July 30, 2024

California Air Resources Board ("CARB")
1001 I Street
Sacramento, CA 95814

Re: Comments on July 10, 2024, Cap-and-Trade Program Workshop

Charter Oak Advisors appreciates the opportunity to provide comments on the July 10th workshop. Charter Oak Advisors is a value-oriented investment firm, and we thank you for your ongoing commitment to protecting public health, California's air quality, and the climate. The Cap-and-Trade Program (the "Program") is a critical component of California's climate portfolio and key to reducing Greenhouse Gas ("GHG") emissions cost-effectively to achieve carbon neutrality by 2045 as outlined in AB 1273. We support the objectives that CARB has laid out in considering modifications to the Cap-and-Trade Program, including:

1. Aligning the Cap-and-Trade Program with the 2045 greenhouse gas reduction target;
2. Increasing the ambition of the Program while providing a steady price signal for investments in clean energy technology;
3. Supporting a well-functioning market through reduced price volatility and strong cost containment provisions; and
4. Minimizing emissions leakage while protecting ratepayers and California consumers

With these objectives in mind, we provide the following comments:

1. **We believe CARB should not wait until 2026 to adjust the allowance caps. CARB should adjust the allowance caps starting in 2025, as soon as practicable and before January 1, 2026.** First, removing allowances over six

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years (starting January 1, 2025) vs. five years lessens the steepness of cap declines, providing more time for covered entities to plan mitigation and compliance strategies. A longer transition period is key as many abatement technologies require board decisions, budget planning, design, permitting and construction/sourcing. It would also provide a more consistent annual cap decline as the current proposal effectively has a step down in 2026 and 2027 which may lead to price volatility. Second, adjusting the caps sooner will allow covered entities to leverage clean energy incentives provided by the Inflation Reduction Act (the "IRA"), reducing the overall cost of reductions and potentially accelerating reductions in GHGs and criteria pollutants in California. Third, adjusting the caps in 2025 supports California communities by expediting emission reductions and enabling funds from the Greenhouse Gas Reduction Fund (the "GGRF") to support communities and the State's climate objectives at a time of overall budget shortfalls.

2. **CARB should raise the price ceiling and the Allowance Price Containment Reserve ("APCR") tiers.** AB 398 directed CARB to establish a price ceiling and two price containment points at levels below the price ceiling based on various criteria including the need to avoid adverse impacts on California households and businesses, leakage potential, the cost of GHG emission reductions, and the social cost of greenhouse gases. Since the price ceiling was established, there have been advancements in the calculation of the social cost of carbon ("SCC") and additional information on the cost of GHG mitigation that warrant revisiting these price points in this rulemaking.

   In late 2023, the Interagency Working Group on Social Cost of Greenhouse Gases issued a memo identifying advancements in the SCC that directed agencies to use their "best professional judgement" to determine the SCC valuation most appropriate for use.[1] The EPA used updated SCC values ($161 to $430 per metric ton in 2030) in the December 2023 regulatory impact analysis for performance standards for existing oil and natural gas sources.[2]

[1] https://www.whitehouse.gov/wp-content/uploads/2023/12/IWG-Memo-12.22.23.pdf
[2] https://www.epa.gov/environmental-economics/scghg

At the time the AB 398 price ceiling was established in 2016, the SCC was $50 per metric ton in 2030.[3] CARB included the updated SCC valuations in the 2024 Cap-and-Trade Standardized Regulation Impact Analysis ("SRIA").[4] These latest valuations, ranging from $161 to $430 per metric ton in 2030, should be used in updating the price ceiling and APCR price tiers.

Californians are also experiencing the cost of climate change now. Extreme weather events and forest fires have increased insurance rates for homes and businesses. Measures focused on climate adaptation, including resiliency centers and increasing the reliability and resiliency of the electricity grid are also increasing energy costs for Californians. The costs of climate change go beyond the atmospheric impact of GHG emissions and should be accounted for in setting the price ceiling and APCR tiers.

More data is also available about the cost of GHG mitigation and projected Cap-and-Trade allowance prices. The 2022 Scoping Plan includes updated costs for carbon capture, utilization, and storage ("CCUS"), Direct Air Capture, and other forms of mitigation.[5] Updated allowance price projections from UC Davis finds that under most modeled scenarios (40%, 48%, and 55% GHG reduction in 2030) the allowance prices will be near the existing price ceiling through 2035.[6]

Updating and raising the price ceiling and APCR price tiers to reflect the latest science and analyses will also accomplish two CARB goals in this regulatory proceeding: 1) reducing price volatility and providing cost containment; and 2) sending a steady price signal for investment in low carbon technology. As a leader in global climate policy, California has the opportunity to lead by example. Today, California's APCR tier prices are below the Scoping Plan cost estimates for CCUS ($100/metric ton) and Direct Air Capture ($1,000/metric

[3] https://www.epa.gov/sites/default/files/2016-12/documents/sc_co2_tsd_august_2016.pdf
[4] https://dof.ca.gov/wp-content/uploads/sites/352/2024/04/nc-Cap-and-Trade_SRIA2024.pdf
[5] https://ww2.arb.ca.gov/sites/default/files/2024-01/nc-2022-sp-appendix-h-ab-32-ghg-inventory-sector-modeling.pdf.pdf
[6] https://ww2.arb.ca.gov/sites/default/files/2023-11/nc-combinedSlides_Nov162023.pdf

ton in 2030) in the industrial sector and are not sufficient to encourage abatement. A higher price ceiling and APCR price tiers will incentivize early investment in clean energy technologies and will ensure that the APCR is a true cost containment provision - providing access to additional allowances due to short-term imbalances in allowance supply and demand and insulating the market from volatility.

We recognize that California is also facing an affordability crisis and propose two options for addressing issues related to cost while ensuring that the price ceiling and APCR tiers accurately represent the stated goals of AB 398.

Energy prices are high across the state, impacting vulnerable communities that face high temperatures and poor infrastructure. A 2022 study from UC Berkeley highlighted the regressive nature of California's electricity rates.[7] To combat the high cost of energy, we propose that a larger portion of GGRF funds be returned to ratepayers in the form of the California Climate Credit. Providing all ratepayers with a tangible benefit from the Cap-and-Trade Program can reduce bills, alleviate concerns related to energy affordability, and build support for the program.

The price ceiling and APRC tiers are cost containment provisions, meant to protect covered entities and Californians from the impacts of high prices. Ensuring that there are a sufficient number of allowances, specifically in the APCR Tier 1, or lowest cost containment price point, is critical to ensure that there are allowance available for sale to alleviate high prices caused by short-term imbalances of allowance supply and demand.

3. **CARB should remove 265 million allowances from the 2025 to 2030 budget years when revising future allowance budgets.** CARB should maintain the objective to remove 265 million allowances in achieving a 48% reduction in

[7] https://haas.berkeley.edu/wp-content/uploads/WP330.pdf

GHG emissions by 2030 as outlined in the SRIA. The July 10th workshop outlined two options for removing allowances from auction and allocation – option 1 removes 180 million allowances while option 2 removes 265 million allowances. We propose a modified option where 220 million allowances are removed from auction supply and allocation from 2025 to 2030 with the remaining 45 million allowances removed from the price ceiling and second APCR tier. We recommend maintaining all allowances in the APCR Tier 1 to provide robust cost containment at the lowest cost containment price point. This option allows CARB to achieve a 48% reduction in GHGs by 2030 as required by the 2022 Scoping Plan and maintains consistency in messaging and provides steady guidance and assurance in CARB as a regulatory body. We believe this scenario accomplishes CARB's stated objectives of providing a steady price signal for clean energy investments, while also reducing leakage and price volatility. In addition, a well-functioning market requires clear and consistent messaging. CARB's consistency in removing 265 million allowances will support the longevity of the Cap-and-Trade allowance market.

As always, please let us know if you have any questions.

Thank you,

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