

July 7, 2023

Ms. Liane Randolph
Chair, California Air Resources Board
1001 I Street
Sacramento, CA 95814

**Re: Independent Emissions Market Advisory Committee comments
on the Joint Cap-and-Trade Program Workshop (June 14, 2023)**

Dear Chair Randolph and Members of the Board,

On behalf of the Independent Emissions Market Advisory Committee (IEMAC), thank you for the opportunity to comment on the California and Québec Joint Cap-and-Trade Program Workshop on June 14. We commend CARB for initiating a process to identify opportunities to improve and strengthen the carbon market to better contribute to the emissions reduction goals identified in the 2022 Scoping Plan. We are especially pleased with the increased ambition represented in the allowance budget scenarios that will be considered, which is needed for California to achieve its 2030 greenhouse gas reduction goal and net-zero greenhouse gas emissions no later than 2045.

The IEMAC was established in 2017 with the adoption of AB 398 (E. Garcia) and produces an annual report to CARB and the Legislature on the environmental and economic performance of California's cap-and-trade program. Over the last several years, the IEMAC's annual reports have made a series of recommendations on potential reforms to the cap-and-trade program, including opportunities to dynamically balance allowance supplies with market demand, program design options that can help address concerns about local air quality in overburdened communities, and the extension of the program's explicit legal authority after 2030. Our comments today map some of these recommendations to topics identified in the workshop, as well as to topics that were not included in the workshop but which might usefully emerge in subsequent workshops and in the upcoming rulemaking process.

We begin with appreciation for staff's decision to include separate 2030 and 2045 time horizons for each scenario under consideration, which will help inform discussions about the future of the program and its explicit legal authority after 2030. We are also pleased to see the analytical consideration of changes to the greenhouse gas inventory methods in the 40 percent reduction by 2030 scenario; we recommend including those changes in the other scenarios as well.

We also commend CARB's decision to engage in longer-term studies about leakage risks in the industrial sector and in electricity markets, which the IEMAC previously identified as a priority for further analysis. As staff note, these studies will also help the agency prepare for the 2025 progress report required under AB 398. Further, the holistic evaluation of California's important working relationship with Québec and parallel analytical processes can serve as the basis for

strengthening the cap-and-trade program and potentially provide a template for linking with other jurisdictions.

Although we are glad to see the staff workshop presentation focus on important analytical questions, some additional information would help inform program stakeholders going forward. The IEMAC has also recommended that CARB consider a number of issues in the cap-and-trade program design process that were not addressed at the initial workshop, but which would be helpful to discuss in future workshops.

- **Pre-rulemaking workshop agenda and schedule.** We encourage CARB to clarify the process and timing of workshops preceding the formal rulemaking. Specifically, it would be helpful to stakeholders and the public to more substantively and constructively engage if the agency published the full schedule for workshops and the topics that will be addressed during the pre-rulemaking process.
- **Clarifying the cap-and-trade program's explicit authority.** Given the importance of setting clear market expectations, it would be especially helpful for CARB to clarify its understanding of its authority to operate the program beyond 2030 and/or indicate whether Legislative action is desirable. We recommend that staff connect questions about the program's expected operation after 2030 to the forthcoming modeling work, which the proposed use of 2030 and 2045 time horizons for each modeling scenario suggests may already be forthcoming. Clarity and analytical transparency on these important issues would facilitate the continued smooth functioning of the carbon market and the compliance planning of regulated parties.
- **Dynamic market reforms.** The June workshop helpfully identified the potential for carbon market reforms to improve the balance of allowance supply and demand, which could position the carbon market to play a stronger role in achieving the state's long-term climate policy goals and match the ambition required in the 2022 Scoping Plan. We appreciate that potential reforms must be considered in the holistic context of California's climate goals and policy portfolio. Although this process is naturally administrative in nature, the IEMAC has recommended that any reforms may be best implemented with a dynamic mechanism to adjust the cap-and-trade program in response to changes in technological, economic, and policy outcomes over time, rather than through periodic administrative adjustments.

We believe that dynamic carbon market reforms could provide a useful mechanism to respond to variability in emissions outcomes and uncertainty about the effectiveness of individual regulatory programs. To date, regulatory programs and incentives have been major drivers of technological change and are responsible for a large share of the emissions reductions that California has achieved. Although these mechanisms are likely to remain prominent going forward, emissions outcomes vary by sector and year depending on the success of regulatory programs, private sector investments, and changes in economic activity.

Presently, the supply of emissions allowances is unresponsive to the success of regulations or the efforts of individuals and institutions to address their climate impact across a range of outcomes. As a result, the success of other efforts reduces allowance prices, compliance costs, and the relative importance of the carbon market in the state's policy portfolio. CARB has the opportunity in the upcoming rulemaking process to take important steps to remedy this dilemma and position the carbon market to amplify the accomplishments of regulatory programs. This can be done by adjusting the supply of allowances dynamically in response to the success of regulations and individual actions. While a one-time allowance supply adjustment could be justified on the basis of the accumulated allowance bank, the future balance of demand and supply and associated allowance bank will nonetheless remain uncertain, which makes the ideal supply adjustment difficult to anticipate in advance.

- **Emissions containment reserve.** The IEMAC has previously recommended that CARB consider adopting an emissions containment reserve as an example of a dynamic market reform that can help address uncertainty in the program's supply-demand balance and allowance bank. This approach is similar to program features already in operation. In today's program, allowances that remain unsold at auction are automatically removed from future auctions. An emissions containment reserve would operate in the same way. For example, the Regional Greenhouse Gas Initiative adopted an emissions containment reserve in 2021, where ten percent of the annual allowance supply is available only at prices at or above a specified trigger price; if prices remain below the trigger price, then the associated supplies are withheld from the market. (A similar mechanism is also built into Washington's cap-and-trade program, though it has not yet been implemented.)

As with any potential market reform, some additional distributional considerations are warranted. Implementation of an emissions containment reserve would likely boost the asset value of newly issued allowances compared to a scenario in which more allowances were sold at a lower price. This increase in value could initiate a value transfer among constituents affected by the carbon price, unless it is accompanied by additional changes to the program. For example, if the quantity of freely allocated allowances directed to energy-intensive and trade-exposed facilities were not adjusted, then those facilities would see a boost in the value of their free allowances. Meanwhile, the value of state-owned allowances sold at auction would fall, leading to a reduction in Greenhouse Gas Reduction Fund revenues. Further, if utility-consigned allowances continue to be sold first under an emissions containment reserve, then the value of those allowances is also likely to increase. CARB would benefit from carefully evaluating the design choice and how it affects these distributional outcomes.

Beyond an emissions containment reserve, other approaches to dynamically adjusting the allowance supply are available. For example, the European Union adjusts future allowance supplies based on the number of allowances in circulation. However, many economists favor an adjustment based on the allowance price, rather than the number of

allowances in circulation, because the auction provides a mechanism to instantaneously implement such an adjustment in a simple and transparent manner.

- **Local air quality considerations.** The IEMAC encourages CARB to consider program design approaches to address the concerns of overburdened and disadvantaged communities. While the cap-and-trade program is not the primary regulatory tool for managing local air quality, there may be ways to align the program with local environmental benefits to amplify other regulatory efforts. One approach that might be minimally disruptive to the carbon market is to introduce annual rates of performance at individual facilities that affect disadvantaged communities. As part of the workshops leading up to a rulemaking, CARB may want to give attention to the balance between measures that address local environmental outcomes in disadvantaged communities with leakage concerns that affect the economic activity in those communities, and strive to find solutions that reconcile these concerns.
- **Carbon offsets.** The IEMAC has expressed concerns about the persistent differences in opinion among scholars and advocates regarding the quality of offsets in the carbon market. CARB has responded to concerns about the forest offset program's buffer pool by commissioning a new study on forest carbon reversal risks; however, confidence in the study would be boosted if it were not bound by confidentiality terms. CARB might also consider suspending the registration of new projects in fire-prone forests while its longer-term study process is underway. Beyond concerns about the permanence of carbon offset credits, there are also significant concerns about additionality and emissions leakage, including several peer-reviewed studies that CARB has not yet addressed. As part of the upcoming workshop process, CARB has the opportunity to put in place an ongoing process of review of the science and to consider reforms that could begin to assuage those concerns.

In closing, the IEMAC appreciates CARB's emphasis on the value of a gradually increasing price on greenhouse gas emissions and the need for increased climate ambition. Strengthening the cap-and-trade program is important to the cost-effectiveness of the state's climate policy portfolio and in shaping expectations of businesses and households around the future energy pathway in the state. We appreciate the workshop process and hope that it will identify reforms that enable the cap-and-trade program to play a more influential role in achieving California's climate objectives.

Sincerely,

The Independent Emissions Market Advisory Committee

Disclaimer: Please note that this letter does not purport to represent the views of the Legislative Analyst's Office nor those of the IEMAC's non-voting member, Dr. Ross Brown.