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Clean and Prosperous California Comment Letter to California Air Resources Board 04 May 2026

Clean and Prosperous (CAP) California emphasizes the importance of timely implementation of the proposed amendments at the upcoming May Board hearing, which is critical to the credibility of the California Air Resources Board (CARB) after extensive delays to the ongoing rulemaking over the last two and a half years (Section 1).¹

The proposed expansion of the Manufacturing Decarbonization Incentive (MDI) may discretionarily allocate Build Up California Allowances (BUCAs) to certain facilities undertaking decarbonization activities and vulnerable to emissions leakage. The possible reintroduction of 118.3 million allowances through the MDI undermines emissions accounting that is central to CARB's cap setting (Section 2). For this reason, if CARB moves forward the MDI as drafted, reductions in future caps equal to the quantity of BUCAs would maintain the integrity of CARB's emissions accounting (Section 2). In recognition that such changes would trigger a second 15-day and thereby preclude timely implementation, these changes could be made during a follow-on rulemaking guided by Board direction.

The allocation of BUCAs by CARB can be constrained by targeting marginal reductions through a variety of strategies discussed in Section 3 including (a) allocating BUCAs proportional to reductions, and (b) targeting activities that are additional, conservativeness, and permanent. Similarly, these suggestions could be taken up during a follow-on rulemaking guided by Board direction.

1) Timely implementation of the proposed amendments at the May Board hearing is critical to protect CARB's credibility

The cap-and-invest rulemaking is the longest duration and most delayed update to California's program since its inception. Correspondingly, allowance demand has dropped whenever CARB further delays and/or weakens ambition, thereby causing allowance prices to drop from a high of nearly ~41 USD to current prices at or below the floor of ~27 USD.²

These drops reflect a variety of factors with the driving factor being CARB's credibility at delivering a timely rulemaking update, including cuts to allowance supply. For this reason, it is critical for the proposed rulemaking to be adopted at the May Board hearing.

¹ CAP California. 2025a. "[Money Left on the Table: Restoring Cap-and-Trade Auction Revenues Through Legislative Reauthorization](#)".

² CAP California. 2025a. "[Money Left on the Table: Restoring Cap-and-Trade Auction Revenues Through Legislative Reauthorization](#)".

If the May Board hearing is missed, a careful analysis suggests that CARB probably delays implementation of proposed updates into 2027, with potential negative implications for rollout of the California Climate Credit (CCC) and market linkages with Washington and Quebec.³

2) Reducing future caps commensurate with the quantity of allocated BUCAs would ensure the integrity of CARB's emissions inventory

The possible reintroduction of 118.3 million allowances through MDI undermines emissions accounting that is central to CARB's cap setting. Per CARB's ISOR Staff Report, "Removing 118 million allowances from 2027-2030 allowance budgets is needed to account for updates to CARB's GHG Emission Inventory." (Staff Report, p. 30, Jan. 20, 2026).

The GHG Emission Inventory informs cap setting by establishing the share of total statewide emissions that fall within the scope of the cap-and-invest program, which is then applied to statewide statutory targets to derive allowance budgets. As CARB explained in its October 2025⁴ informal workshop, "Updates made in the 2022 GHG Inventory identified a downward adjustment that would have impacted allowance budgets adopted in the 2016 Cap-and-Invest Rulemaking," which set the 2020-2030 annual budgets. CARB estimated this downward adjustment equals roughly 118.3 million allowances. By CARB's own estimates, the 118.3 million allowances that are being removed from pre-2031 budgets should never have been introduced in the first place. Therefore, once removed, this quantity of allowances should not be reintroduced as currently contemplated by the proposed amendments.

Based on our understanding, any significant changes to the MDI would trigger a second 15-day commenting period, almost certainly delaying the May Board hearing and probably precluding implementation in 2026. For this reason, if the MDI moves forward as implemented, then CARB would be required to reduce future caps commensurate with the quantity of allocated BUCAs. This would be easiest implemented at the level of compliance periods, such that the quantity of allowances of allocated BUCAs in one compliance period is counterbalanced by an equal reduction in caps for the next compliance period. Our analysis suggests that MDI would allocate 27 million allowances annually at maximum.⁵

3) The quantity of allocated BUCAs should be targeted at marginal reductions

The allocation of BUCAs by CARB can be constrained by targeting marginal reductions through a variety of strategies discussed in Section 3 including: (a) targeting activities that

³ Elevate Climate. 2026. "Policy Note on Rulemaking Timing". See Attachment A.

⁴ [Cap-and-Invest Workshop October 2025](#)

⁵ CAP California. 2026. "MDI Bounding Exercise". See Attachment B.

are additional, conservative, and permanent; (b) allocating BUCAs proportional to expected or actual reductions; and, (c) penalizing entities that do not deliver timely reductions.

a) Targeting activities that are additional, conservative, and permanent

In theory, the MDI could be designed to have no net impact on cap levels, but that outcome would require “additionality” and “conservativeness” as described below:

- **Additionality of reductions:** The reductions caused by the BUCAs must exceed what the carbon price or other climate policies would have achieved. This is similar to the concept of “additionality” in the carbon offsets literature and “marginality” in the economics literature.
- **Conservativeness of BUCAs:** CARB issues one BUCA for one reduction caused by the MDI (sometimes referred to as a “one-to-one” requirement). This is similar to the concept of “conservativeness” in the carbon offsets literature.

As proposed, the MDI requires neither additional or conservativeness. Therefore, the quantitative impact of MDI on cap levels depends on whether CARB discretionarily adheres to these principles and, if not, which principles above are relaxed.

- If CARB does not target additional reductions, then all BUCA allocations would increase the cap. While additional reductions contribute to achieving the cap, “non-additional” reductions that are awarded BUCAs do not, and instead effectively increase the cap. In the extreme, if MDI is fully subscribed and used for “non-additional” reductions, then the MDI would effectively increase the cap by 118.3 million tons.
- If CARB does not issue a “conservative” quantity of BUCAs, then the impact on the cap depends on the degree to which CARB “overawards” BUCAs. For example, if CARB awards three BUCAs for one ton of additional emissions reduction, then the cap would effectively increase by two tons. In this example, if MDI is fully subscribed, then the MDI would effectively increase the cap by 78.87 million tons (118.3 million BUCAs - 39.43 million reductions).⁶

A core constraint in the design of the MDI is that MDI-eligible facilities are already covered by the cap-and-invest program and therefore subject to the carbon price, which in itself is designed to incentivize emissions reductions. Therefore, any emissions reduction that is truly additional should, by definition, be more expensive than today’s carbon price—otherwise it would have already occurred.

⁶ Note: if BUCAs lead to additional decarbonization activities for capital investments, then reductions can occur over many years and even beyond years applicated for MDI.

This creates a design tension. CARB could (i) strictly impose additionality and one-to-one conservativeness requirements, in which case MDI uptake is likely to be constrained to a narrow set of projects that cost more than the carbon price but less than two times the carbon price⁷, or (ii) relax additionality and conservativeness requirements, which is likely to result in systematic over-allocation of BUCAs relative to emissions reductions and an increase in the effective cap.

In the context of the MDI, the Executive Officer could clarify CARB's intent to use additionality and conservativeness as criteria for applying facilities by issuing guidance for applying facilities. On that basis, the Executive Officer can accept applications that are additional and conservative, while rejecting those that are not.

b) Allocating BUCAs proportional to reductions rather than expenditures

Allowing for tailoring of the modified cap adjustment factor: CARB's rulemaking documentation creates ambiguity as to whether MDI facilities receive a fixed CAF of 0.8 or a CAF of "up to 0.8." If the CAF is fixed at 0.8, as suggested in the 15-Day Notice, facilities are likely to be over-awarded relative to their reductions. By contrast, if facilities must apply for a CAF "up to 0.8," as reflected in the proposed amendments, CARB can reject applications that request excessive BUCAs relative to planned reductions. CARB should consider clarifying this ambiguity ahead of MDI implementation, for instance, by correcting the 15-Day Notice or through a Board Resolution.

Provide additional guidance prioritizing cost effectiveness: to minimize the incidence of overallocation, CARB should treat the MDI as a competitive procurement process that rewards the fewest BUCAs for the most reductions. In that context, the Executive Officer should issue guidance ahead of each compliance period that outlines criteria that will be used in assessing whether to approve or deny a facility's proposed modified cap adjustment factor.

Furthermore, CAP California suggests that cost effectiveness be the primary criterion against which the modified CAFs are deliberated. As currently drafted, there is no clear criteria that distinguishes between facilities that plan to reduce more emissions for the same modified CAF. For example, two facilities could request a modified CAF of 0.6, while one could reduce one ton of emissions and the other one hundred, yet there is no preference within the proposed language that would prioritize the more cost-effective application or provide grounds to deny the less cost-effective application.

CAP California suggests that the Executive Officer should (1) publish guidance ahead of each compliance period for MDI applications that (2) prioritizes cost-effectiveness as a

⁷ An entity that is awarded one BUCA per reduction would be willing to provide reductions up to two times the carbon price because reducing that emissions (1) avoids the need to retire an allowance for one ton of emissions and (2) can monetize a BUCA at the price of an allowance.



criteria and (3) empowers itself to deny applications if an excessive quantity of BUCAs is awarded per reduction.

Clawbacks based on reductions rather than expenditures: As drafted, the regulations require an MDI facility must return allowances to CARB based on the proportion of unspent monetary value of BUCAs. This provides a layer of accountability but an imperfect one because facilities that spend money on eligible activities but never reduce emissions (e.g., breaking ground on a CCUS project that never materializes), or reduce fewer emissions than expected, would not be penalized.

TIMELINE FOR COMPLETING IMPLEMENTATION IN 2026

To have the regulation in effect September 1, 2026, CARB must submit the final rulemaking package to OAL by July 21, 2026 (at least 30 working days prior).

September 1 is the deadline for EDUs to specify destination accounts, creating a hard upstream dependency that limits flexibility.



- ## PROCESS CONSTRAINTS & RULEMAKING PRACTICES
- “Substantive” revisions (per OAL, “alter the meaning of the regulatory provisions”)** to a proposed regulation require a new 15-day comment period.
 - Any changes proposed after the ISOR must be **“sufficiently related”** to the original proposal (per OAL, “reasonably foreseeable based on the notice of proposed action”).
 - CARB’s longstanding practice is to **not release market moving information during an auction blackout window.**
 - CARB typically takes two to three weeks to review 15-day comments and respond to CEQA-related comments before publishing the Board meeting agenda. *(Note: our timeline uses a conservative three-week estimate.)*
 - CARB must publish Board meeting agendas at least ten days in advance.
 - CARB typically takes four to six or more weeks (depending on the complexity of the rulemaking record) to prepare the FSOR after the Board hearing.
 - CARB must submit the final rulemaking package to OAL at least **30 working days** before the desired effective date (in this case, July 21 for a September 1 effective date).

PATHWAYS — IMPACT OF ADDITIONAL 15-DAY CHANGES							BOARD HEARING	FSOR COMPLETE (EST.)	OAL SUBMISSION DEADLINE	FEASIBILITY
PATHWAY DEFAULT PATH No Additional 15-Day Changes ON TRACK	No additional 15-day changes.		May 28	Jun 25 – Jul 8	July 21	Sept 1	May 28	Jun 25 – Jul 8	July 21	On track to meet July 2 OAL submission deadline and achieve Sept 1 effective date.
OPTION 1 Release During Blackout EXTREMELY UNLIKELY	Releasing amendments by May 5 violates auction blackout and does not allow sufficient time to respond to CEQA comments and notice the board hearing.		NO TIME	NO TIME	NO TIME	NO TIME	NO TIME	4–6+ weeks	July 21	Not feasible. Violates auction blackout period, does not allow sufficient time to respond to CEQA comments or to notify the board meeting agenda.
OPTION 2 Release After Blackout UNLIKELY	15-day change release on May 21 extends comment period through June 5, pushing hearing beyond May 28. Even with an expedited process, unlikely to meet July 21 deadline.		Week of July 3	Aug 3 – 17	July 21	Week of July 3	Week of July 3	Aug 3 – 17	July 21	Unlikely. FSOR likely not complete in time for July 21 OAL deadline.
OPTION 3 Release After May 28 Hearing VERY UNLIKELY	Releasing changes after the May 28 hearing shifts the entire schedule back by 1–2 weeks. FSOR extends into mid-to late-August.		Week of July 13	Aug 10 – 24	July 21	Week of July 13	Week of July 13	Aug 10 – 24	July 21	Very unlikely. Board hearing moves to mid-July and FSOR extends into mid-to late-August.



**Estimating the Uptake of CARB's Proposed Manufacturing Decarbonization Incentive
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1. Abstract

We provide draft estimates of the maximum annual uptake of CARB's proposed Manufacturing Decarbonization Incentive (MDI). Based on our calculations, we estimate that at maximum 27.05 million Build Up California Allowances (BUCAs) would be allocated in 2028 if all 94 eligible facilities participated and if CARB issued the maximum allowed quantity of BUCAs. We view this as a probable upper bound for 2028 BUCA allocations. Further work will refine our maximum estimate into an expectation of BUCA allocation, which we anticipate will be lower than 27.05 million BUCAs in 2028.

2. Summary of Analysis

Our approach bases calculations on CARB's 2026 allocation summary report (hereafter referred to as the "CARB report").¹ Table 1 provides the starting point with total 2026 allocations of 29.17 million allowances to 131 industrial facilities in 2026.

However, not all facilities or allowances in the report are eligible for BUCAs through the MDI. Therefore, we treat their 2026 allowance allocation values as a starting point and further constrain them in the following ways:

- Removing allowances allocations that are not eligible for MDI;
- Removing facilities that are not eligible for MDI; and,
- Accounting for the expected closure of the Valero refinery in Benicia.

These constraints reduce the universe of eligible facilities to 94. In turn, these constraints result in a 2026 allowance allocation "base" of 21.88 million allowances that could then be used to estimate maximum BUCA allocation in 2028 under several conservative assumptions.

- Assumption 1: Production and emissions in 2026 are the same as in 2028, which could be a conservative assumption, given concerns over falling production in the industrial sector.
- Assumption 2: Every one of the estimated eligible MDI facilities applies for and is granted BUCAs, which is likely conservative for several reasons, including that many eligible emitters are quite small and the process for application seems uncertain and burdensome.
- Assumption 3: The amendments state that MDI allocation applicants can request a CAF modifier of "up to 0.8." For purposes of this analysis, we assume that the applicant requests, and CARB grants, the permissible upper bound modifier of 0.8.

¹ [nc-v2026 Public Allocation Summary.pdf](#)

- Assumption 4: we assume the oil and gas sector does not access the MDI to build out carbon capture and sequestration projects, leaving any estimation here for further work. This is not a conservative assumption insofar as these projects are allocated BUCAs.

Under this set of assumptions, we can translate the 2026 constrained allocation of 21.88 million allowances into estimated maximum BUCAs allocated in 2028 through two steps.

- To arrive at estimated 2028 allocations, we multiply 21.88 million allowances by ~1.21, which is the ratio of the 2028 cap adjustment factor (0.782) and the 2026 cap adjustment factor (0.647).² The result is an estimated ~26.44 million 2028 allowances, under Assumptions 1 and 2 above.
- To estimate maximum BUCAs allocated in 2028, we multiply 2028 allocations by ~1.02, which is the ratio of the modified cap adjustment factor (0.8) and the 2028 cap adjustment factor (0.782). The result is an estimated 27.05 million 2028 BUCAs, under Assumptions 2 and 3 above.³

3. Methodological Appendix

This section walks through how we adjust 2026 industrial allocations from CARB to (a) remove allowances that are not eligible for MDI, (b) remove facilities that are not eligible for MDI, and (c) account for the expected closure of the Valero refinery in Benicia. Table 1 summarizes our calculations.

Table 1
Estimating Maximum BUCAs in 2028 Based on 2026 Allocations

Description	Emissions (Million Tons)	Facilities	Calculation
2026 Allocation Levels	29.17	131.00	Sum First 11 Rows in Column Table 1 CARB Allocation Summary
(Remove True Up Allowances)	-1.53	131.00	Subtract Column 3 from Column 2 in Table 1 CARB Allocation Summary
(Remove Oil/Gas Extraction)	-2.94	109.00	Remove Row 2 in Table 1 CARB Allocation Summary
(Remove Dairy Product Manufacturing)	-0.25	101.00	Remove Row 6 in Table 1 CARB Allocation Summary
(Remove ineligible Misc. Facilities)	-0.85	95.00	Adjust miscellaneous category downward by 40 percent
(Adjust for Refinery Closure)	-1.72	94.00	Account for expected closure of Benicia refinery

² See Table 9-1 in the proposed 15-day amendments. CAFs selected for “Standard Activities”. Note that a few facilities eligible for MDI are not in the “Standard Activities” column and may therefore receive a slightly lower CAF. For simplicity, we ignore these eligible facilities.

³ The calculation can be made in one step by multiply 21.88 million allowances by (0.8/0.647) but we broke the calculation into two steps for exposition.

Adjusted 2026 Allocations	21.88		Summing preceding rows
Estimated Maximum BUCAs in 2028	27.05		Multiplying by two ratios: 2028 to 2026 CAF and 2028 modified CAF to 2028 CAF.

a. Remove Allowance Allocations Not Eligible for the MDI

The proposed 15-day amendments specify that true-up allowance allocations are not eligible for receiving a modified cap adjustment per Section 95891(g). We therefore subtract true-up allowance allocations from total industrial allocations in 2026.⁴ This adjusts allocations eligible for BUCAs through the MDI downward by 1.53 million allowances.

b. Remove Facilities Not Eligible for the MDI

- Downward adjustment for oil and gas extraction: The proposed 15-day amendments specify that the oil and gas sectors are not eligible for utilizing the MDI (Section 95891(g)(1)(B))⁵. We therefore eliminate that sector from total industrial allocations in 2026 by removing the second row of Table 1 in CARB’s report. This adjusts allocations eligible for BUCAs through the MDI downward by 2.94 million allowances and downward by 22 facilities.
- Downward adjustment for ineligible sectors: The CARB report includes the “dairy product manufacturing” category, which is not eligible for MDI because the corresponding NAICS codes are not listed in Table 8-1 per Section 95891(g)(1)(B) in the proposed 15-day amendments. We therefore eliminate that sector from total industrial allocations in 2026 by removing the sixth row of Table 1 in CARB’s report. This adjusts allocations eligible for BUCAs through the MDI downward by 0.25 million allowances and downward by 8 facilities.
- Downward adjustment estimation for ineligible facilities: The CARB report includes the “miscellaneous industrial facilities and legacy contract generators” category which includes certain facilities that are not eligible for MDI because their corresponding NAICS codes are not listed in Table 8-1 per Section 95891(g)(1)(B) in the proposed 15-day amendments. We identify six such facilities: Crockett Cogeneration Project, Panoche Energy Center, Matchmaster Dyeing and Finishing, The P&G Paper Products Company, Northrop Grumman Marine Systems in Sunnyvale, and Los Angeles International Airport.

Rather than estimating allocations based on historical emissions for these facilities⁶, we instead adjust 2026 allocations listed in row ten of Table 1 in CARB’s report proportionately downward by 40 percent (6 ineligible facilities divided by 15 total facilities). This adjusts allocations eligible for BUCAs downward by 0.85 million allowances (1.41 million allowances multiplied by 0.6) and downward by 6 facilities.

⁴ By subtracting column 3 from column 2 for remaining and adjusted rows.

⁵ The only exception is if these facilities pursue a CCUS project.

⁶ This provide unreliable because historical emissions are significantly greater than 2026 allocations.

c. Account for Expected Refinery Closure

The Valero refinery in Benicia is expected to close this year. If that occurs, then this refinery would obviously not be involved in the MDI. Therefore, we estimate allocations for this refinery in 2026 by multiplying reported GHG emissions in 2024 via CARB's MRR by the 2026 cap adjustment factor (1.72 million allowances = 2.67 million emissions * 0.647 cap adjustment factor in 2026). This adjusts allocations eligible for BUCAs downward by 1.72 million allowances and downward by one facility.

d. Estimate Maximum BUCAs through MDI in 2028

We estimate allowance allocations in 2028 by conservatively assuming that all eligible facilities participate in the MDI, facilities maintain their production and emissions at 2026 levels, and each facility gets a 0.8 cap adjustment factor modifier.

Given these assumptions, we first convert 2026 allocation levels into estimated 2028 allocation levels by multiplying 2026 allocation levels by ~1.21 (the ratio of the 2028 cap adjustment factor of 0.782 and the 2026 cap adjustment factor of 0.647).⁷ From there, we can multiply the result by the ~1.02 (the ratio of the modified cap adjustment factor granted by the MDI of 0.8 and the 2028 cap adjustment factor of 0.782) to obtain an estimate of maximum BUCAs received in 2028.

In aggregate, this methodology estimates the total quantity of BUCAs to equal 27.05 million allowances in 2028 (21.88 million allowances * ~1.21 * ~1.02). Note that a small selection of facilities would receive a slightly smaller modified cap adjustment factor, so this estimate is biased upwards.

⁷ Note that CAFs typically decrease over time rather than increase. The reason the 2028 CAF is higher than the 2026 CAF is because CARB proposes to make a one-time adjustment to increase the CAF followed by an annual decline. For this reason, our calculations for years beyond 2028 would result in lower estimates of maximum BUCA issuances.