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Cap-and-Trade Workshop  
California Air Resources Board  
1001 I Street,  
Sacramento, CA 95814

(Submitted via the Workshop Comment Submittal Form and to [ctworkshop@arb.ca.gov](mailto:ctworkshop@arb.ca.gov) email)

**Re: WSPA Comments on the CARB Public Workshop – Potential Amendments to the Cap-and-Trade Regulation**

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the California Air Resources Board (CARB) Public Workshop: Potential Amendments to the Cap-and-Trade Regulation, hosted on July 27, 2023.<sup>1</sup> WSPA is a non-profit trade association that represents companies that import and export, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states, and has been an active participant in air quality planning issues for over 30 years.

WSPA appreciates the information CARB shared during the public workshop regarding the potential amendments to the Cap-and-Trade Regulation. We are supportive of utilizing market-based approaches like Cap-and-Trade to help achieve California's greenhouse gas (GHG) reduction goals and appreciate CARB's inclusion of carbon capture, utilization, and storage (CCUS) and carbon dioxide removal (CDR) technology options needed to achieve the State's decarbonization objectives.

WSPA encourages CARB to consider how potential amendments to the Cap-and-Trade Regulation may impact gasoline costs in California. Senate Bill (SB) X1-2 (2023) directs State agencies to evaluate how to ensure that petroleum and alternative transportation fuels are adequate, affordable, reliable, and equitable. The California Energy Commission found that the Cap-and-Trade Regulation and the Low Carbon Fuels Standard (LCFS) together add approximately 32 cents per gallon to the cost of gasoline.<sup>2</sup> It is essential for CARB to minimize further impacts, given both the legislative directive in SB X1-2 and ongoing supply constraints for transportation fuels, which exacerbate existing impacts. WSPA is concerned that proposed amendments to the Cap-and-Trade Regulation could further compromise the supply reliability of critical transportation fuels, a consequence of which could increase energy costs at a time when energy affordability is a pressing priority for many Californians.

WSPA supports CARB's objective to adopt a 2030 reduction target for the Cap-and-Trade program that can maintain a steady and stable carbon market in California, and appreciates CARB's inclusion of carbon-negative technologies within the Cap-and-Trade framework. These carbon-negative technologies are essential to achieve the State's 2045 carbon neutrality target,

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<sup>1</sup> CARB. California Public Workshop: Potential Amendments to the Cap-and-Trade Regulation. Available at: [https://ww2.arb.ca.gov/sites/default/files/2023-07/nc-CapTradeWorkshop\\_July272023\\_0.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-07/nc-CapTradeWorkshop_July272023_0.pdf). Accessed: August 2023.

<sup>2</sup> Based on OPIS, EIA, API, and AAA data. CEC staff presentations available at: <https://www.energy.ca.gov/event/workshop/2022-11/commissioner-hearing-california-gasoline-price-spike-refinery-operations>. Accessed: June 2023.

as outlined in the 2022 Scoping Plan Update. WSPA also supports CARB's introduction of new benchmarks and allowances for drop-in biogenic fuels in its proposal.

However, WSPA opposes any changes to the allowance mechanisms that could retrospectively adjust allowance budgets, which could introduce volatility and instability to the carbon market. Separately, we have significant concerns about the "one-product, one-benchmark" approach for oil and gas production, which could lead to unintended emissions leakage.

Our detailed comments are provided below:

**1. CARB must weigh technology readiness, implementation uncertainty, and the need to maintain a stable market when considering adjustments to the 2025-2030 allocation caps**

CARB presented scenarios that would make adjustments to the 2025-2030 allocation caps based on GHG reduction targets of 40%, 48%, or 55% from 1990 levels by 2030. CARB also presented hypothetical linear decline scenarios for 2021 to 2030 that estimated allowance reductions that *could have* been achieved beyond the allocation caps in the 2016 Cap-and-Trade Regulation, based on information from the 2022 Scoping Plan Update, the updated 2021 GHG Emission Inventory, and recent State climate policy. CARB proposed to decrease the 2025-2030 allocation caps beyond the GHG reduction targets based on the "cumulative" reductions that could have been achieved under the hypothetical linear decline scenarios.

*First*, WSPA opposes any methodology for assessing allocation cap adjustments for 2025-2030 that attempts to incorporate hypothetical reductions for previous years. Such methodologies would retroactively modify or reduce historical allowance pools that have already been distributed (i.e., via auction or direct allocation) or banked, creating a disincentive for companies to maximize their GHG emissions reductions. The Cap-and-Trade program depends on stability and predictability in order to facilitate long-term decarbonization planning. Investment in sustainable and low-carbon initiatives requires significant lead time, and companies must be able to depend on a stable and reliable allowance market to make these investments. Similarly, companies must be able to utilize allowance banking effectively to undertake longer-term, higher-capital investments that are necessary to achieve the State's carbon neutrality goals. By removing allowances from budget years prior to the amendments, CARB would set a concerning precedent that would undermine confidence in the Cap-and-Trade program as a market-based GHG mitigation mechanism.

*Second*, CARB's 55% GHG reduction target may not be achievable by 2030 with readily available technology. CARB's 2022 Scoping Plan modeling found that even a 48% GHG reduction target may not be achievable by 2030. As CARB acknowledged in the July 27<sup>th</sup> workgroup meeting, the 2022 Scoping Plan Update scenario<sup>3</sup> relied on a significant amount of mechanical carbon dioxide removal, including carbon capture utilization and storage, and renewable hydrogen, among others. These technologies have yet to be deployed in the State at the rates necessary to reach a 48% reduction target by 2030. These concerns would only be amplified under a 55% reduction target scenario. Assembly Bill (AB) 32

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<sup>3</sup> CARB. 2022 Scoping Plan for Achieving Carbon Neutrality, Table 2-3 Available at: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>. Accessed: August 2023.

(2006) requires CARB to consider technological feasibility and cost-effectiveness in regulating GHG emissions.<sup>4</sup> WSPA urges CARB to account for near-term reduction limits using readily available technologies, in accordance with this statutory mandate. WSPA further urges CARB to consider the costs of these technologies in setting GHG reduction targets, to ensure that GHG reductions are cost-effective.

While WSPA strongly supports the use of carbon-negative technologies and low-carbon fuels to achieve GHG reductions, we also urge CARB to include a regulatory “safety valve” to mitigate implementation uncertainty associated with the deployment of these and other technologies. Delays in deployment due to regulatory uncertainties, policy constraints or other commercial factors, could hinder the projected amount of GHG reductions achieved by 2030. For instance, California Environmental Quality Act (CEQA) review and other regulatory proceedings can cause significant delays in project implementation without a streamlined process. Similarly, SB 905 (2022) restricts implementation of pipeline projects to transport carbon dioxide (CO<sub>2</sub>) pending regulatory actions by the federal Pipeline and Hazardous Materials Safety Administration<sup>5</sup> (PHMSA). This restriction will stall the majority of large-scale CCS project developments, and likely all development of such projects at refineries. Maintaining a steady and stable market under the Cap-and-Trade program ensures that industry can address this implementation uncertainty and continue to reliably invest and make developments in low-carbon technologies.

To assuage this uncertainty and preserve the stability of the carbon market, WSPA recommends that CARB adopt a mechanism that would move the allowances under the three proposed scenarios into Allowance Price Containment Reserves (APCR) Tier 1. Moving the allowances into APCR Tier 1, rather than distributing them, will help ensure that there is a stable carbon market pricing mechanism that will allow industries the time to adapt, innovate, and transition toward sustainable practices in the long-term. Such a mechanism would still incentivize GHG reductions at the desired schedule, but would also preserve the price-containing mechanism necessary for the success of the program. Without the protections provided by this mechanism, the market price of allocations may rise dramatically to accommodate CARB’s aggressive short-term GHG reduction goals, resulting in detrimental consequences for California’s industries and harming long-term reduction goals. Abrupt increases in carbon market pricing could lead to higher operational costs for industry, which may struggle to absorb the added financial burden, leading to job losses, higher energy costs and reduced economic growth. Moreover, an unexpected surge in carbon market prices may disrupt long-term planning and investments in low-carbon technologies.

CARB should be aware that the cost of several key abatement and creditable actions related to hydrogen production and their economic viability may change substantially in part depending on California’s policy and incentives. As outlined in the 2022 Scoping Plan

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<sup>4</sup> California Health & Safety Code § 38560. Available at: <https://law.justia.com/codes/california/2021/code-hsc/division-25-5/part-4/section-38560/>. Accessed August 2023.

<sup>5</sup> SB905, Chapter 359, Statutes of 2022, Section 71465(a). Available at: [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220SB905](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905). Accessed August 2023.

Update,<sup>6</sup> California's long-term GHG reduction goals require a substantial increase in the supply of hydrogen. As a key component in decarbonizing various sectors including transportation fuels, hydrogen would play a key role in a transition to a low-carbon economy. The timeline to develop and scale-up hydrogen production, distribution, and utilization processes poses a challenge. The lack of regulations on streamlined permitting processes may inadvertently disincentivize long-term and timely investments in hydrogen technologies, leading to uncertainties in the market. For California to successfully realize its GHG targets, it is crucial for CARB to promptly address these concerns and create a conducive environment that fosters hydrogen development and deployment.

WSPA urges CARB to broadly consider these and other indirect impacts in conducting its environmental review under CEQA. CARB must consider, consistent with CEQA Guidelines, the impacts of a proposed project, which include any "cumulative and growth-inducing impacts."<sup>7</sup> CARB must also assess "a reasonable range of alternatives to the proposed project, which could feasibly attain most of the project objectives but could avoid or substantially lessen any of the identified significant impacts."<sup>8</sup>

**2. WSPA maintains its previous position that post-2030 targets as market signals are a necessity for the multi-decade capital investments to deploy these necessary technologies (electrification, hydrogen, low carbon fuels, CCUS/CDR, etc.)**

AB 398 (2017, E. Garcia)<sup>9</sup> expressly authorized CARB to extend the Cap-and-Trade program through December 31, 2030, and further instructed that CARB strengthen important cost containment mechanisms within the program, including a price ceiling, price containment points below that price ceiling, and a compliance offset program limit that increases in 2026. In accordance with this statutory mandate, CARB must ensure that its Cap-and-Trade program is technologically feasible and cost-effective.

The passage of AB 398 indicates that CARB requires legislative authorization to extend the Cap-and-Trade program beyond 2030. As such, WSPA encourages CARB to work with the State Legislature to establish legally defensible post-2030 targets that will send clear market signals for the multi-decade capital investments industries will need to make to deploy decarbonization technologies. We look forward to working with CARB and State policy leaders on such an effort to extend the program beyond 2030.

As WSPA has pointed out in its previous comment letter dated July 7, 2023,<sup>10</sup> post-2030 GHG reduction targets are necessary in order to provide assurance for long-term

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<sup>6</sup> Ibid, Figures 4-2 and 4-7.

<sup>7</sup> California Code of Regulations Title 17, § 60004.2. Environmental Impact Analysis. Available at: <https://www.law.cornell.edu/regulations/california/17-CCR-60004.2>. Accessed: August 2023.

<sup>8</sup> Ibid.

<sup>9</sup> California Legislature. 2017. Assembly Bill 398, California Global Warming Solutions Act of 2006: market-based compliance mechanisms: fire prevention fees: sales and use tax manufacturing exemption. Available at: [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180AB398](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398). Accessed: August 2023.

<sup>10</sup> WSPA. 2023. WSPA Comments on the Joint California-Québec Public Workshop: Potential Amendments to the Cap-and-Trade Regulation. July 7. Available at: [https://ww2.arb.ca.gov/system/files/webform/public\\_comments/4411/WSPA%20Cap-and-Trade%20Workshop%20Comment%20Letter%207-7-2023.pdf](https://ww2.arb.ca.gov/system/files/webform/public_comments/4411/WSPA%20Cap-and-Trade%20Workshop%20Comment%20Letter%207-7-2023.pdf). Accessed: August 2023.

investments in low-carbon technologies. Upgrading utility infrastructure for electrification, installing hydrogen fueling infrastructure, transportation pipelines, and production facilities, and developing low-carbon and negative-carbon technologies will require multi-decade capital investments. By establishing post-2030 GHG reduction targets under the Cap-and-Trade program, more certainty can be provided for project investments where the emissions reductions may not be fully realized until 2030 or later.

WSPA encourages CARB to consider the implementation timelines and potential for delays for the large-scale infrastructure and technology deployments necessary to achieve GHG reductions when establishing near-term and post-2030 targets. Rather than modeling a linear annual decrease in allowance budget scheduled through 2030, CARB should consider a curved trendline which is slower in early years and faster in later years, similar to what is being considered for the LCFS regulation, to account for these development timelines.

### **3. WSPA reaffirms the need for carbon negative technologies under Cap-and-Trade to achieve the 2045 target for carbon neutrality under the 2022 Scoping Plan Update**

As WSPA has pointed out in its previous comment letter dated July 7, 2023,<sup>11</sup> CCUS and CDR technologies will be critical to the overall success of the 2022 Scoping Plan Update to achieve carbon neutrality by 2045. WSPA supports CARB's inclusion of CCUS and CDR technologies under the Cap-and-Trade program, and we agree that significant improvements are necessary to streamline and accelerate the permitting process for all negative-carbon technologies.

WSPA further recommends that CARB amend the Cap-and-Trade Regulation to include a mechanism for generating additional allowances based on emissions reductions achieved by CDR and CCUS. Such a mechanism would provide incentive for companies to take on the long-term, costly investments and implementation uncertainty associated with these technologies, while facilitating substantial emissions reductions in future years. CARB has already established a placeholder for such a concept in California Code Regulations title 17 Section 95852(g),<sup>12</sup> and WSPA encourages CARB to finalize this concept.

In order to ensure the successful development of CCUS and CDR technologies, WSPA recommends CARB establish and clarify the roles of State agencies in developing standards, streamlining permitting, and establishing land use authority. We encourage CARB to work with the California legislature to remove the provision in SB 905 that prohibits the use of pipelines to transport carbon dioxide and develop an improved project environmental review process under CEQA for an expedient deployment of CCUS and CDR technologies.

WSPA urges CARB to utilize the existing market-based regulatory programs – including the Cap-and-Trade framework and the corresponding Mandatory Reporting Regulation – to develop a robust CDR program, rather than pursue an additional rulemaking process, such

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<sup>11</sup> Ibid.

<sup>12</sup> California Code of Regulations Title 17, 95852. Emission Categories Used to Calculate Compliance Obligations. Available at: <https://www.law.cornell.edu/regulations/california/17-CCR-95852>. Accessed: August 2023.



as that proposed under SB 308,<sup>13</sup> which would require CARB to establish a separate CDR market rather than provide CARB flexibility to incorporate CDT rules into the Cap-and-Trade framework. The addition of CDR to Cap-and-Trade would provide entities with another tool to achieve the emission reductions necessary to meet the State's climate goals and further develop Cap-and-Trade as an economy-wide emissions reduction program. Creating an additional market when a successful market currently exists would be duplicative and would create an unnecessary compliance obligation secondary to the existing Cap-and-Trade requirements, further burdening emitting entities.

#### 4. WSPA supports CARB's proposal to include drop-in biogenic fuels in the Cap-and-Trade program

Including drop-in biogenic fuels supports efficient low carbon fuel production to meet the ongoing demands in the on-road, aviation, and off-road transportation sectors. Such fuels are an essential part of the path to decrease petroleum fuel production in line with demand under the 2022 Scoping Plan Update—CARB noted in a workshop presentation that *“modifications are occurring to existing in-state petroleum refineries to manufacture biogenic fuel.”*<sup>14</sup> WSPA encourages CARB to develop robust benchmarks and allocation methodology for drop-in biogenic fuels with input from impacted stakeholders.

As WSPA pointed out in the numerous comment letters on the 2022 Scoping Plan Update,<sup>15,16</sup> supporting renewable fuels with low carbon intensity is a technologically and economically feasible approach to achieve California's GHG reduction goals. CARB's proposed allocation for drop-in biogenic fuel production aligns with this perspective and allows renewable fuels to play an important role in California's decarbonization. WSPA supports an allowance mechanism for biogenic fuels produced and encourages the in-state development of low-carbon fuels. Such a mechanism would further the success of other key State programs such as SB 1383 (2016) and forestry management programs, which increase the supply of biogenic feedstocks that can be utilized in hard-to-decarbonize and hard-to-electrify sectors.

Given the extended timelines required for electrical grid infrastructure upgrades, drop-in biogenic fuels and other renewable fuels will play a key role in the State's decarbonization, not only as a bridge between existing technologies and electrification, but also as means to address intermittency concerns within the electric grid, as the State transitions to renewables generation while simultaneously expanding energy demand. WSPA encourages CARB to develop additional policy mechanisms to support the production and innovation of biogenic and low carbon fuels in-state. This approach is supported by AB 398, which outlines provisions for allocation of allowances to aid industries in meeting compliance

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<sup>13</sup> California Legislature. 2022. Senate Bill 308, Carbon Dioxide Removal Market Development Act. February 2. Available at: [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202320240SB308](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202320240SB308). Accessed: August 2023.

<sup>14</sup> CARB. California Public Workshop: Potential Amendments to the Cap-and-Trade Regulation, Slide 54. Available at: [https://ww2.arb.ca.gov/sites/default/files/2023-07/nc-CapTradeWorkshop\\_July272023\\_0.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-07/nc-CapTradeWorkshop_July272023_0.pdf). Accessed: August 2023.

<sup>15</sup> WSPA. 2022. Comments on the Draft 2022 Scoping Plan Update. June 24. Available at: <https://www.arb.ca.gov/lists/com-attach/4416-scopingplan2022-BnEAdVQIBTdRCAZn.pdf>. Accessed: June 2023.

<sup>16</sup> WSPA. 2022. Comments on the Final 2022 Scoping Plan Update and Appendices. December 15.

requirements.<sup>17</sup> Moreover, AB 32 reinforces this by instructing CARB to establish regulations aimed at mitigating any potential leakage.

WSPA also encourages CARB to consider impacts from electrification versus increased reliance on low-carbon fuels in conducting its required environmental analysis under CEQA. California currently faces unresolved grid reliability issues based on challenges in meeting demand during extreme heat waves. Recent studies have found that factors affecting grid reliability are predicted to increase in future years, as California is expected to experience continued greater demand for electricity. CARB should analyze these important cumulative and indirect impacts in accordance with 17 C.C.R. § 60004.2.

WSPA would like to highlight the importance of using publicly available data from verified sources as CARB develops the allocation method and benchmarks for drop-in biogenic fuels. Further, a definition of drop-in biofuels is needed to understand how the changes will apply to current and planned biofuel operations. We look forward to working with CARB to develop a method that can support efficient low carbon fuel production moving forward. We recommend a separate work group to address changes to the Mandatory Greenhouse Gas Reporting Regulation.

**5. WSPA is concerned that unreliable out-of-state data sources would bias a “one-product, one-benchmark” approach for thermal and non-thermal extraction methods of oil and gas production and lead to emissions leakage**

CARB is proposing a product-based allocation benchmark that would unify the standards for thermal production using enhanced oil recovery (EOR) and non-thermal production. According to CARB, this unified standard helps account for the difference in carbon intensity between in-state and out-of-state crude oil extraction. WSPA opposes reliance on a unified standard.

*First*, a unified standard puts California industry at a significant disadvantage. California is the only State to maintain data on the carbon intensity of crude production. The oil and gas production process in California is rigorously documented and modeled through the Oil Production Greenhouse Gas Emissions Estimator (OPGEE), leading to a reasonable degree of certainty in the calculations of emission intensity for California crude production. The OPGEE model was developed by Stanford University in conjunction with CARB, the California Environmental Protection Agency, and several industry partners, and focuses mainly on California and Alaska oilfields.<sup>18</sup> By contrast, estimates for out-of-state crude production are not reliable. Carbon intensity calculations for crude imported from many other countries are similarly unreliable due to inaccurate data on the range of production techniques used, the lack of confidence in the accuracy of data reported for specific production techniques, and out-of-date emission factors for production and transportation

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<sup>17</sup> California Legislature. 2017. Assembly Bill 398, California Global Warming Solutions Act of 2006: market-based compliance mechanisms: fire prevention fees: sales and use tax manufacturing exemption. Available at: [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180AB398](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398). Accessed: August 2023.

<sup>18</sup> Stanford. Oil Production Greenhouse Gas Emissions Estimator User Guide & Technical Documentation. April 20, 2022. Available at: [https://eao.stanford.edu/sites/g/files/sbiybj22256/files/media/file/opgee\\_v3.0\\_methodology-3.pdf](https://eao.stanford.edu/sites/g/files/sbiybj22256/files/media/file/opgee_v3.0_methodology-3.pdf). Accessed: August 2023.

techniques. As a result, out-of-state data may significantly *underestimate* carbon intensity, putting California crude production at a disadvantage under a unified standard because of these untrustworthy data and modeling assumptions.

*Second*, a unified standard deemphasizes thermal enhanced recovery techniques. CARB's approach would discourage in-state production, raising concerns about the potential for emissions leakage to out-of-state entities where emissions cannot be accurately measured. CARB should account for these leakage impacts in conducting its CEQA analysis.<sup>19</sup>

WSPA urges CARB to conduct a thorough reevaluation of its carbon intensity data sources, ensuring that only publicly available and verified data are used. Additionally, WSPA advocates for maintaining an equal level of scrutiny for data pertaining to both in-state and out-of-state extraction techniques to ensure the proposal's integrity and accuracy. Until such time as all producers, globally and locally, are on an equal data quality footing, CARB should avoid using carbon intensity calculations for the purposes of Cap-and-Trade allowance allocation and should exercise great caution in relying upon carbon intensity calculations for other regulatory purposes as well.

Thank you for considering our comments. We would welcome the opportunity to discuss these issues and concerns in more detail. If you have any immediate questions, please feel free to contact me at [tderiv@wspa.org](mailto:tderiv@wspa.org). We look forward to working with you on these important issues.

Sincerely,



Tanya DeRivi  
Senior Director, Climate Policy

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<sup>19</sup> California Code of Regulations Title 17, § 60004.2. Environmental Impact Analysis. Available at: <https://www.law.cornell.edu/regulations/california/17-CCR-60004.2>. Accessed: August 2023.