California Food Producers

We Help Bring California's Goodness to the World

March 9, 2026

Lauren Sanchez, Chair
California Air Resources Board
Industrial Strategies Division, Climate Change Program Evaluation Branch
1001 I Street
Sacramento, California 95814

Comments Submitted Electronically to the Public Docket

RE: Comments on Proposed Changes to the Cap-and-Invest Program Regulations

Dear Chair Sanchez:

The California League of Food Producers (CLFP) is a statewide association representing the interests of food processors and beverage producers throughout the state, including companies covered by the Cap-and-Invest Program (Program). CLFP supports the state's efforts to reduce the impacts of global climate change on its people, economy, and the environment, and we appreciate the opportunity to provide comments to the California Air Resources Board (CARB) regarding its proposed revisions to the Program regulations.

The California Food Industry is a Key Driver of California's Economy

California's multi-billion dollar food industry is a cornerstone of the state's economy. Food processing directly adds $25.2 billion to California's economy, and indirectly contributes an additional $56.7 billion, as income earned is spent on products and services in local and regional economies, multiplying the value of food processing facilities to the local and regional economies. California is home to hundreds of food processors that collectively employ over 200,000 full-time and part-time workers, and there are thousands more workers employed in trucking, packaging, energy, equipment and other related businesses that depend on the food processing industry. In 2022, California's agricultural production and processing industries represented 2.5 percent of the total state gross domestic product (GDP).[1]

[1] See California Governor's Office of Business and Economic Development (GOBiz), Working Lands & Water; U.S. Dept. of Ag. (USDA), California, New York, and Texas rank as the top 3 States in number of U.S. food and beverage processing plants | Economic Research Service (Jun. 26, 2020); University of Arkansas, Division of Agriculture, Research and Extension, California | Economic Impact of Agriculture; CLFP, Sexton, R., Medellin-Azuara, J., Saitone, T., The Economic Impact of Food and Beverage Processing in California and Its Cities and Counties (Jan. 2015), Exec. Summary, p. ii.

The food processing industry is an indispensable complement to California's agricultural sector, a $49 billion dollar sector that generates at least $100 billion in related economic activity.[2] The state's food processors convert California agricultural products into food, beverage, and fiber products, and farmers across the state rely on California food companies to purchase their harvests for processing.

In many rural counties and disadvantaged communities, food processing is a primary engine of local economic prosperity.[3] Food processing jobs are critical to local economies. For example, food processing is responsible for nearly half the jobs in Colusa County, and more than a fifth of the jobs in Kings, Merced, Stanislaus Counties. Food processing is also a key contributor to funding state and local governments in California, contributing over $8 billion in state and local tax revenue. In the Central Valley alone, the sector contributes nearly $20 billion in value added to the regional economy and nearly 205,000 jobs.[4]

CARB Must Balance California's Climate and Economic Goals

For the Cap-and-Invest Program to have a positive impact on the climate, it is critical that it functions to not only drive in-state reductions of greenhouse gas (GHG) emissions, but also to avoid increasing emissions outside of the state. The California Global Warming Solutions Act[5] (Act) does not require CARB to turn a blind eye to the impact of the Program on global GHG emissions, the state's economy, and low-income communities in order to hit the in-state GHG emissions reduction targets. On the contrary, the Act specifically states that CARB's implementing regulations are only required to achieve the maximum "technologically feasible and cost-effective" GHG emission reductions and to achieve California's GHG emissions

[2] Cal. Dept. of Food & Ag. (CDFA), More than 100 Years Protecting and Promoting Agriculture in the Golden State.

[3] Cal. Dept. of Food & Ag. (CDFA), More than 100 Years Protecting and Promoting Agriculture in the Golden State; University of Arkansas, Division of Agriculture, Research and Extension, California | Economic Impact of Agriculture; California Governor's Office of Business and Economic Development (GOBiz), Working Lands & Water; U.S. Dept. of Ag. (USDA), California, New York, and Texas rank as the top 3 States in number of U.S. food and beverage processing plants | Economic Research Service (Jun. 26, 2020); CLFP, Sexton, R., Medellin-Azuara, J., Saitone, T., The Economic Impact of Food and Beverage Processing in California and Its Cities and Counties (Jan. 2015).

[4] CLFP, Sexton, R., Medellin-Azuara, J., Saitone, T., The Economic Impact of Food and Beverage Processing in California and Its Cities and Counties (Jan. 2015), Exec. Summary, pp. ii-iii.

[5] AB 32 (Nunez, 2006), as amended by SB 32 (Pavley, 2015), AB 1279 (Muratsuchi, 2022), and AB 1207 (Irwin, 2025).

reduction goals "to the extent feasible."[6] The Act also requires CARB to "ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities," and to consider "cost-effectiveness of these regulations," "overall societal benefits" including "benefits to the economy, environment, and public health," "the effect of these regulations on affordability, cost effectiveness, and minimization of leakage in California," and "the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases."[7] It specifies that CARB must "minimize leakage," including by distributing industrial sector allowances to minimize emissions leakage risk to cost effectively achieve the state's GHG emissions reduction goals and the purposes of the Act beginning January 2, 2031.[8] Collectively, these provisions empower CARB to craft rules that do not negatively impact the state's economy, businesses, and low-income communities while causing GHG emissions elsewhere that offset California's reductions.

We recognize and appreciate that CARB's regulatory proposal includes measures intended to minimize the impact of the proposed increased Program stringency on in-state manufacturing. However, unless the measures are sufficient to mitigate the effect of the proposed increased Program stringency on leakage, CARB's proposal could result in a *net increase* of global GHG emissions and create significant negative effects on California's economy and communities by driving food production and other manufacturing to jurisdictions with lower regulatory compliance burdens, while harming low-income communities, California businesses, and the state and local economies. This result would clearly conflict with the purpose and intent of California's climate policy. CLFP urges CARB to ensure that any changes it makes to the Program regulations will not cause this adverse result.

Modifications to the Proposed Manufacturing Decarbonization Incentive Allocation Could Further Minimize Leakage Risk in the Food Processing Sector

The food processing industry in California is particularly vulnerable to emissions leakage. California food producers operate on very narrow margins. Consequently, the industry is more vulnerable than most to increases in regulatory compliance costs, increasing consumer prices for food processed in the state. Increases in natural gas costs and increasing allowance costs for food processors are especially likely to result in emissions leakage and in substantial collateral

[6] Health & Saf. Code, §§ 38560, 38562.
[7] Health & Saf. Code, § 38562(b).
[8] Health & Saf. Code, § 38562(c)(2)(G).

damage to the economic viability of the food processing industry and the low-income communities that rely on the availability of food processing jobs. CARB must consider these impacts on California's economy, businesses, and low-income communities.[9]

Food processing facilities are already closing due to increasing regulatory and economic pressures. For example, since 2020, four of the state's tomato processing facilities have closed. The proposed removal of 118 million allowances from the Program through 2030 will increase the cost of allowances and, in turn, place additional pressures on in-state food producers and increase the risk that additional facilities will close and that production (and associated emissions) will move out of state. To reduce the impact of the increased Program stringency on emissions leakage risk, CLFP strongly supports CARB's proposal to maintain a 100 percent assistance factor for all manufacturing through 2035, and to reduce the cap decline rate for manufacturers through 2031.

CLFP also supports CARB's proposal to provide an incentive allocation for manufacturing decarbonization projects that reduce GHG emissions and protect against leakage through a manufacturing decarbonization incentive allocation. However, we ask CARB to also consider that, in most cases, food processing operations cannot be decarbonized while still maintaining economic competitiveness with out-of-state producers, which limits the ability of the manufacturing decarbonization incentive allocation to mitigate the increased leakage risk that would result from CARB's proposed increased Program stringency. Many food processing operations in the State rely on high heat processes, including boilers and dehydrators, that rely on natural gas to reach temperatures required to meet food safety requirements. For example, tomato processing uses natural gas combusted in boiler burners to generate heat, which drives the heat transfer process that converts boiler water into steam. The steam is then distributed throughout the facility to support various heating and processing operations such as cooking, evaporation, and sterilization. Natural gas is also used in cogeneration systems, where gas turbines generate an average of 10 megawatts (MW) of electrical power for facility use, and the turbine exhaust serves as the heat source for the waste-heat boilers, enabling additional steam production without requiring supplemental natural gas firing in those boilers. All tomato products are heated to temperatures above 200° F in fully enclosed systems to achieve pasteurization. Thermal processes, including heating, holding, and cooling of cans and pouches,

[9] Health & Saf. Code, § 38562(a), (b), (c)(2)(G).

prevent microbial spoilage and ensure long-term shelf stability.[10] Each step is tightly controlled and continuously monitored through automated systems and instrumentation to maintain commercial sterility and ensure products meet customer specifications.

Even under the most aggressive regulatory scenarios, the food processing industry is only capable of making a relatively minor contribution to achieving CARB's statewide GHG reduction goals. The 35 food processing facilities that are currently subject to the Program generate relatively minimal GHG emissions. The total annual carbon emissions of these facilities are only about 1.9 million metric tons (mmt) of carbon dioxide equivalent (CO_2e), and the total emissions for the entire food processing sector are only about 2.1 mmt CO_2e, accounting for less than 1 percent of total annual statewide GHG emissions.[11,12] Food processors have also already invested heavily in measures to improve fuel efficiency, and many facilities have been able to increase production without increasing GHG emissions. Additional meaningful GHG emissions reductions are challenging because of the quantity and cost of electricity or alternative fuels (such as biofuels and hydrogen) that would be needed to power high-heat food processing equipment and to generate the steam needed for steam-powered equipment; the infrastructure, technology, and logistical constraints that prevent facilities from obtaining a sufficient, reliable supply of electricity or alternative fuels; and the extremely high capital costs and operation and maintenance costs that facilities would incur to transition their natural gas powered operations. For example, operating a single representative tomato processing facility at a typical steam demand of 1.1 million pounds per hour would require approximately 330 MWh of electricity.

California currently does not have the energy infrastructure needed to meet the energy needs for its food processing facilities, making it technologically infeasible to achieve meaningful further decarbonization in this sector. It will be years, possibly decades, before the state's electrical grid will generate sufficient electricity and before the state's alternative fuels sectors are able to generate a sufficient and reliable supply to meet this increased demand. It will also likely be

---

[10] These thermal processes achieve the required 5-log reduction in pathogenic organisms, meeting the regulatory standards outlined in 21 CFR 155.190 (canned tomatoes), 21 CFR 155.191 (tomato concentrates), and 21 CFR 117 (current Good Manufacturing Practice, hazard analysis, and risk-based preventive controls for human food).

[11] See CARB, 2024 Mandatory GHG Reporting - Reported Emissions; CARB, 2026 Public Allocation Summary.pdf.

[12] Note: The actual impact of California food processing on California GHG emissions is not reflected by their facility-level GHG emissions number alone. It does not account for GHG reductions associated with the CO_2 uptake of crops grown in state for processing (about 8 grams of CO_2 per tomato plant per day multiplied by hundreds of thousands of plants and days in the growing season) or transportation GHG emissions savings associated with processing produce in the state near the fields where they are grown. It is much lower, and may in fact be net negative, when taking offsetting factors into account.

decades before the state has constructed the infrastructure needed to distribute the electricity, hydrogen, and biofuel to where it is needed, especially for food processors located in rural areas. Electricity and alternative fuels are also not cost effective because their costs are extremely high compared to the cost of natural gas.[13] For example, the energy cost to operate an electric boiler is eight times higher than the cost to operate a natural gas boiler because of high electricity prices.

These challenges significantly limit the ability of food processors to take advantage of CARB's proposed manufacturing decarbonization incentive allocation. Several of the proposed eligible strategies are reliant on the availability of a reliable supply of cost-effective alternative fuels (e.g., procurement of exempt biomass-derived fuels, electrification projects, low carbon hydrogen procurement, procurement of electrified thermal energy). Others, such as renewable energy generation and storage and installation of solar or geothermal are not technologically feasible or cost effective due to the very high energy demand at food processing facilities. For example, to generate the approximately 300,000 MWh needed for a single tomato processing facility, it would require:

- About 7,000 acres of solar panels at a cost of about $700 million, plus battery storage sufficient to support 24/7 facility operation during the processing season.
- About 600 wind turbines at a cost of about $1.6 billion, plus battery storage sufficient to support 24/7 facility operation during the processing season.
- To produce biofuel to replace natural gas, processing more than 300,000 tons of waste per year by a digester.
- To generate hydrogen from solar, a reliable supply of more than 750 tons of wet waste per day, and a capital investment of about $180 million plus ongoing operation costs.

CLFP recommends that CARB revise the project types eligible for the proposed manufacturing decarbonization incentive allocation to include projects that are cost effective and technologically feasible without the need for reliable and affordable supply of electricity or

[13] See Cal. Independent System Operator (CAISO). (2022) 20-Year Transmission Outlook. Available at http://www.caiso.com/InitiativeDocuments/Draft20-YearTransmissionOutlook.pdf [estimating that infrastructure upgrades necessary to meet demand will cost $30.5 billion over 20 years, and that transmission projects require eight to ten years of lead time]; Cal. Council on Sci. & Tech. (CCST). (Apr. 2025). Key Challenges for California's Energy Future. Available at CCST-Key-Challenges-for-Californias-Energy-Future.pdf [noting that clean alternative fuels are expensive, supplies are limited, and indirect impacts have not been analyzed (lifecycle analysis); and that utilities are constrained in their ability to provide reliable power, and new and increasing energy demand will require upgrades and expansion of an electrical grid challenged by wildfires, extreme heat, and weather events, expected to cost billions of dollars over the next 20 years].

alternative fuels. For example, incentivizing projects intended to decrease natural gas consumption by increasing the energy efficiency of natural gas-powered processes could help manufacturers with hard-to-decarbonize processes to reduce their natural gas use.

The Proposed Increased Program Stringency from 2031 Through 2045 Will Push Food Production and GHG Emissions Out of State

CLFP opposes CARB's proposal to aggressively increase the stringency of the Program starting in 2031, including increasing the cap adjustment factor starting in 2032, which will necessarily reduce the number of free allowances available to food processing facilities. Free allowances are a necessary and critical tool to minimize emissions leakage in this sector given the limited the ability of food producers to feasibly and cost-effectively achieve further material GHG emissions reductions. We are very concerned about the collateral damage CARB's proposal will cause to the economy of the state and low-income communities that rely on food processing jobs, spending, and tax revenue, and to the climate as food production and associated GHG emissions increasingly shift outside of California.

Most of the processors in the Cap-and-Trade program produce basic food products (canned tomatoes, dehydrated vegetables, milk, cheese, and meat products) and operate on small economic margins. These are not luxury items. They are an essential part of the diets for most households. In addition to GHG compliance costs, food processors are also facing rising costs for labor, packaging, water, and trucking. California food products compete directly with producers in other states and countries. Since 2019, the U.S. has shifted from a net food exporter and is now a net importer of food. Canned goods from China are already less expensive than canned goods produced in California, and the availability lower cost Chinese canned foods is likely to shift market share from California to China. By increasing California regulatory pressures that drive up the cost of food produced in state CARB's proposal will exacerbate this market shift. The resulting increase in global emissions would undermine the effectiveness of California's efforts to combat climate change both because the products are produced in jurisdictions with lesser regulatory requirements and due to increased emissions associated transportation of imports to California markets.

When rapid increases in Program stringency outpace the ability of covered facilities to feasibly and cost effectively achieve further GHG emissions reductions, the Program no longer works as intended. It reaches a point of diminishing returns where it stops effectively driving further emissions reductions and instead drives facilities to close and production to move out of state. At

that point, California would no longer be acting as a national and global leader in climate policy as intended by the Act. Ironically, its policies would make global GHG emissions worse while simultaneously causing irreparable harm to California's economy, businesses, and low-income communities. To avoid this unreasonable result, CARB must take care to ensure that its proposed changes to the Program regulations do not cross that threshold.

There are several measures CARB can include in a revised proposal to more effectively mitigate economic and environmental leakage risks in the food processing sector. CLFP recommends the following:

- *CARB should either decline to further increase the Program's stringency or substantially reduce the number of allowances it removes from the Program through 2045.* The emissions reduction path in the current Cap-and-Invest Program regulations is already aggressive and has been effective to reduce GHG emissions in the state. But rapidly increasing the Program's stringency will not necessarily achieve the purposes of the Act. CARB should evaluate whether the proposed increased Program stringency will effectively reduce GHG emissions nationally and globally, not only in California, without harming California economy generally, food production industry specifically, and low-income communities. Based on that analysis, CARB should modify its proposed changes to the total number of allowances in the Program to ensure it will have sufficient free allowances available through 2045 to effectively mitigate economic and environmental leakage and to advance the purposes and intent of the Act.

- *CARB should evaluate economic and environmental leakage risk on a sector-specific basis, based on best available science and scientific methodologies.* To ensure that CARB can distribute allowances to food processers in a manner that minimizes leakage risk, CARB should consider sector-specific and facility-specific factors and take them into account when developing a methodology for distributing allowances post-2030 in accordance with the requirements of AB 1207. As noted earlier, the food processing industry accounts for a very minor portion of total statewide GHG emissions and that should factor into the regulatory framework.

  CLFP has commissioned a leakage study that is focused on the impact of the Cap-and-Invest Program on leakage risk in the tomato processing sector. This study is currently in progress. CLFP will share the final report with CARB when it is available, and we ask that CARB consider it in connection with this rulemaking.

- *CARB should expand application of the Alternate Cap Adjustment Factor (Alt CAF).* Facilities with high process emissions (which are currently eligible for the Alt CAF) and industries that are reliant on natural gas because reliable, cost-effective electricity or alternative fuel is not available or not technologically feasible, face the same constraints to decarbonization. In both cases, because the industry sectors are limited in the extent to which they can decarbonize their operations, the Program's ability to incentivize GHG emissions reductions is constrained. Applying the Alt CAF to the food processing sector would mitigate the impact of the Program on economic and emissions leakage, keeping food production in the state where it is subject to California's environmental, worker protection, and community protection laws.

Industrial Leakage Study

CARB based its proposed regulatory updates on the results of an industrial emissions leakage study it commissioned to comply with reporting requirements in AB 398 (2017).[14] Evaluation of this leakage report by stakeholders and their technical experts is critical to our ability to meaningfully evaluate whether proposed regulatory changes based on the study's results and recommendations adequately characterize and minimize leakage risk. Given the importance of the study to CARB's development of leakage minimization measures in the proposed regulation, CLFP asks that CARB release the findings of the industrial leakage study and provide an additional public comment period on the pending regulatory proposal following its release to facilitate meaningful stakeholder participation and input on the regulatory proposal.

Thank you for your time and consideration of our concerns. We look forward to further engaging with you on these issues.

Sincerely,

Trudi E. Hughes

Trudi Hughes
President/CEO

[14] See CARB Cap-and-Invest Workshop October 2025 presentation, slides 26-46; CARB Cap-and-Invest Workshop October 2025 recording; AB 398 (2017), Health & Saf. Code, § 38562(c)(2)(J).