May 8, 2024

Dr. Liane Randolph
Chair, California Air Resource Board
1001 I Street
Sacramento, CA 95814

RE: Comments on April 23rd CARB workshop regarding updates to California's Cap-and-Trade program

Dear Chair Randolph,

On behalf of the above climate and environmental organizations, we appreciate the opportunity to provide comments on the April 23, 2024 workshop on updates to the California Cap-and-Trade Program. As always, our organizations deeply appreciate CARB's continued work on this program, and we look forward to ongoing engagement throughout this rulemaking process. These comments respond to several of the ideas put forward in this workshop, as well as considerations for future workshops.

We applaud CARB's proposal to calibrate the emissions cap to achieve a 48% reduction by 2030.

To avoid the worst impacts of climate change, we need to secure as many emissions reductions as possible in this decade to stay within the carbon dioxide budgets identified by the Intergovernmental Panel on Climate Change (IPCC) to keep global warming within the 1.5°C target. The 2022 Scoping Plan also recognized that meeting California's net-zero goal by 2045 will require the state to pick up the pace on emission reductions in the near-term and achieve at least a 48% reduction below 1990 levels by 2030. Given the urgency of cutting climate pollution and the emissions trajectory necessary to achieve the goals of the 2022 Scoping Plan, **our organizations appreciate CARB's proposal to tighten the emissions cap to achieve a 48% emission reduction by 2030.**

To minimize damage from climate change, California needs to cut climate pollution rapidly, *in this decade*. Earlier reductions in emissions translate to greater cumulative reductions, which makes it easier to ensure that California is on a reduction trajectory in line with what climate science requires. The proposal outlined in the 2024 Standardized Regulatory Impact Assessment (SRIA)[1] and in the April 23rd workshop continue to emphasize the importance of securing cumulative emission reductions consistent with the state's goals. We applaud CARB for not only evaluating the necessary "end point" in 2030 (i.e., a 48% reduction) but – critically – calibrating an adjustment to the cap between 2025 and 2030 to achieve the *cumulative* reductions in line with reducing emissions between 2021 and 2030 to meet the target. This

[1] https://ww2.arb.ca.gov/sites/default/files/2024-04/nc-Cap-and-Trade_SRIA2024.pdf

approach emphasizes that ***the path we take towards achieving emissions targets*** — ***and the cumulative reductions achieved over time*** — is even more important than "hitting" a particular emissions level in a specific year. Our organizations commend CARB's focus on driving cumulative reductions in line with the state's target — helping the state accelerate emissions reductions as rapidly as possible and secure a safer climate future.

The role of cap-and-trade isn't just as a driver for reductions, but as an 'insurance policy' to secure the cumulative reductions consistent with California's climate targets. The primary feature of the program – the cap – sets a cumulative emissions budget that ensures covered emissions do not surpass set limits, acting as a safeguard if other strategies and policies fall short. The 2022 Scoping Plan emphasized this program as a key tool to bridge the gap between expected reductions from other policies, and the necessary cuts to achieve California's goals. With uncertainty around the timely scale and deployment of nascent technologies like green hydrogen and carbon capture by 2030, a firm and properly calibrated emissions cap is essential. California's commitment to tightening its allowance budget is a significant advancement in strengthening the state's emissions backstop and, in turn, strengthening the state's entire suite of climate policies.

Post-2030 allowance budgets should leverage the opportunity for increased ambition.

In the April 23 workshop, CARB presented a pathway for a post-2030 emissions trajectory that included a 'step increase' in emissions from 2030 to 2031, with emissions declining from 2031-2045 in line with the goals of the 2022 Scoping Plan. This trajectory appears to reflect the first of two options for post-2030 allocation that were presented in CARB's October 5, 2023 workshop, which included both an 'emissions target method' (option 1)[2] and an 'allowance budget method' (option 2)[3]. While both methodologies offer declining emissions pathways that achieve a level in 2045 that equal an 85% reduction below 1990 levels for covered sources, the differing starting points from which the cap declines in 2031 have significant implications on the cumulative emissions reductions that are ultimately achieved.

The path California takes toward its 2045 emission goal will determine how effectively the state minimizes the impacts of climate change. This is because minimizing cumulative emissions of long-lived greenhouse gas pollutants is crucial to avoiding the worst impacts of climate change. Despite having the same 'end point' for allowances issued in 2045, the starting point from which the cap declines has an impact on the cumulative allowance budget and therefore on the cumulative reductions secured by the Cap-and-Trade program. As CARB laid out in its October 5 workshop, the difference between these two post-2030 options is significant: the emissions target method (option 1, and the option presented on April 23) would set a post-2030 emissions cap at approximately 173 MT. The allowance budget method (option 2) would set the starting point at 139 MT. This change in baseline has important implications for cumulative climate pollution emitted under this program post-2030.

In EDF's comments submitted for the October 5 workshop, we recommended that CARB pursue the methodology outlined in Option 2 – the allowance budget method. This method would allow CARB to pursue a more ambitious emission reduction pathway on the way to achieving California's long-term emission reduction goals. The emission target method presented in the April 23 workshop would allow for an increase in issued allowances in 2031 compared to 2030, a highly unusual situation that is not consistent with the central feature of a cap-and-trade program: declining emissions limits.

[2] CARB October 5 Cap-and-Trade Program Workshop, slide 31 (https://ww2.arb.ca.gov/sites/default/files/2023-10/nc-CapTradeWorkshop_Oct052023_0.pdf)
[3] CARB October 5 Cap-and-Trade Program Workshop, slide 32 (https://ww2.arb.ca.gov/sites/default/files/2023-10/nc-CapTradeWorkshop_Oct052023_0.pdf)

Additionally, we would appreciate clarity from CARB about their process for selecting the methodology presented in the April 23rd workshop. Specifically, it would be helpful to better understand if CARB has made a decision for post-2030 allocation and how that decision was made. If CARB is still considering both options, EDF reiterates its recommendation that **CARB pursue the allowance budget method instead of the emissions targets method**. As previously stated, reducing cumulative emissions is vital to avoiding the worst impacts of climate change, given the longevity of greenhouse gases in the atmosphere. There are many tools at CARB's disposal in the cap-and-trade program to address issues of affordability and price stabilization without sacrificing the ambition of the program. Our organizations encourage CARB to utilize the allowance budget methodology to maintain a higher level of ambition in emissions reductions and ensure that the cap is an effective backstop in the case that California's other complementary climate policies don't fully deliver on their projected impacts.

Allowance removals under a tighter budget should prioritize guaranteed reductions.

Relying on complementary policies to fully deliver on their assumed reductions is also an important factor in the Standardized Regulatory Impact Assessment (SRIA) that CARB released in April. Our organizations appreciate the extensive analysis undertaken by CARB in this SRIA, and we understand that this document is one part of a long process which may not necessarily reflect the ultimate content of the 45-day package. Since the SRIA provides insight into CARB's thinking on how to achieve the more ambitious emissions reductions in the 2022 Scoping Plan, as discussed in the April 23 workshop, it seems relevant to include key takeaways from the SRIA as part of our comments on the workshop itself.

In the SRIA, CARB offers three options for removing allowances from the cap-and-trade program in order to sufficiently tighten the allowance budget in line with a more ambitious cap. The first option (A) relies on removing allowances from the budget for direct allocation and auction; the second option (B) relies primarily on allowances in the Allowance Price Containment Reserve (APCR), and the third option (C) relies half on the APCR and half on the budget for direct allocation and auction. While these scenarios are presented as equally effective options that achieve the same emissions outcomes, this is far from guaranteed.

Options B and C both rely on removing allowances from the APCR in order to reduce the overall allowance budget. However, removing APCR allowances does not ensure actual emission reductions. The allowances in the APCR, and the emissions they represent, are not allowances that would necessarily otherwise have been in use since APCR allowances are only made available when auction prices reach a certain threshold and covered entities request to participate in an APCR auction; an APCR auction has not happened to date in the history of the Cap-and-Trade program. Removing allowances from a pool that has not yet been tapped and may not be tapped in the future does not deliver the guaranteed emissions reductions that the 2022 Scoping Plan calls for. Hypothetically, if CARB decides to lean on the APCR for allowance reductions and removes the 156 million APCR allowances available at both Tier prices, that would result in only 107.5 million allowances being removed from the budgets for direct allocation and auction. **This would result in fewer emission reductions than the 118 million allowances which would have been removed in the 40% reduction scenario, which CARB rightly rejected as being insufficiently ambitious.** Given CARB's ultimate goal of creating a more ambitious cap-and-trade program through this rulemaking, CARB should not rely on removing allowances from the APCR to meet their budget reduction target.

The certainty of emission reductions is essential to this program's function as an effective backstop. The certainty of a backstop is especially important given the assumptions in the SRIA that California's complementary climate policies will fully deliver on their expected emission reductions; if these policies don't fully deliver, it is imperative that the tightened emission cap is designed to meet the moment with

an effectively calibrated emissions budget. The only way to ensure reductions is by removing allowances from direct allocation and auction.

Furthermore, removing allowances from the APCR risks price volatility in the market by removing the 'speed bumps' that help stabilize prices in the case of unusually high demand. If CARB were to remove allowances from the APCR, it would risk undermining this critical cost-containment program feature by reducing its ability to actually protect against price increases. The APCR's functionality must be preserved for the integrity of the market, in addition to the integrity of the cap.

Our organizations recommend CARB pursue Option A, which draws the necessary budget reductions from the direct allocation and auction pools – this guarantees emission reductions in line with the enhanced ambition of the 2022 Scoping Plan. If CARB does decide to draw allowances from the APCR, this should be done *only* with the end goal of protecting low-income rate payers, and CARB should only consider removing as many APCR allowances as are necessary to achieve that goal.

Bring compliance offsets underneath the emissions cap.

Our organizations recommend that CARB count offsets beneath the emissions cap, instead of in addition to the emissions cap. This approach was pursued in Washington, where the issuance of new allowances will regularly be reduced to reflect offset usage. In other words, the annual budget of compliance instruments is inclusive of both allowances and offsets, rather than only an annual budget of allowances (with offsets adding to compliance instruments beyond the budget). This approach represents an increase in climate ambition across the cap-and-trade program as there would no longer be the additional compliance instruments (offsets) outside of the emissions cap.

As CARB described in the April 23rd workshop, compliance offsets play an important role in supporting greenhouse gas reductions and removals from sources that are not covered by the cap-and-trade program. Counting offsets beneath the emissions cap would preserve this important opportunity for emission reductions in sectors not subject to a compliance obligation under cap-and-trade, such as forestry and agriculture, and maintain the price signal to take on conservation and other traditional offsetting practices. This in turn preserves the social and environmental benefit those practices can provide to tribes, local communities, and ecosystems. At the same time, this approach ensures that should offsets in the market be found to be of low-quality, they are contained beneath the emissions cap and the overall environmental integrity of the program is maintained.

Consider changes to compliance periods only where necessary to align with linked partners.

In the April 23 workshop, CARB also offered two options for changes to California's compliance period schedule, which both seek to align the ends of compliance periods with the years in which the state has statutory emissions reduction targets. However, since covered entities must already submit their emissions data annually under the Mandatory Reporting Regulation, it's unclear why this change – which would be disruptive to compliance strategies for covered entities – is necessary. Without a clear rationale for requiring this change to compliance period schedules, such as for the purposes of alignment with a linked jurisdiction, our organizations recommend that CARB not prioritize this change as part of the current rulemaking.

If CARB does pursue changing compliance period schedules in line with the two options presented on April 23, our organizations support the schedule laid out in option 1. The new compliance periods proposed in option 1 are more closely aligned with the existing compliance periods in Washington's cap-

and-invest system, and would require fewer changes for all parties in the case of a linked system between California, Quebec, and Washington.

Our organizations strongly support linkage between these jurisdictions and were excited to see the joint statement of interest[4] from their respective governments in exploring the possibility of forming a linked market. Although linkage will require a separate rulemaking process in California, our organizations encourage CARB to undertake that process as swiftly as possible. All three jurisdictions stand to benefit from joining forces in a linked market, and California's leadership in the linkage process is critical to its success.

CARB should strongly consider recommendations from the Environmental Justice Advisory Committee.

Our organizations appreciate the Environmental Justice Advisory Committee (EJAC) presentation at the April 23rd cap-and-trade workshop and continues to support many of the priorities outlined by EJAC, such as the addition of facility-level emissions caps to ensure emission reductions keep pace in overburdened communities. While the cap-and-trade program was not designed to address local air pollution, only global greenhouse gas emissions, it is increasingly clear that considering conventional air pollutants in program design decisions is not only valuable — due to the ongoing and significant air pollution in California, especially in the most disadvantaged communities — but also possible. As we transition to a clean energy economy, it is crucial that the benefits of the cap-and-trade program are widely distributed, with a priority given to those who bear the brunt of pollution and climate change impacts. **To ensure a reduction in greenhouse gas emissions and co-pollutants in communities burdened by air pollution, our organizations urge CARB to consider, including through a public workshop, the imposition of specific emission reduction requirements on individual pollution sources.** While this approach would somewhat limit the compliance flexibility inherent to a cap-and-trade program, the creation of facility-level emission caps on stationary sources in the most overburdened communities will help ensure that local air pollution benefits are realized alongside climate benefits. This targeted approach would hold facilities accountable for their contributions to cumulative air pollution burdens and could be designed to maintain certain other compliance flexibility and cost containment strategies. Our organizations strongly encourage CARB to publicly consider this program feature to address local air pollution.

The EJAC presentation highlighted the importance of carefully considering how program benefits and costs are distributed. Our organizations appreciate EJAC's focus on this issue and encourages CARB to explore strategies that would direct greater benefits to disadvantaged communities, including a public consideration of design changes proposed by EJAC. There are a variety of innovative strategies that CARB should evaluate to direct greater benefits – in particular stronger pollution reduction outcomes – to disadvantaged communities. Facility-level emissions caps could be one important tool for ensuring a minimum pace of progress on reducing emissions in overburdened communities[5]. In addition, CARB could explore strategies to update industrial allowance allocation in a way that reduces free allocation more quickly at facilities in overburdened communities, thus providing a stronger incentive to reduce emissions in those communities (we discuss this concept in more detail below). Our organizations encourage CARB to consider these and other opportunities to deliver greater benefits to disadvantaged communities through cap-and-trade program design.

Our organizations also support the EJAC highlighting recommendations from the Independent Emissions Market Advisory Committee (IEMAC), including recommendations to reduce the supply of allowances and account for offsets under the cap by retiring allowances. In addition to these important steps, our

[4] https://ecology.wa.gov/about-us/who-we-are/news/2024-news-stories/mar-20-shared-carbon-market
[5] Burtraw and Roy, 2023 How Would Facility-Specific Emissions Caps Affect the California Carbon Market? (rff.org)

organizations recommend that CARB incorporate an ECR into its program**,** leveraging the frameworks already established in Washington's Climate Commitment Act (CCA) and the Regional Greenhouse Gas Initiative (RGGI). Like the existing Allowance Price Containment Reserve, an ECR would adjust the supply of allowances available at auction in response to the price. If auction prices remain near the price floor, then fewer allowances are available for purchase, representing a temporary tightening of the emissions cap. The benefit of this approach is that it is predictable based on auction settlement prices and represents a modest increase in climate ambition when emission reductions are relatively inexpensive. Allowances not offered for sale now represent emissions that are not occurring now, and if those allowances are then permanently retired, then California is achieving greater cumulative emission reductions.

Industrial allowance allocation should be updated to reflect current benchmarks and cap decline.

CARB indicated in the SRIA that it is evaluating updates to industrial allowance allocation, including the eligibility criteria and calculation methods. Our organizations encourage CARB to undertake a comprehensive review of industrial allocation to ensure it continues to prevent emissions leakage, while providing a strong incentive to decarbonize emissions-intensive, trade-exposed (EITE) industries.

California's output-based allocation (OBA) method has a strong track record of cutting climate pollution from emissions-intensive industries while supporting in-state production. OBA ensures that industrial facilities are rewarded based on two key metrics: 1) how much they produce in-state, and 2) how efficiently they produce compared to similar industrial facilities. Facilities that increase their in-state production while reducing their emissions receive relatively more allowances than facilities that are not increasing production or not reducing their emissions.

A key component of this approach is the greenhouse gas benchmark, a metric for comparing emissions performance across similar industrial facilities. Product-based benchmarking establishes an emissions performance standard for each product, which is used to reward more efficient facilities on a comparative basis. Benchmarks are developed on a product-by-product basis and are developed to reflect the performance of highly efficient, or "best in class" facilities in each sector. It is important that product benchmarks are updated regularly to reflect the current best performing technologies and innovation, thus providing a continued incentive for facilities receiving free allowances to reduce their emissions. **Our organizations encourage CARB to update the benchmarks to reflect advancements in the best performing standards for each industry**.

In addition to product benchmarks, a key input for industrial allocation is the cap decline factor, which reduces free allocation to industry over time in proportion to the overall emissions cap. Reducing free allocation over time ensures that EITE industries will have an increasing price signal to support emission reductions and innovation. As CARB moves forward to tighten the program-wide emissions cap, it is essential that the tighter emissions cap is reflected in the output-based allocation formula through the cap decline factor.

Our organizations also encourage CARB to explore innovations in the industrial allocation method that could support stronger pollution reduction outcomes in overburdened communities. For example, CARB could apply a more stringent cap decline factor to industries that have localized pollution impacts on disadvantaged communities. This type of adjustment could ensure that free allocation of allowances declines faster in overburdened communities, thus providing a stronger incentive for reducing emissions where air quality improvements are most urgently needed.

Our organizations reiterate our appreciation for CARB staff's ongoing work to update this important climate program, and we look forward to ongoing engagement in this rulemaking process.

Sincerely,

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