waivers previously granted by the United States Environmental Protection Agency to enforce its Advanced Clean Cars II and Advanced Clean Trucks, amongst other regulations. CARB argued that these waiver disapproval resolutions "introduced an unprecedented degree of uncertainty into the California market for new motor vehicles." See CARB 5-Day Public Notice and Comment Period, Emergency Amendment and Adoption of Vehicle Emissions Regulations, at 2. Available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2025/emergencyvehemissions/notice.pdf>.

1. CARB’s proposed allowance budget reductions raise serious concerns regarding affordability, petroleum market stability, and long-term operational certainty for covered entities.

CARB’s proposal to reduce a total of one billion allowances between 2027 and 2045 would lead to a significant annual cap decline rate. CARB should reassess these reductions to allowance budgets and consider raising the allowance cap in this and future years to avoid unnecessary supply constraints that could undermine feasibility, affordability, petroleum market stability, and long-term operational certainty. While WSPA recognizes that a reduction in allowances is generally consistent with California’s aggressive climate targets, CARB’s revised allowance budgets must still be technologically feasible. The pace and structure of CARB’s proposed reductions raise serious concerns to WSPA.

WSPA has repeatedly emphasized the importance of ensuring that proposed changes to allowance budgets reflect the technological and economic feasibility of achieving emissions reductions across regulated sectors. Health and Safety Code § 38562(a) requires CARB to “adopt greenhouse gas emissions limits and emissions reduction measures by regulation to achieve the maximum *technologically feasible and cost-effective* reductions in greenhouse gas emissions” (emphasis added). Accordingly, any adjustment to the allowance budget must account for realistic deployment timelines for decarbonization technologies – including those applicable to transportation fuels and other hard-to-abate sectors – while minimizing emissions and economic leakage. Allowance reductions that outpace the availability of viable compliance options risk creating market conditions that increase costs without delivering corresponding emissions reductions, thereby undermining both affordability and GHG reduction integrity.

CARB’s assessment of technological and economic feasibility in support of its Proposed Amendments lacks the technologically feasible and cost-effective requirement and is instead largely tied to reduction scenarios developed in support of the 2022 Scoping Plan Update, which relies on additional emission reductions from complementary measures that have not yet manifested. For instance, the 2022 Scoping Plan Update contemplated a CO₂ removal and capture target of 20 million metric tons by 2030,¹⁵ despite ongoing delays in CARB’s implementation of carbon capture and reduction measures. In addition, CARB relied on significant transportation sector emissions reductions with measures focused on zero emission vehicle technologies, however, as of 2025 Quarter 4, these vehicle registrations are slowing significantly.¹⁶ To compensate for fewer emissions reductions in other programs, CARB’s updated modeling scenarios predict that allowance prices will reach the price ceiling in nearly every instance.¹⁷ Despite this modeling, CARB’s analysis estimates future allowance prices at the midpoint between the floor price and the APCR Tier 1 price through 2045.¹⁸ CARB’s assessment of future allowance allocations therefore fails to account for increased market pressures and significantly higher compliance costs, and does not realistically evaluate the feasibility of required reductions.

While WSPA agrees that 2027 is the earliest reasonable year for implementing any allowance budget adjustments, given the time required for rule adoption, compliance planning, and market preparation, WSPA has serious concerns regarding the feasibility of CARB’s proposed near-term allowance reductions. Removing 118 million allowances between 2027 and 2030 would introduce a significant step change in future allowance budgets and materially destabilize the market. Given the timing of this rulemaking, covered entities would have less than one year to achieve reductions commensurate with removing approximately 15 million allowances.¹⁹ At the same time, CARB is proposing to remove allowances from annual budgets corresponding to offset use for compliance,²⁰ which would effectively *further* increase the stringency of allowance budgets and reduce compliance flexibility for covered entities

¹⁵ 2022 Scoping Plan Update at pg. 96.

¹⁶ [Cal-Covering-4Q-25.pdf](#)

¹⁷ See CARB November 16, 2023, “Joint California-Quebec Workshop: Potential Amendments to the Cap-and-Trade Regulation.” Available at: <https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cap-and-trade-meetings-workshops>. Accessed February 2026.

¹⁸ See CARB ISOR “Table 21: Estimated Scenario Allowance Demand and Weighted Average Allowance Price, 2027-2046” at page 320. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/cap_invest/nc_isor.pdf

¹⁹ See ISOR at 34.

²⁰ See ISOR at 36.

while significantly decreasing the cost-effectiveness of available emissions reductions, exacerbating the impacts described above.

As WSPA has noted in prior comments,²¹ adjusting future allowance supply based on previously achieved GHG emissions reductions creates a perverse incentive structure that discourages early action and sets a troubling precedent for retroactive manipulation of the allowance market. Such an approach would erode market confidence and complicate long-term decarbonization planning. However, if CARB determines that the 118 million allowance reduction must proceed, it should minimize sudden shifts in allowance supply and avoid outright removal of allowances from the program. Instead, consistent with previous regulations, CARB should transfer the reduced allowances into APCR. Moving allowances into the APCR rather than permanently removing them would preserve critical program flexibility and help maintain a stable carbon market pricing mechanism. This approach would continue to incentivize GHG emissions reductions on the desired schedule while providing a safeguard against extreme price volatility that could otherwise arise from abrupt supply constraints. Absent such protections, allowance prices could rise sharply to accommodate aggressive short-term reductions, resulting in higher operational costs for regulated industries, increased consumer costs, potential job losses, and reduced economic activity. Moreover, sudden price spikes would disrupt long-term investment planning and undermine the very decarbonization efforts the program is intended to support. Transferring allowances to the APCR would better balance emissions reduction objectives with market stability, affordability, and CARB's statutory obligations under AB 32.

2. CARB must comprehensively evaluate leakage risks and minimize these risks by maintaining cost-effective compliance pathways, consistent with legislative directives.

Since passage of AB 32, the California legislature has made clear that CARB has an obligation to minimize leakage in regulating GHG emissions through its Cap-and-Invest program.²² Subsequent legislation has highlighted the importance of this obligation – for instance, under AB 398, CARB was required to develop a report on “the leakage risk posed by the regulation” and “recommendations to the Legislature on necessary statutory changes to the program to reduce leakage...” by December 31, 2025.²³ AB 1207 further reaffirms CARB's responsibility to address leakage risks while maintaining in-state production and economic competitiveness. Accordingly, any Cap-and-Invest program amendments must be evaluated not only for their GHG emissions outcomes but also for their impact on compliance instrument availability, market stability, and the ability of covered entities to plan for and make long-term investments, which impact potential leakage associated with the Cap-and-Invest program.

WSPA is concerned that the net effect of CARB's Proposed Amendments will be to increase leakage by significantly constraining the forward supply of compliance instruments available to covered entities, thereby compromising the affordability of the program for California consumers and businesses and discouraging in-state investments. These impacts are likely to be particularly significant for California refineries, since California no longer has sufficient in-state refining capacity to meet its own demand, and additional refinery closures have already been announced.

HSB Solomon Associates LLC has evaluated emissions- and economic-based leakage sensitivities under California's Cap-and-Invest program using data collected from over 300 refineries worldwide (or 85% of global refining capacity) under their 2024 Fuels Refinery Performance Analysis.²⁴ This helps to illustrate how the program impacts California refining's competitive position vis-a-vis imported transportation fuels. Solomon's Carbon Emissions Index (CEI),²⁵ is a refinery complexity-based metric that measures a facility's Scope 1 and 2 carbon emissions relative to the global average. The data shows

²¹ See, e.g., WSPA Comments on 10-5-2023 Cap-and-Trade Workshop, WSPA Comments on 4-23-2024 CARB Cap-and-Trade Workshop, and WSPA Comments on 11-12-2025 Cap-and-Invest Workshop.

²² See HSC § 38562(b)(9).

²³ See HSC § 38562(c)(2)(J).

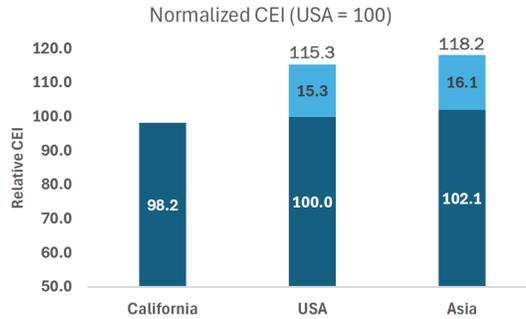
²⁴ See Attachment, “Solomon CEI & CTF Sensitivities” by Solomon Associates LLC. February 2026.

²⁵ See “Report on CWT-CWB for California Regulatory Support” by Solomon Associates, May 17, 2013. Complexity-based metrics allow for refineries with complex process units such as an FCC or Hydrocracker to be compared against more simple refineries that do not include or have smaller complex process units. Available at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/meetings/081313/cwt-cwb_backgrounddocument.pdf

that California refineries operate at a lower CEI than its peers in the United States and in Asia. When additional transportation fuels are imported due to in-state refinery shutdowns, or to meet additional consumer demand, associated emissions to meet that demand increases global emissions versus producing the same fuel in California.

Normalized Refinery CEI Including Shipping to West Coast

Product Shipping Emissions Intensity Basis = 5 kg CO₂/Bbl from Asia and 4.5 kg CO₂/Bbl from US Gulf Coast



$$\text{Refinery CEI with Shipping} = (\text{Actual Net CO}_2\text{e Emissions} + \text{Shipping CO}_2\text{e Emissions}) / (\text{Refinery Standard CO}_2\text{e Emissions})$$

CEI = Carbon Emissions Index

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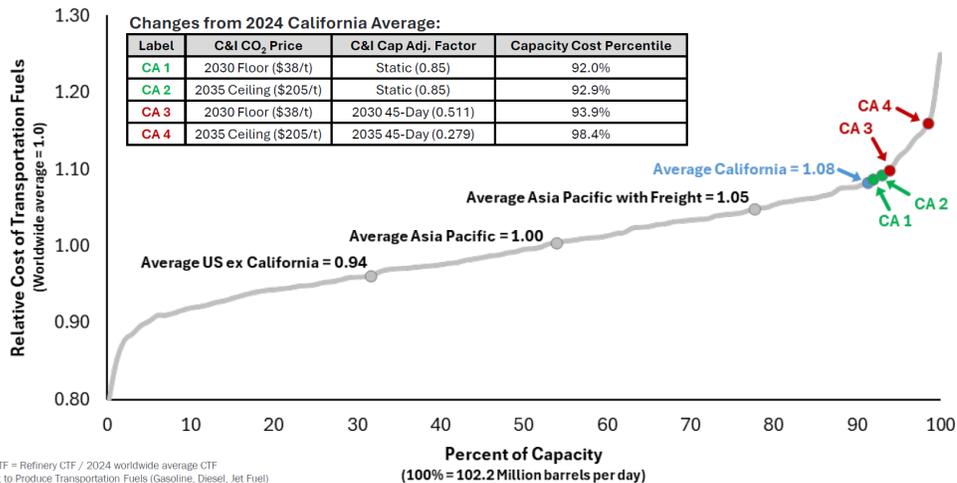
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Solomon’s “Cost to Produce Transportation Fuels”²⁶ is a metric measuring multiple fuel production costs relative to a global average. Using these inputs to isolate potential Cap-and-Invest program impacts under CARB’s proposal (shown in red) versus WSPA’s proposal explained below (shown in green), demonstrates the potential magnitude that CARB’s proposal could have in driving California’s refineries further into a competitive disadvantage while increasing both economic and environmental leakage:

Cost of Producing Transportation Fuels

Worldwide Distributions – 2024

Worldwide CTF Curve with Asia Pacific + Freight and California Average



Relative CTF = Refinery CTF / 2024 worldwide average CTF
CTF = Cost to Produce Transportation Fuels (Gasoline, Diesel, Jet Fuel)

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Additionally, Capitol Matrix Consulting evaluated estimated compliance costs through 2035 for California refiners under CARB’s Proposed Amendments.²⁷ It projects that the annual compliance costs for refineries could approach approximately \$1.5 billion by 2035, with cumulative costs to refineries between approximately \$5.5 billion to potentially \$9 billion over the next decade. For an industry already operating

²⁶ CTF is the cost to produce the average barrel of transportation fuel in USD/bbl. Transportation fuel includes gasoline, diesel and jet fuel. The CTF includes raw material costs, operating costs and the cost to purchase biofuels.

²⁷ See attached “Impact of Proposed Cap-and-Invest Regulations on California Refiners” by Capitol Matrix Consulting.

under uniquely high costs and narrow margins in California, this additional burden could further destabilize a critical sector of California's economy that is already losing roughly 18% of in-state refining capacity within a six-month period.

To address these significant leakage risks, WSPA urges CARB to incorporate certain program changes, as detailed below.

A. CARB should strengthen industrial allowance allocations and preserve all existing cost-containment mechanisms.

AB 1207 directs CARB to "evaluate the cost impact of the market-based compliance mechanism on California consumers when it revises regulations implementing that mechanism" and provides CARB with flexibility to "consider additional actions to ensure consumers are protected," including but not limited to "adjustment to the allowance price containment reserve or the price ceiling."²⁸ CARB is proposing to increase the stringency of allowance budgets starting in 2027, which CARB acknowledges "may impart an increased carbon price signal in consumer energy prices and in the price of goods produced in-state."²⁹ Indeed, CARB's updated economic analysis estimates that "cost of compliance with this regulation over its 20-year lifetime is \$124 billion or averaging \$6.2 billion annually."³⁰ These costs do not account for additional indirect costs to consumers, such as retail fossil fuel prices, which may significantly impact affordability.³¹

Consistent with these anticipated cost impacts, WSPA urges CARB to strengthen industrial allowance allocations and existing cost-containment mechanisms in the Cap-and-Invest program. Such action would help protect California's industrial competitiveness and workforce while providing the regulatory certainty necessary to support long-term investments. Weakening cost-containment tools or allowance availability risks further increasing compliance costs without delivering commensurate environmental benefits, particularly if GHG emissions are displaced rather than reduced. These mechanisms also are critical to maintaining affordable in-state fuels production.

B. CARB should enhance program flexibility and deploy additional policy and economic tools to manage compliance costs and mitigate future leakage risks.

WSPA recommends that CARB enhance Cap-and-Invest program flexibility through several targeted measures to mitigate future leakage risks, particularly for industrial sectors with higher leakage risks:

- CARB should develop new industrial incentives, which could provide critical support for maintaining operational affordability.
- CARB should integrate CCUS and CDR as eligible compliance pathways, which would incentivize investments in emerging decarbonization technologies while providing California industry with additional options to achieve emissions reductions cost-effectively. CARB has repeatedly acknowledged that CCUS and CDR are "essential tools for achieving climate neutrality,"³² and AB 1207 directs CARB to "[c]onsider developing additional compliance offset protocols. . . , including carbon dioxide removal."³³
- CARB should expand offset opportunities and implement additional cost-containment measures to preserve market stability. AB 1207 provides CARB with flexibility to "consider additional actions to ensure consumers are protected," including but not limited to "adjustment to the allowance

²⁸ HSC §§ 38562(c)(2)(A)(iii), (i).

²⁹ SRIA at 54.

³⁰ ISOR at 315.

³¹ SRIA at 54 (explaining that "[r]etail gas prices in California aren't fully explained by the current regulatory environment," but that "[p]redicting how allowance price changes impact these complex pricing strategies and the per gallon gasoline and diesel prices paid at the pump in the future by consumers is *beyond the scope of this work*").

³² ISOR at 341. See also CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, 84 (Dec. 2022), available at: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf> ("Carbon capture and sequestration (CCS) will be a necessary tool to reduce GHG emissions and mitigate climate change while minimizing leakage and minimizing emissions where no technological alternatives may exist.") ("2022 Scoping Plan Update").

³³ HSC § 38562(c)(2)(H).

price containment reserve or the price ceiling.”³⁴ CARB should use this flexibility to implement broader cost-containment mechanisms to help address leakage.

C. CARB must conduct a comprehensive, updated emissions leakage analysis grounded in California’s current economic conditions and emissions trends.

Under AB 398, CARB was required to develop a report on “the leakage risk posed by the regulation” and “recommendations to the Legislature on necessary statutory changes to the program to reduce leakage...” by December 31, 2025.³⁵ In line with this legislative directive, CARB must comprehensively evaluate potential leakage impacts, taking into account California’s current economic conditions and emissions trends. CARB’s proposal currently does not incorporate updated leakage findings, even though CARB’s Standardized Regulatory Impact Assessment (SRIA) predicts an average reduction in output of \$125 million between 2026 and 2046 for the petroleum and coal products manufacturing industry and a reduction in related employment.³⁶ These projected industry impacts create an increased risk of leakage, particularly in light of announced California petroleum refinery closures, which will reduce the State’s refining capacity by up to 20%.

CARB should promptly share any existing GHG emissions leakage analyses to inform stakeholder engagement during this rulemaking, and provide sufficient time between the release of such a comprehensive study and the final rulemaking to allow for meaningful public comment. Stakeholders must have a clear understanding of how CARB developed its leakage assessment and whether, and to what extent, the Cap-and-Invest program has already resulted in emissions leakage within the industrial sector before CARB adopts amendments that could further constrain the supply of compliance instruments. Transparency regarding the reasoning, data, assumptions, and methodologies used in the leakage assessment is essential to support informed public comment and sound program design.

D. CARB’s Draft Environmental Impact Assessment (Draft EIA) must include a comprehensive, long-term analysis of GHG emissions leakage and energy demand impacts and an assessment of a reasonable range of alternatives.

In preparing an EIA, CARB is required to assess all reasonably foreseeable direct and indirect impacts of a project, including cumulative impacts.³⁷ The Draft EIA identifies minimizing emissions leakage as a core objective³⁸ but fails to evaluate how the Proposed Amendments may affect leakage risk, including adverse impacts to air quality and GHG emissions. Leakage is an economic response that leads to reasonably foreseeable physical environmental consequences, including increased GHG emissions outside of California, localized emissions “hot spots,” or regional pollution increases. Indeed, CARB cannot fulfill its statutory mandate to minimize leakage without evaluating potential out-of-state emissions impacts from a lifecycle perspective. CARB should therefore ensure that the EIA for the project includes a comprehensive, long-term analysis that evaluates how the Proposed Amendments affect industrial activity, fuel supply, electricity demand, GHG emissions from production, and compliance costs over the full program horizon. Such a report should also consider the following:

- **Emissions benefits for in-state fuel exports:** Activities that limit future in-state transportation fuel production or development may result in GHG emissions leakage because California refineries supply fuels to other states, including those in the Southwest. Through the potential future application of CCUS technologies in the Cap-and-Invest program for industrial emissions and production of low-carbon and renewable liquid fuels at California refineries, California’s exports could play a pivotal role in reducing the carbon intensity of fuels consumed in other states compared to fuels produced elsewhere. Supporting in-state transportation fuel production could therefore help achieve significant out-of-state emissions reductions and minimize leakage. However, imposing overly burdensome compliance requirements on this industry sector may

³⁴ HSC §§ 38562(c)(2)(A)(iii), (i).

³⁵ HSC § 38562(c)(2)(J).

³⁶ See SRIA at 70–73, Table 26, Table 28.

³⁷ 14 CCR §§ 15126.2, 15130.

³⁸ Draft EIA, at 17-18.

result in businesses choosing to leave California rather than comply, which could instead exacerbate leakage impacts.

- **Upstream and downstream emissions for the transportation fuel sector:** Reducing future in-state supply of transportation fuels may lead to increased lifecycle emissions impacts associated with electric vehicles. For instance, a typical electric car requires six times the amount of mineral inputs compared to a conventional vehicle, and resources are not currently available to meet this demand at scale. Increased reliance on electric vehicles would therefore increase demand for critical mineral resources and associated infrastructure for battery production, recycling, and disposal for both light-duty vehicles and medium- and heavy-duty vehicles, which would result in significant emissions impacts. CARB provided an estimate for the projected annual increase in battery production in Table 4 of the Draft Environmental Analysis for the Advanced Clean Car II regulation showing an annual increase in battery production ranging from 43.2 gigawatt-hours (GWh) in 2026 to 150.8 GWh in 2035 – a significant increase from the 60 GWh of lithium-ion battery capacity cumulatively deployed in the United States electric vehicle market from 2010 to 2020. Lifecycle emissions impacts could also include increased emissions from electricity generation used during vehicle operation and increased particulate matter emissions associated with higher vehicle weights. Accordingly, CARB should conduct a comprehensive study to understand the risks that the Cap-and-Invest Proposed Amendments could have on upstream and downstream emissions directly related to the transportation fuel sector.

The results of CARB's analysis should be made publicly available for review and comment prior to finalizing the Proposed Amendments to ensure transparency and accountability.

In addition, CARB is required to consider a reasonable range of alternatives that meet the basic objectives of the project and minimize the significant effects of the project.³⁹ As previously discussed, minimizing leakage is expressly recognized as a project objective. Yet, the Draft EIA does not evaluate structurally different industrial allocation alternatives that directly address leakage, as proposed in this letter. Such alternatives are feasible and fulfill the project's goal to reduce leakage, prevent facility closures, and deter out-of-state emissions displacement. CARB must therefore consider these alternatives in the EIA.

3. CARB should reevaluate leakage risks for refineries and adopt targeted measures to minimize these risks.

Achieving emissions reductions for petroleum and biofuel refineries requires long-term investments that involve substantial capital outlays, lengthy permitting timelines, and extended project development horizons that are incompatible with frequent or uncertain changes to allocation methodologies. Available data from Solomon Associates⁴⁰ demonstrates that California refineries are already competitively disadvantaged relative to global peers. As of 2024, independent refinery benchmarking analyses indicate that, compared with worldwide averages, California petroleum refineries face declining profitability and incur higher operating costs due to increasingly stringent regulatory requirements, including the Cap-and-Invest program. These adverse conditions have materially increased GHG emissions and economic leakage risks as production shifts to regions with less stringent environmental and GHG regulations. In-state gasoline supply has already decreased, leading to a corresponding increase in gasoline imports; according to a 2025 Oil Price Information Service report, California's gasoline imports over the first 10 months of 2025 exceeded totals for any year since at least 2004.⁴¹ Since 2024, two California petroleum refineries have publicly announced permanent shutdowns.⁴² These permanent shutdowns have both reduced in-state fuel supply and further increased California's reliance on imported fuels. These imports are typically produced under less stringent environmental regulations and transported over long distances, resulting in higher lifecycle GHG emissions and increased costs for California consumers.

³⁹ 14 CCR § 15126.6(c).

⁴⁰ Solomon Associates' 2024 Worldwide Fuels Refinery Performance Analysis.

⁴¹ OPIS 2025, As Reliance on Imported Gasoline Rises, California Adapts to a 'New World'. Available at: <https://www.opis.com/resources/energy-market-news-from-opis/as-reliance-on-imported-gasoline-rises-california-adapts-to-a-new-world/>. Accessed February 2026.

⁴² Phillips 66 announced it will permanently cease conventional crude oil processing at its Wilmington, California refinery by the end of 2025, and Valero has announced plans to idle or cease refining operations at its Benicia, California refinery by April 2026.

CARB's Proposed Amendments will heighten existing competitive disadvantages for California refineries. AB 1207 directs CARB to design regulations "in a manner that transitions support from gas corporations to electrical distribution utilities,"⁴³ which inherently establishes a competitive disadvantage to gas corporations and related industries, such as refineries, in order to provide additional support for statewide electrification efforts. CARB's SRIA acknowledges that "[t]he trend of decreasing demand for natural gas has the potential to result in the elimination of upstream or downstream businesses."⁴⁴ Absent corrective action now, continued tightening of industrial assistance through declining CAFs will likely only serve to further accelerate refinery closures and exacerbate leakage, leading to the potential elimination of additional in-state refining.⁴⁵ CARB must therefore take immediate steps to prevent further erosion of the economic viability of California's petroleum and biofuel refineries.

A. CARB should explicitly designate petroleum refineries as high-leakage-risk.

Explicitly designating petroleum refineries as high-leakage-risk facilities instead of "medium" risk is necessary to meet CARB's obligations under AB 32 and AB 1207, protect environmental integrity, and ensure that GHG emissions reductions occur within California rather than being shifted out of state. While Table 8-1 assigns an industry assistance factor of 100% to all risk levels, explicit designation of petroleum refineries as "high" risk would provide a foundation for identifying alternative approaches to mitigate leakage through the allocation of allowances. For example, two of the criteria for sectors that currently use the alternative CAF are based on leakage risk factors (high emissions intensity *and* high leakage risk classification). In addition, updating the designation in Table 8-1 now would address future rulemakings should the values in Table 8-1 later change.

B. CARB should at minimum adopt fixed CAFs that are protective for refineries through 2045.

Certain emissions-intensive, trade-exposed (EITE) sectors require stable and predictable baseline allocation methodologies to sustain operations and make the long-term capital investments necessary to meet Cap-and-Invest program goals and reliably provide for regional fuel demand. CARB has acknowledged the importance of providing additional protections to these industry sectors by applying an adjusted CAF to facilities "with over 50% of total emissions from process emissions and operating in a sector with both high emissions intensity and a high leakage risk classification."⁴⁶ However, limiting CAF adjustments to these particular facilities fails to account for increased leakage risks across additional industry sectors, including petroleum and biofuel refineries.

WSPA urges CARB to adopt stable, long-term CAFs for these sectors to prevent California refining from becoming even more cost-disadvantaged and uncompetitive as explained above. AB 1207 provided CARB with additional flexibility to address leakage by removing the requirement that CAFs be set proportionally to the overall allowance budgets. Consistent with this flexibility, CARB should, at minimum, set baseline CAFs that would provide the regulatory certainty needed to support continued in-state fuel production and investment in GHG emissions-reduction technologies while avoiding unnecessary market disruption and helping to maintain a reliable and affordable fuel supply for Californians.

Specifically, from 2026 through 2045, CARB should, at minimum, adopt a flat 0.85 CAF for petroleum refineries (North American Industry Classification System (NAICS) 324110) and a 1.00 CAF for biorefineries (a subset of NAICS 325199) (**Table 1**) and associated hydrogen plants.⁴⁷ Maintaining a 1.00 CAF for biofuel refineries within NAICS 325199 is equally critical to support the in-state production of low-carbon fuels that are essential to California's energy transition and have already achieved a large portion

⁴³ HSC § 38562(b)(1)(B).

⁴⁴ SRIA at 76.

⁴⁵ Under the California APA, Gov. Code § 11346.3(c)(1), CARB is required to address economic impacts such as the "creation of new businesses or the elimination of existing businesses within the state" and the "competitive advantages or disadvantages for businesses currently doing business within the state." While CARB's Initial Statement of Reasons (ISOR) concludes that the Proposed Amendments are not expected to "eliminate any business," CARB's failure to account for increased leakage risks for refineries may lead to new closures. CARB. Staff Report: Initial Statement of Reasons. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/cap_invest/nc_isor.pdf. Accessed February 2026.

⁴⁶ ISOR at 59.

⁴⁷ Note, these CAFs should also be associated equipment and facilities, including hydrogen plants, directly supporting the operations of petroleum refineries and biorefineries.

of California’s GHG emissions reduction goals, as has been incentivized through various California policies.

Table 1. WSPA Proposed Table 9-2 Cap Adjustment Factors for Selected Sectors

Budget Year	Cap Adjustment Factor, c	
	Industrial Activities with NAICS code 324110*	Industrial Activities with NAICS code 325199*
2025	0.85	1.0
2026	0.85	1.0
2027	0.85	1.0
2028	0.85	1.0
2029	0.85	1.0
2030	0.85	1.0
2031	0.85	1.0
2032	0.85	1.0
2033	0.85	1.0
2034	0.85	1.0
2035	0.85	1.0
2036	0.85	1.0
2037	0.85	1.0
2038	0.85	1.0
2039	0.85	1.0
2040	0.85	1.0
2041	0.85	1.0
2042	0.85	1.0
2043	0.85	1.0
2044	0.85	1.0
2045	0.85	1.0

*Activities would include onsite hydrogen plants that support NAICS code 324110 and 325199 activities. This would include onsite hydrogen plants owned/operated by a third party that may report as a separate entity under a different NAICS code.

Adopting a flat 0.85 CAF for petroleum refineries from 2026 through 2045 represents the minimum action necessary to halt the decline of cap-related assistance for this sector, improve affordability under the Cap-and-Invest program, contribute to leveling the playing field with out-of-state and international competitors, and provide additional stability to help sustain long-term decarbonization investments. Maintaining stable CAFs for these EITE sectors directly addresses both economic and emissions leakage concerns, consistent with longstanding legislative directives. By providing predictable, long-term allocation treatment, CARB can better ensure that emissions reductions occur within California rather than being shifted out-of-state, thereby preserving environmental integrity while supporting California’s economy and workforce. Stabilizing CAFs for the refining sectors would also reduce the risk of supply disruptions, moderate compliance costs, and protect consumers from price volatility while still preserving incentives for GHG emissions reductions within the Cap-and-Invest program framework. This approach is also consistent with the Legislature’s directive under SB X1-2 and AB X2-1 to ensure that California maintains reliable, affordable, and safe fuel supplies for its residents.

WSPA urges CARB to adopt the proposed baseline CAFs as a minimum near-term measure while retaining maximum flexibility to evaluate and implement additional or alternative approaches that may further mitigate leakage and competitiveness risks. However, WSPA emphasizes that this proposal should not preclude CARB from considering additional measures or alternative approaches that may more effectively address leakage risks and competitive pressures facing the petroleum sector. Additional measures may be needed to address increased leakage risks due to the continuing rise in allowance prices. At a minimum, prices are expected to double in the next 10 years, and have the potential to increase at an even higher rate when considering that the ceiling price could be more than six times higher in 10 years compared to the current allowance price (assuming an average inflation rate of 2.5%). Comparable cap-and-invest programs provide assistance to EITE industries beyond a fixed CAF – for

example, Washington's Cap-and-Invest program provides for EITE industries to obtain no-cost allowances equal to 94% or more of a facility's baseline emissions between now and 2034. CARB should evaluate additional measures in line with these other programs to adequately address rising compliance costs and increasing leakage risks for refineries.

C. Refineries must be able to choose between using an LHF or CWB benchmark.

Under the existing Cap-and-Invest program, petroleum refineries receive allocations for the activity of "petroleum refining" using CWB as the output metric. CARB is now proposing to replace this CWB metric with a new "liquid hydrocarbon fuel" framework for reporting years beyond 2030, including developing an LHF benchmark that CARB would utilize to directly allocate allowances to facilities that process 100% petroleum feedstocks, co-process renewable and petroleum feedstocks, or process 100% renewable feedstocks. While LHF offers a straightforward production-based allocation, the existing CWB metric is a robust and valuable measure of refinery operations that reflects differences in complexity, processing efficiency, and emissions intensity.

There are wide liquid hydrocarbon fuels production differences that include a variety of feedstocks (e.g., light/heavy crudes, vegetable oils, waste oils and fats), different processing configurations (i.e., stand-alone, co-processing), different site configurations, different fuel types, and varying on-site and off-site energy requirements. Petroleum refining, standalone renewable fuel production, and co-processing also include different process steps and have distinct energy requirements and GHG emissions intensities. Therefore, WSPA recommends that petroleum refineries be allowed to choose between an LHF or CWB benchmark beyond 2031. This flexibility would preserve the ability of more complex refineries to receive allocations commensurate with their operational characteristics while maintaining transparency and consistency with historical reporting. A choice would encourage efficiency improvements and provide regulatory certainty for long-term planning and capital investment decisions. It would benefit any entity, regardless of their preference for a CWB or LHF benchmark.

D. CARB should consider implementing new or existing mechanisms to prevent leakage and stabilize California's petroleum sector.

WSPA is concerned that State-led efforts to stabilize California's refining sector will be substantially undermined unless CARB acts to ensure equivalent carbon pricing for imported transportation fuels. Implementing such a mechanism would minimize leakage risks, consistent with CARB's legislative mandate, by encouraging importers to reduce GHG emissions from other refining areas and to minimize transportation-related emissions associated with imported fuels.

CARB has broad authority under AB 398 and AB 1207 to adopt measures to minimize leakage as part of its Cap-and-Invest program.⁴⁸ CARB should consider building upon prior work to transition to other policies that improve industrial assistance such as by exploring longer-term alternative leakage mitigation options for transportation fuels.

To achieve cost equivalency and address leakage risks, CARB would need to ensure that imported transportation fuels are subject to carbon costs equivalent to those imposed on California refineries. CARB should also consider existing mechanisms for addressing leakage, including extending the adjusted CAF to additional impacted industries such as refineries, and lowering the price ceiling to increase allowance availability and affordability.

E. CARB should expand its proposed manufacturing decarbonization incentives to include petroleum refineries, crude extraction, and biorefineries.

CARB is proposing to adopt a manufacturing decarbonization incentive allocation under § 95891 as a new cost-containment tool to support decarbonization investments and manage compliance costs, allowing eligible facilities to receive additional free allowances via a CAF modifier and reinvest their value

⁴⁸ See HSC § 38562(b)(8).

in CARB-approved decarbonization projects. This mechanism can be critical for maintaining operational affordability, consistent with § 95891's stated purpose to provide transition assistance and minimize GHG emissions leakage. However, CARB's proposed amendment excludes much of the oil and gas value chain—including petroleum refineries, crude extraction, and biorefineries – despite their high EITE and leakage risk. Excluding these sectors directly conflicts with the stated purpose of § 95891 and undermines CARB's obligation to minimize leakage in California.

By excluding petroleum and biorefining sectors, CARB denies these industries access to a mechanism that could help offset rising compliance costs and support long-lead-time investments in GHG emissions-reduction technologies. As a result, these sectors must fund decarbonization entirely out-of-pocket while simultaneously facing declining CAFs and increasing allowance purchase obligations. This exclusion creates an allowance allocation disparity and further competitive imbalance across covered entities. Other entities are permitted to monetize incentive allocations to finance decarbonization, while transportation fuel manufacturers, despite being highly trade-exposed, are excluded from the same opportunity. In doing so, CARB effectively prioritizes which industries are retained in-state and which are discouraged from operating in California, rather than advancing decarbonization based on GHG emissions-reduction potential. This unequal treatment increases operating costs for California-based petroleum and biorefining facilities and intensifies the risk that production will shift out of state to jurisdictions with weaker environmental regulations and higher lifecycle GHG emissions.⁴⁹

In CARB's Initial Statement of Reasons, CARB notes that other programs, such as LCFS and the Renewables Portfolio Standard, apply to energy sectors. However, those programs impose separate compliance obligations and costs and do not provide free allowances or leakage mitigation under the Cap-and-Invest program. The existence of these other regulatory programs does not justify excluding those sectors from a key cost-containment and decarbonization incentive under § 95891(g).

CARB should revise § 95891(g) to ensure that crude extraction, petroleum manufacturing, petroleum refineries, and biorefineries are eligible for manufacturing decarbonization incentive allocations, consistent with the program's purpose, the leakage-minimization directives of AB 32 and AB 1207, and the need to maintain manageable compliance costs while achieving real, in-state GHG emissions reductions.

4. CARB should reevaluate its treatment of offsets to mitigate compliance burdens.

Consistent with AB 1207's directive, CARB is proposing to remove allowances from annual budgets corresponding to offset use for compliance.⁵⁰ WSPA appreciates CARB's efforts to establish a regulatory framework that integrates offset usage into the annual allowance budget. However, WSPA remains concerned that the proposed method for removing allowances – specifically the assumption of 100% offset utilization and the slow timeline for reintroducing unused volumes – risks creating an artificial market shortage of GHG allowances and increasing compliance costs for regulated entities without providing a corresponding environmental benefit.

- **Initial offset removal:** CARB's proposal to initially remove allowances from the budget based on a 100% utilization rate of the offset usage limit fails to account for actual offset usage within the program. Historically, actual offset usage has rarely reached the maximum allowable limit. CARB's "worst-case scenario" accounting approach significantly overestimates the volume of allowances that need to be retired. By front-loading these removals, CARB is effectively tightening the cap beyond its intended stringency and reducing the availability of compliance instruments in the short-term. WSPA urges CARB to adopt a more balanced approach by basing initial allowance removals on historical average usage data, which would provide a more accurate reflection of market behavior while still maintaining the integrity of the cap.

⁴⁹ See <https://rbnenergy.com/daily-posts/blog/while-many-us-refiners-face-gloomy-outlook-things-look-brighter-padd-3> (providing that PADD 5 policy challenges and additional closures influenced by policy developments may result in a short gasoline market).

⁵⁰ ISOR at 36.

- **Timing for reintroducing unused allowances:** The proposed timeline for reintroducing unused allowance volumes to the auction is too slow to support effective market liquidity. If CARB removes allowances based on maximum potential offset use, any volume that remains unused should be returned to the market as quickly as possible to prevent price distortions and ensure consistent funding for the GGRF. Under the existing timeline, these unused volumes may be held out of circulation for years, trapping liquidity and reducing the resources available for statewide climate and equity programs. WSPA recommends that CARB implement an expedited reconciliation process to return unused allowances to the auction within the following calendar year, thereby ensuring that the market remains responsive to actual compliance needs.
- **Double-counting:** It is imperative that CARB’s implementation of AB 1207 avoid “double-counting” of emissions reductions. The 2022 Scoping Plan Update and the cap decline trajectory analysis through 2030 were already designed with the anticipated use of offsets under this program. Because CARB has already accounted for a certain volume of offsets in its long-term modeling, removing 100% of allowances for all offsets used under AB 1207 effectively penalizes the market twice for the same compliance activity. CARB should refine its removal calculations to account for those offsets already managed within the 2030 cap, ensuring that the regulation remains consistent with the statutory mandate and preserves affordability.

5. CCUS and CDR projects should directly reduce covered emissions and be reflected in MRR reporting.

By CARB’s own account, both CCUS and CDR technologies will be critical to achieving California’s 2045 carbon neutrality target. CARB’s planning documents, including the 2022 Scoping Plan Update,⁵¹ acknowledge that large-scale deployment of CCUS and CDR is necessary to achieve long-term climate goals. While large-scale deployment is aspirational given the long-term investment signal CARB is sending, these technologies have been shown to directly prevent CO₂ from entering the atmosphere or permanently remove CO₂ already emitted. However, under the current regulatory framework and the Proposed Amendments, covered entities that invest in CCUS or CDR do not receive clear or direct compliance recognition under either Cap-and-Invest or MRR, significantly weakening the incentive to pursue these capital-intensive, long-lead-time projects.

AB 1207 specifically directs CARB to “[c]onsider developing additional compliance offset protocols to address sectors that are not covered by the market-based compliance mechanism but are identified in the scoping plan . . . , including carbon dioxide removal.”⁵² CARB’s Proposed Amendments largely defer development of CCUS pathways pending CARB’s adoption of its Carbon Capture, Removal, Utilization, and Storage Program, instead creating new § 95852.3 as a placeholder to address the treatment of utilized or sequestered carbon dioxide in the Program.⁵³

To ensure that the Cap-and-Invest program remains effective and supports the State’s long-term GHG reduction targets, CARB should explicitly recognize qualified CCUS and CDR projects as covered GHG emissions reductions eligible for meeting compliance obligations. Covered entities that capture and permanently store or verifiably remove CO₂ should be allowed to reflect those reductions in their covered emissions, rather than being required to surrender allowances as though the captured GHG emissions had been released into the atmosphere. Absent such clarity, the program risks discouraging investment in precisely the technologies that CARB has identified as essential for achieving carbon neutrality.

Equally important, the MRR must be updated to provide a clear pathway for reporting net GHG emissions that account for CCUS and CDR. Specifically, CARB should clarify in the MRR that covered entities may report net GHG emissions, including direct GHG reductions from CCUS and CDR projects. Without corresponding changes to the MRR, covered entities cannot accurately report the GHG emissions reductions achieved through these technologies, nor can CARB ensure consistent, transparent, and

⁵¹ CARB. 2022 Scoping Plan for Achieving Carbon Neutrality. Available at: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>.

Accessed February 2026.

⁵² HSC § 38562(c)(2)(H).

⁵³ See ISOR at 82.

verifiable accounting across the program. Aligning the MRR with Cap-and-Invest treatment of CCUS and CDR is necessary to provide regulatory certainty and ensure environmental integrity.

Clarifying CCUS and CDR treatment under both Cap-and-Invest and the MRR would also function as an important cost-containment mechanism. By permitting covered entities to reduce their compliance obligations through verified emissions capture and removal, CARB can help moderate allowance demand, support market stability, and lower overall compliance costs while still delivering real, in-state emissions reductions. This approach is particularly critical for EITE sectors facing limited near-term decarbonization options.

WSPA urges CARB to amend both regulations to explicitly recognize qualified CCUS and CDR projects as direct reductions to covered emissions. Doing so is essential to enabling private investment, accelerating deployment of carbon-negative technologies, and ensuring the Cap-and-Invest program can credibly and affordably support California's path to carbon neutrality by 2045.

6. CARB should maintain the existing three-year compliance period.

CARB is proposing to reduce Compliance Periods 6 and 7 to two years and thereafter alternate between two-year and three-year compliance periods. This change would introduce unnecessary complexity and regulatory uncertainty for covered entities. Alternating compliance period lengths would create carbon accounting challenges by forcing entities to continually shift planning horizons, recalibrate internal tracking systems, and adjust allowance procurement strategies on a recurring basis. These disruptions increase administrative burden and financial risk without improving environmental outcomes.

Instead, CARB should retain the existing three-year compliance periods. Maintaining a stable, predictable three-year compliance period provides regulatory certainty and minimizes avoidable compliance costs, while supporting accurate GHG emissions accounting, long-term investment planning, and alignment with business and carbon management strategies.

7. In both Cap-and-Invest and MRR programs, CARB should continue exemptions for biogenic emissions and allow reliance on existing, approved methodologies.

CARB should continue to support exemptions for biogenic process and combustion emissions and allow reporting entities to rely on existing, approved methodologies. Using established methodologies is critical to ensuring consistency across programs, maintaining data integrity, and avoiding unnecessary reporting and administrative burdens.

Biogenic emissions disclosures have never been required under MRR or under other major federal and international accounting frameworks. Instead, these frameworks consistently treat biogenic CO₂ similarly to avoided emissions, which are reported separately as supplemental information rather than as a mandatory component of a facility's GHG inventory. This approach reflects the longstanding recognition that incorporating biogenic CO₂ directly into mandatory reporting frameworks can distort emissions inventories and create inconsistencies across programs.

Additionally, including low-carbon fuels (i.e., renewable naphtha and sustainable aviation fuel) on the list of excluded fuels from the fuel supplier obligation under Cap-and-Invest supports efficient low-carbon fuel production needed to meet ongoing demand in the on-road, aviation, and off-road transportation sectors. This approach is consistent with CARB's goal in the 2022 Scoping Plan Update to reduce petroleum fuel production and demand, while recognizing that low-carbon fuels will remain critical to meeting California's energy needs, given ongoing grid reliability challenges and extended timelines for electrical infrastructure upgrades. In addition, this approach provides regulatory certainty for in-state petroleum refineries that are already being modified to manufacture low-carbon fuels. WSPA stresses that it is critical for CARB to develop allocation methods and benchmarks for low-carbon fuels that support in-state fuels with low carbon intensity, as WSPA noted in Comment 3.

8. CARB should revise § 95852.1 to protect federal RINs and voluntary market participation.

WSPA seeks clarification and refinement of the language in § 95852.1 concerning the ownership and contract rights of exempt biomass-derived fuels. Specifically, WSPA is concerned that the provision stating “no other entity may claim an emissions exemption to reduce a compliance obligation or otherwise claim a reduction in emissions associated with the use of the biomass-derived fuel” is overly broad and creates significant regulatory uncertainty for market participants.

While WSPA appreciates that this section explicitly allows for the generation of Renewable Energy Credits and LCFS credits, the current phrasing inadvertently threatens the eligibility of these fuels for other critical programs. By prohibiting any other entity from “otherwise” claiming an emissions reduction, the regulation could be interpreted to preclude the generation of federal Renewable Identification Numbers (RINs) under the Renewable Fuel Standard. Furthermore, this language may interfere with voluntary commercial transactions in which GHG attributes are contractually transferred to private parties.

This proposed amendment creates a requirement that is more restrictive than necessary for maintaining the Cap-and-Invest program’s integrity. Ambiguity risks disincentivizing biogenic fuel projects by limiting their participation in federal and voluntary markets, which are essential for the financial viability of low-carbon fuel production. WSPA recommends that CARB narrow the scope of this provision to ensure it prohibits double-claiming only within the Cap-and-Invest program, thereby explicitly protecting the ability of entities to utilize federal RINs and engage in voluntary environmental attribute transactions.

9. CARB should revise the ethanol denaturant reporting amendment to avoid double-penalizing fuels.

Currently, all ethanol blended in transportation fuels is reported such that all associated biogenic CO₂ emissions are exempt under the Cap-and-Invest program and MRR. CARB is now proposing to change this method to exclude the fossil denaturant in the ethanol from exempted biomass-derived fuels’ GHG emissions, including amending MRR so that the volume of fossil fuel denaturant from supplied fuel ethanol is counted.

CARB should revise its proposed approach to ethanol denaturant reporting to avoid double-penalizing fuels that are already regulated under the LCFS, particularly where denaturant use is required, and to avoid double-counting of emissions. Ethanol denaturants have been included in the LCFS’s CA-GREET modeling dating back to at least 2015. The Proposed Amendments would unnecessarily double-count and double-regulate these emissions. In addition, CARB’s proposed default calculation method will make reporting even more challenging and require a shift in protocol to include out-of-state entities.

WSPA reiterates its position that low-carbon fuels are sufficiently regulated under LCFS, which addresses biogenic emissions from the production and use of transportation fuel, and therefore should continue to be exempt from reporting under the Cap-and-Invest program.

10. CARB should reevaluate proposed new account types to reduce unnecessary complexity and administrative burden.

WSPA is concerned that the Proposed Amendments, to add new account types under the Cap-and-Invest program could further increase administrative complexity and impose additional burdens on covered entities. The current system includes compliance and holding accounts and already requires covered entities to invest significant labor and associated costs to track, surrender, and bank allowances. Introducing additional account types, such as the proposed “Allowance Removals for Offset Use Account,” risks fragmenting account management, complicating allowance transfers, increasing the potential for reporting errors, and adding further costs to the administrative burden of the program. Covered entities must reconcile multiple accounts while maintaining accurate records for compliance, trading, and verification purposes.

WSPA recommends that CARB carefully evaluate the operational impacts of adding new account types and consider alternatives that maximize flexibility and minimize administrative burden, such as allowing offset-related transactions to be tracked within existing compliance or holding accounts whenever feasible. Streamlining account structures will help ensure program efficiency and maintain regulated entities' ability to comply accurately and reliably.

11. CARB's proposed additional documentation requirements for certain trades are unnecessary.

The Proposed Amendments for certain allowance trades would require an additional level of documentation that is unnecessary and would increase compliance burdens for covered entities. In particular, CARB is proposing to add § 95921(b)(7), which would require that, for a transfer of compliance instruments that does not contain a price at the time of transfer, "Parties to the transaction must submit the transaction agreement, invoice records, written counterparty confirmation, and screenshots of completed trade details..." However, these documents are not necessary in all instances to ensure that CARB has sufficient information to verify that the transaction is accurate and permitted. The proposed language should be revised to allow submittal of one or more documents that verify the transaction rather than require all these documents, some of which may not be available.

12. CARB should clarify the type of operations that would be included under a liquefied petroleum gas receiving facility or "LPG receiving facility."

The 30,000-gallon reporting threshold is equivalent to a single rail car of LPG. When railcars enter California, they may sit idle at a rail yard until the tracks are aligned to ship the rail car to its destination. CARB's current definition of an LPG receiving facility is unclear. WSPA recommends that CARB clarify this definition to identify that the 30,000 gallons is associated with offloaded LPG. Additionally, if the use of the offloaded LPG is captured in a Cap-and-Invest program covered entities MRR offloaded LPG volume reporting is not required to prevent the double counting of emissions.

13. CARB should ensure that MRR remains aligned with federal reporting requirements.

WSPA urges CARB to maintain the MRR's alignment with the federal Greenhouse Gas Reporting Program at 40 Code of Federal Regulations (CFR) Part 98 to the greatest extent practicable and to reconsider the provisions in the Proposed Amendments that could introduce conflicts or inconsistencies between the two programs. California reporting entities have spent more than a decade developing sophisticated compliance systems for internal operation and external reporting that are fundamentally based on federal reporting methodologies. Departing from these established frameworks would be highly disruptive and costly, requiring companies to redesign data collection and reporting systems that are deeply embedded in day-to-day operations.

WSPA recognizes the significant uncertainty currently surrounding the federal program, based on the U.S. Environmental Protection Agency's proposal to rescind GHG reporting requirements for a large number of source categories. However, even if federal GHG reporting requirements are reduced or eliminated, CARB should continue to rely on the existing federal technical methodologies as the foundation for the MRR. Doing so would preserve data continuity and integrity, maintain consistency with historical reporting, and avoid imposing unnecessary administrative burden associated with developing and implementing entirely new, state-specific methodologies during a period of regulatory uncertainty.

14. CARB should eliminate MRR requirements that duplicate LCFS reporting.

WSPA requests removal of § 95121(d)(10), which would require reporting biomass-derived fuel volumes for each unique combination of LCFS pathway code, fuel type, and point of regulation. Existing MRR reporting already defines points of regulation and ensures no double-counting, and LCFS pathway data is separately reported in quarterly and annual LCFS submissions, with fuel pathway codes fully reconciled with counterparties or, depending on the transaction type, subject to third-party verification. In addition, biomass-derived fuels may be mixed in common tankage, making it impossible to identify which LCFS pathway code is associated with each reported volume. A fuel supplier, at best, could report all LCFS

pathway codes of biomass-derived fuels purchased and/or produced in a year. The supplier would not be able to identify the LCFS fuel pathway code for specific volumes sold at California terminal racks. Requiring this level of detail in MRR duplicates LCFS reporting, increases administrative burden, and does not improve the accuracy of GHG emissions reporting.

For biomass-derived blendstocks, CARB should consistently provide separate GHG emission factors and allow entities the option to use those factors rather than requiring the use of the same factor as fossil blendstocks. WSPA observed that while biodiesel and renewable diesel are treated differently from distillates, bionaphtha is currently assigned the same emissions factor as fossil blendstocks. Consistently providing separate emission factors for biomass-derived blendstocks and allowing entities the option to use them ensures that GHG accounting accurately reflects the carbon content of bio-based fuels while enabling regulated entities to select the most appropriate factor for reporting.

15. Fuel suppliers should be allowed to report LPG emissions using a default emission factor.

CARB should reduce the reporting complexity for emissions from LPG fuel by removing the requirement to report the emissions from the individual components of fossil or biomass-derived liquefied petroleum gas. CARB is allowing importers of liquid petroleum gas in § 95122(b)(9) the ability to use a default LPG factor, stating that the modification is needed to allow suppliers of imported LPG in all cases to report imported LPG volumes as “LPG” rather than LPG components. CARB should add similar language to fuel suppliers in Section 95121 for the same reasons: to simplify emissions reporting, which under the existing requirement is often burdensome for suppliers to implement and provides little additional precision in emissions reporting.

16. CARB should specify reportable process vents for hydrogen production.

WSPA agrees with CARB’s intent to require all hydrogen production facilities, whether integrated within a refinery or operating as a standalone hydrogen production facility, to be held to the same GHG emissions reporting requirements. However, CARB needs to add significant language to specify which process vents are required to be reported. CARB should include the same language as in § 95113 (Refineries) that excludes process vents for which the concentration of CO₂, N₂O, and CH₄ are determined to be below the thresholds in 40 CFR § 98.253(j). CARB should also align with EPA reporting requirements and include in the regulation language allowing quantification of vent flows using measurement data (if available), process knowledge, or engineering estimates, as provided in 40 CFR § 98.253(j). Lastly, CARB should specify in its regulations how to account for double-counted emissions from hydrogen production to ensure consistency across all data reporters.

WSPA appreciates your consideration of these comments and welcomes the opportunity to discuss these concerns in more detail. We look forward to working with you on these important issues.

Sincerely,



Jodie Muller
President & Chief Executive Officer