

November 12, 2025

Ms. Lauren Sanchez
Chair
California Air Resources Board
1001 “I” Street
Post Office Box 2815
Sacramento, California 95812

Dear Ms. Sanchez,

The California Large Energy Consumers Association (CLECA) appreciates the opportunity to provide comments to the California Air Resources Board (CARB or Board) following the October 29, 2025, Cap-and-Invest Program Workshop. These comments focus on the discussion and feedback requests of industrial allowance allocation adjustments and related approaches for mitigating emissions leakage under Assembly Bill (AB) 1207 (Irwin) and Senate Bill (SB) 840 (Límon).

CLECA members represent a broad array of emissions-intensive, trade-exposed (EITE) industries that are essential to California’s economy and public welfare. CLECA member industries include steel, cement, industrial and medical gases, beverage, minerals processing, and energy infrastructure. These facilities collectively serve as the foundation for critical supply chains, providing materials for infrastructure, health care, and food logistics.

Industrial Competitiveness Pressures Intensify the Need for Robust Leakage Prevention

Over the past decade, the competitive pressures facing high-energy, emissions-intensive, and trade-exposed industries have deepened as electricity prices for large industrial customers have risen to “more than two-and-a-half times the U.S. average.”¹ These electricity cost increases are compounded by electricity sector carbon compliance obligations and related policy choices embedded in electricity rates. Increased electricity rates have been exacerbated by regional spikes in natural gas prices in recent years. Higher local transportation fuel prices and overall cost inflation further worsen the situation. These combined factors have eroded the economic competitiveness position of manufacturing

¹Little Hoover Commission. *The High Cost of Electricity in California*. Report #290. Sacramento, CA: Milton Marks Commission on California State Government Organization and Economy. October 2025. Available at: <https://lhc.ca.gov/wp-content/uploads/LHC-Report-290-The-High-Cost-of-Electricity-in-California-Final-Draft-Prior-to-Publication-10.31.25.pdf>

facilities in California and increased the current reality and risk of increasing emissions leakage. At the same time, competition in materials and manufacturing markets continues to grow, leaving California producers with limited ability to recover these higher costs through higher product prices.

This EITE sector affordability crisis has hindered investment in California, and in some cases, it has also driven production to regions with weaker environmental standards and higher-emission grids, resulting in increased production and transportation emissions. Such shifts do not reduce global greenhouse gas (GHG) emissions; instead, they relocate them beyond California's regulatory reach, undermining CARB's ability to effectively regulate emissions and leading to diminished economic opportunities for Californians.

Cap-and-Invest Program Reaffirms the Importance of Competitiveness and Leakage Protection

A durable and well-calibrated industrial allocation framework is essential to mitigating industrial asymmetric competitiveness pressures that contribute to emissions leakage. As CARB evaluates potential modifications, the Board should look beyond the immediate implementation concepts outlined in the October 29th workshop and consider broader modernization to address the realities of leakage pursuant to the focus on minimizing emissions leakage in AB 1207.

The extension of the Cap-and-Invest Program through 2045 under AB 1207 reaffirms the Legislature's intent to preserve core program elements; specifically, industrial sector allowances are continued to "protect state utility ratepayers, encourage decarbonization of the state's economic sectors, and further enable Californians to affordably decarbonize and power their end uses."² AB 1207 also expressly requires CARB to "minimize leakage,"³ and directs that industrial sector allowances be allocated "in a manner that minimizes emissions leakage risk."⁴

Current State of Emissions Leakage Risk and Emissions Leakage Assessment Transparency

Greater transparency is warranted; stakeholders should have access to the underlying *Industrial Leakage Assessment*⁵ referenced during the workshop. Since the previous

² AB 1207 (Irwin), Ch. 117, Statutes of 2025, p. 6.

³ AB 1207 (Irwin), Ch. 117, Statutes of 2025, p. 8.

⁴ AB 1207 (Irwin), Ch. 117, Statutes of 2025, p. 10.

⁵ California Air Resources Board (CARB). Oct. 29, 2025. *Cap-and-Invest Program Workshop*. Industrial Leakage Assessment. Slides 35-36. Available at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/meetings/nc_CapInvestWorkshop_October2925.pdf

assessment was conducted in 2016,⁶ conditions for California’s industrial sector have changed substantially. Most notably, California’s industrial electricity prices have risen by roughly 84.4% compared to a 20.6% increase in the U.S. industrial average, as reported in Figure 1.

Figure 1⁷

	CA	US	CA	US	CA	US
	Residential	Residential	Commercial	Commercial	Industrial	Industrial
Year	cents/kWh	cents/kWh	cents/kWh	cents/kWh	cents/kWh	cents/kWh
2024	31.86	16.48	25.29	12.85	21.98	8.15
2023	29.51	16.00	23.91	12.59	18.64	8.04
2022	25.84	15.04	21.81	12.41	17.09	8.32
2021	22.82	13.66	19.18	11.22	14.82	7.18
2020	20.45	13.15	17.53	10.59	14.27	6.67
2019	19.15	13.01	16.67	10.68	13.4	6.81
2018	18.84	12.87	16.34	10.67	13.2	6.92
2017	18.31	12.89	15.76	10.66	12.73	6.88
2016	17.39	12.55	15.07	10.43	11.92	6.76
2015	16.99	12.65	15.73	10.64	12.17	6.91
2014	16.25	12.52	15.62	10.74	12.34	7.1

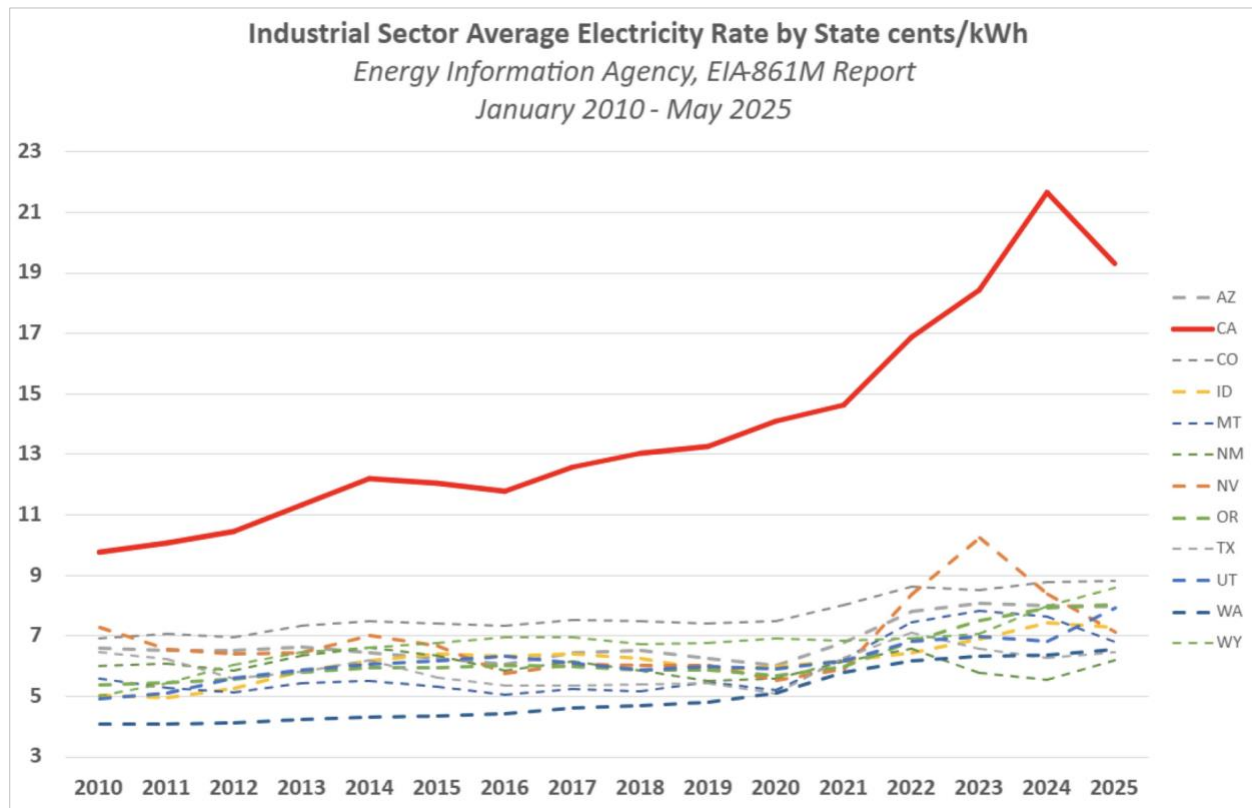
As shown in Figure 2, California’s industrial electricity rates are now approximately 250% higher than those in neighboring states.

Figure 2⁸

⁶ Fowle, Meredith L., Mar Reguant, and Stephen P. Ryan. *Measuring Leakage Risk*. Prepared for the California Air Resources Board, May 2016. Available at: <https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/meetings/20160518/ucb-intl-leakage.pdf>.

⁷ LHC, *High Cost of Electricity in California* (Report #290, Oct. 2025). Figures in Table 1 generated using the U.S. EIA, Data Dashboard: California. Accessed Aug. 7, 2025. Data Dashboard available at: <https://www.eia.gov/beta/states/states/ca/data/dashboard/electricity>

⁸ Source: Energy Information Agency (EIA), EIA-861M Monthly Electric Power Industry Report, Monthly sales to ultimate customers by state for all sectors, January 2010 – May 2025.



A clear example of the reality of emissions leakage and the impact of these electricity rate increases since the 2016 emissions leakage assessment was conducted, is the closure of California’s last operating steel melting facility in Rancho Cucamonga in 2019, where high electricity prices were cited as a primary factor.⁹ This closure eliminated in-state steel production, forcing reliance on imports from regions with higher-emission grids and increasing the embedded carbon in California’s infrastructure and construction materials.

Given these escalating cost pressures, it is essential that stakeholders have the opportunity to review the current assessment’s methodology, data inputs, and key findings; how the current and proposed parameters of the output-based allocation continue to address EITE leakage risk under current market conditions is particularly impactful. Access to the updated emissions leakage assessment would enable stakeholders to provide more targeted and evidence-based feedback on the program’s effectiveness.

⁹ Smith, Kevin. Commercial Metals to Shutter Rancho Cucamonga Steel Mill, Citing High Costs in California. Daily Bulletin, October 16, 2020. Available at: <https://www.dailybulletin.com/2020/10/16/commercial-metals-to-shutter-rancho-cucamonga-steel-mill-citing-high-costs-in-california/>.

Effective Cap-and-Invest Design Is Essential to Minimizing Leakage Amid Rising Competitive Pressures

Effective industrial allocation is critical to maintaining the competitiveness of EITE sectors under the Cap-and-Invest Program (Program). Any changes to the Cap Adjustment Factor (CAF) or any other parameter should work to retain EITE industries in California and further minimize emissions leakage as a core goal of AB1207; this is absolutely necessary to achieve our carbon emissions reduction goal.

In parallel, the development of a Manufacturing Decarbonization Incentive (MDI) or similar program would represent a significant step toward supporting California's manufacturing sector, particularly for industries with high process heat requirements and limited abatement options. However, such a program should be additive to, not drawn from, existing industrial allocations. Redirecting allowances from the EITE framework to fund facility decarbonization projects would undermine the integrity of current leakage protections. This should be avoided at all costs, given California's increased electricity prices and reality of higher emissions leakage risks as demonstrated by the closure of EITE industrial facilities.

Finally, as CARB considers potential updates to utility-administered indirect emissions offsets, the importance of maintaining continuity and effectiveness in minimizing emissions leakage must be emphasized. While recognizing that certain adjustments may be appropriate as the Program evolves, CLECA reiterates its July 2024 comments¹⁰ that any revisions to the current structure should seek to avoid introducing transactional, accounting, or administrative complexities; replacing utility bill credits with direct allocation of allowances could increase costs and administrative burdens for participating facilities, and thereby weaken leakage protections. If there are revisions to indirect emissions offsets, CARB should explicitly assess the potential leakage impacts of these changes and ensure that the industry assistance remains aligned with the cost exposure faced by EITE industries to retain program effectiveness.

CLECA also respectfully requests that CARB provide clear, explicit guidance as soon as possible that the current mechanisms available for offsetting indirect emission through utility bill credits will continue through at least 2027. Providing this clarity will enable industrial customers to plan investments, manage compliance costs, and maintain operations in California as CARB implements broader reforms to the Cap-and-Invest Program.

¹⁰ California Large Energy Consumers Association (CLECA). Emission-Intensive Trade-Exposed (EITE) Electricity Allocation - Comments on Potential Amendments to the Cap-and-Trade Regulation. Submitted to the California Air Resources Board, July 31, 2024. Available at: https://ww2.arb.ca.gov/approved-comments?entity_id=37391.

Maintain and Strengthen Industrial Allocation to Prevent Leakage under Tighter Allowance Budgets

CARB's recent Cap-and-Invest workshop appropriately highlighted the central question about what level of industrial allocation is necessary to prevent new emissions leakage from occurring, or to reverse emissions leakage that has already occurred with the removal of 118.3 million allowances through 2030. CLECA commends CARB for elevating this issue and for recognizing the need to maintain an effective industrial allocation framework as the allowance trajectory tightens.

With this context in mind, CLECA supports CARB's Concept 2 over Concept 1 for industrial allocation as a more suitable and balanced pathway for supporting EITE industries under the modified annual allowance budgets. By maintaining the existing path of industrial allocation, Concept 2 appropriately recognizes that the state's manufacturing base remains highly exposed to both direct and indirect carbon cost pressures. In contrast, the approach reflected in Concept 1,¹¹ which would further reduce protection for emissions leakage, presents unnecessary risk in the current environment of elevated electricity costs and tightening competition. Retaining at least the current allocation levels under Concept 2 is critical.

While CLECA supports CARB's proposal of Concept 2 over Concept 1, we urge the Board to strengthen emissions leakage protection beyond what Concept 2 envisions for industrial allocation to reflect the economic realities facing EITE industries. The proposed allocation reflecting Concept 2 CAFs does not provide adequate protection against asymmetric competitive pressures stemming from the general affordability crisis, most notably with skyrocketing electricity rates.

Suspend CAF Reductions Pending Implementation of a Border Carbon Adjustment (BCA)

The effective allocation to EITE industries today is well below their covered emissions. This reality is driven primarily by the annual reduction in allowances through the CAF. This trend is likely to continue whether under Concept 1 or Concept 2. As the proportion of allocation to covered emission declines, the cost of compliance increases in relation to other producers out of state that are not covered under the Program. This creates a significant and growing competitive disadvantage that will inevitably lead to increased emissions leakage unless addressed.

Even when compared to other emissions trading systems (ETS), California's Program remains notably more stringent. According to CARB's workshop materials,¹² industrial

¹¹ California Air Resources Board (CARB). Oct. 29, 2025. *Cap-and-Invest Program Workshop*. Industrial Allocation Concept Comparison. Slides 43-45. Available at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/meetings/nc_CapInvestWorkshop_October2925.pdf

¹² California Air Resources Board (CARB). Oct. 29, 2025. *Cap-and-Invest Program Workshop*. Industrial Allocation in Other Emissions Trading Systems. Slide 38. Available

sectors in California receive only about 60% of their covered emissions as free allowances. This allocation level falls well below the coverage provided under peer programs such as Washington's (100%) and Québec's (99%).

This disparity, when combined with persistently high electricity costs, demonstrates that the current allocation level remains insufficient to minimize emissions leakage in key EITE industries operating in California. Without additional safeguards, the cumulative burden of compliance costs and energy price differentials will continue to erode the competitiveness of sectors that are central to the state's low-carbon economy.

While market-based instruments, such as border carbon adjustments (BCAs) or similar mechanisms, may eventually address these structural asymmetries by accounting for the carbon cost of imported materials, such measures are not currently applied within the Program. In the absence of such mechanisms, CLECA recommends that CARB temporarily pause the CAF for EITE industries to preserve effective leakage mitigation while longer-term market solutions are developed and evaluated.

Use Cap-and-Invest Revenues to Expand Decarbonization Incentives for EITE Sectors

CARB's recent Cap-and-Invest workshop also raised an important question of whether the Program should expand its role in supporting industrial decarbonization projects that reduce GHG emissions and mitigate leakage risk. CLECA agrees that this discussion is both timely and necessary, as cost exposure among EITE industries has increased while federal funding opportunities have diminished. Support for renewable energy and decarbonization initiatives has been reduced broadly. Notably, the U.S. Department of Energy recently cancelled approximately \$3.7 billion¹³ in previously awarded funds for decarbonization projects, including \$500 million for National Cement's Net Zero Project in Lebec, California.¹⁴ These cuts underscore the recent reduction in Federal support for large-scale emission reduction initiatives.

In light of these conditions, directing Cap-and-Invest revenues toward cost-effective, industrial decarbonization projects is more critical than ever to keep California on track toward its 2030 and 2045 climate targets.

Prioritize Proven, Cost-Effective Industrial Decarbonization Projects, Targeting Decarbonization Incentives to High-Impact, Hard-to-Abate Sectors

at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/meetings/nc_CapInvestWorkshop_October2925.pdf

¹³ U.S. Department of Energy. *Secretary Wright Announces Termination of 24 Projects, Generating Over \$3 Billion in Taxpayer Savings*. Energy.gov, May 30, 2025. Available at: <https://www.energy.gov/articles/secretary-wright-announces-termination-24-projects-generating-over-3-billion-taxpayer>.

¹⁴ Leggate, James. *US Energy Dept. Cancels \$3.7B in Previous Awards for Decarbonization Projects*. Engineering News-Record, June 2, 2025. Available at: <https://www.enr.com/articles/60826-us-energy-dept-cancels-37b-in-previous-awards-for-decarbonization-projects>.

CLECA supports CARB's consideration of an MDI as a mechanism to achieve measurable emission reductions within California's industrial sector. Québec's Cap-and-Trade experience demonstrates that dedicating industrial allowances to fund decarbonization projects is both feasible and effective.

As discussed during the October CARB workshop, Québec allocates a share of its auction proceeds to invest in facility-level projects, creating a direct incentive for investment and decarbonization in EITE sectors. If CARB advances a similar mechanism, eligibility should prioritize sectors and projects with the greatest potential for durable, cost-effective GHG reductions. CLECA recommendations for priority projects include:

- Hard-to-abate industries, such as cement, steel, glass, and mining, characterized by high process emissions and limited near-term abatement options and;
- Emission-intensive, trade-exposed sectors that have experienced significant emissions leakage or are facing persistent competitive pressures and elevated leakage risk.

When determining eligible facility and project investments, CLECA recommends that CARB prioritize commercially proven technologies capable of delivering verifiable, cost-effective emission reductions. Support should not be prioritized for unproven, speculative or early-stage technologies that lack commercial deployment, near-term reduction potential, or scalable application. Examples of commercially demonstrated technologies and near-term applications that deliver measurable, scalable and cost-effective reductions include:

- Electrification of process heat.
- On-site renewable energy and energy storage.
- Fuel switching to low-carbon alternatives such as renewable natural gas or hydrogen.
- Carbon capture and storage (CCS).
- Waste heat recovery and industrial energy efficiency upgrades.

Additional consideration for electrification and CCS projects is vital because such investments, while lowering direct emissions, result in higher electricity consumption, which increases indirect emissions and greater exposure to California's already high energy costs. For instance, CCS systems typically impose an "energy penalty," requiring 13 to 44 percent more energy to operate capture and compression equipment,¹⁵ highlighting the need for offsetting financial incentives.

Design a Transparent, Additive Framework for Industrial Decarbonization Incentives

¹⁵ Intergovernmental Panel On Climate Change (IPCC) (Ed.). (2023). *Energy Systems*. In Climate Change 2022 - Mitigation of Climate Change (1st ed., pp. 613–746). Cambridge University Press.
<https://doi.org/10.1017/9781009157926.008>

Beyond the eligibility criteria, CLECA appreciates CARB's request for stakeholder input on the blueprint for an incentives framework that strengthens the Program's protection against emissions leakage. CLECA offers the following key considerations for the program's design and implementation:

Dedicated Allowance Set-aside

To preserve existing leakage protections, the program should be funded through a dedicated allowance set-aside or separate revenue stream rather than by reallocating existing industrial allowances. CLECA recommends that CARB explicitly clarify that decarbonization incentives are supplemental to industrial allocation and do not affect EITE assistance factors, including both direct allowances and indirect emission credits.

Application and Reporting Framework

CARB can draw on its established Low Carbon Fuel Standard (LCFS) framework,¹⁶ which integrates milestone-based crediting, third-party verification, and structured data reporting, to guide the development of a transparent application and reporting process. The application should adopt an upfront approval process similar to Québec's system, while reporting is conducted through a tiered, milestone-based structure similar to LCFS. Projects should submit initial applications detailing baseline conditions, proposed technologies, and monitoring plans, followed by staged disbursements tied to key milestones.

Performance and Eligibility Criteria

Eligible projects should deliver verifiable, cost-effective GHG reductions against a defined baseline, and demonstrate technical and schedule readiness for timely deployment. Establishing clear thresholds for technology maturity and project readiness will help CARB prioritize near-term, high-impact investments that advance measurable decarbonization outcomes.

Rulemaking Timeline

Finally, CARB should implement decarbonization incentives in alignment with the statutory directives of AB 1207 and SB 840. Integrating the new program's development into the 2027 rulemaking cycle will ensure consistency with these legislative reforms and maintain continuity between upcoming allocation adjustments and new decarbonization incentives.

Taken together, these recommendations would preserve California's existing leakage protections while establishing a transparent, performance-based framework for industrial decarbonization.

Conclusion

¹⁶ California Air Resources Board (CARB). *LCFS Registration and Reporting*. Accessed November 12, 2025, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-registration-and-reporting>.

As CARB evaluates potential modifications to the Cap-and-Invest Program, CLECA urges the Board to ensure that any changes strengthen California's climate objectives by enabling industries to invest in decarbonization, maintain in-state operations, and remain competitive in national and global markets. In the absence of a mechanism such as a BCA to account for the carbon costs embedded in imported materials, the Board's review should consider a temporary pause in CAF reductions for highly vulnerable EITE sectors to avoid exacerbating competitive disparities. In parallel, establishing a dedicated revenue stream for industrial decarbonization, separate from existing EITE allocations, would preserve the strength of current leakage protections while advancing the transition to lower-emission manufacturing.

CLECA encourages CARB to incorporate these considerations throughout the rulemaking process while preserving the full leakage-mitigation value of industrial allocations. CLECA appreciates the opportunity to provide these comments and looks forward to continued collaboration with CARB staff as the agency refines these concepts.

Respectfully submitted,

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