



November 12th, 2025

Lauren Sanchez, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: October 29, 2025 Cap and Invest Workshop

Dear Chair Sanchez:

The Glass Packaging Institute (GPI) appreciates the opportunity to submit comments on the October 29, 2025 Cap-and-Invest Program Workshop. GPI represents the three remaining container glass manufacturers and their four facilities in California.

GPI is one of the few stakeholders representing covered entities that did not oppose AB 32 in 2006. Recognizing that a robust and efficient carbon market is the best way to decarbonize, GPI has consistently supported the continued operation of the Cap and Invest Program in the Legislature.

Nevertheless, it is a challenging time for container glass manufacturers and their fully unionized workforces. In 2015, one of the then five remaining glass plants in California closed in Oakland. Since that time, in-state production has declined significantly, with three of the four remaining glass plants operating at significantly reduced capacity. This phenomenon is not isolated to California. In November 2024, the Ardagh glass container plant in Seattle closed. Less than a year later, the Owens-Illinois (OI) Portland glass container plant closed.

The reasons for these closures and reduced operations is simple. Domestic glass container manufacturers in these states operate at a competitive disadvantage to overseas producers. California glass container manufacturers must comply with in-state recycled content requirements, federal and regional air quality regulations, and they face higher energy, transportation and labor costs than their competitors in other jurisdictions. In early 2025 the Biden Administration found that glass wine bottles originating in China have been “dumped” into the US at less than fair market value.

Emissions leakage in the glass container industry may be particularly disruptive to the state’s efforts to reduce carbon emissions, as lifecycle emissions associated with a glass bottle produced outside of the U.S. are significantly higher. Chinese glass containers imported into the U.S. will, on average, have a carbon footprint 117% higher than glass

containers manufactured on the West Coast. This is due in part to the fact that 30% of the glass container furnaces in China are still coal-powered.

In addition, glass containers are a heavy commodity. Consequently, transporting container glass over long distances significantly increases carbon emissions.

In short, the glass container industry is heavily trade exposed. Should it be helpful, we can provide as much documentation as needed to help further establish that fact. Given the current condition of the glass container industry, it is not an exaggeration that any additional cost of compliance under the Cap and Invest Program puts in-state manufacturing at risk and therefore increases the risk of leakage and increased carbon emissions associated with transportation of container glass over longer distances.

At the same time there is no feasible, cost-effective option for decarbonization of the glass container industry.

With this in mind, GPI submits the following comments.

Leakage Mitigation and Industrial Assistance

GPI applauds CARB's commitment to maintaining a program design that mitigates the risk of leakage. The current output-based allocation with 100% industry assistance has been the correct approach. Consistent with our comments on trade exposure above, any changes to output-based allocations of allowances that would result in fewer allowances allocated for industrial assistance may quickly result in leakage.

Until such time as a viable and cost-effective option exists to decarbonize the production of glass containers, GPI urges CARB to maintain a 100% industry assistance factor post-2030. Any alternative allocation methodology must be designed to be equally effective in terms of leakage mitigation.

Cap Adjustment Factor

GPI believes that even maintaining the current Cap Adjustment Factor (CAF) schedule (Concept 2) may bear risks for the glass container industry. GPI understands and appreciates the need to drive emissions reductions and that the choice to tie industrial allocations to the proportional decline in allowance budgets was intended to achieve this goal.

However, given the glass container industry's significant trade exposure, the proportionate decline in the existing CAF schedule could eventually result in costs that would render California's glass container manufacturers even less competitive, when compared to foreign manufacturers whose bottles are far more carbon intensive. Even if California's competitors produced less carbon intensive products, the increased

emissions associated with transportation of glass containers into California would be significantly higher compared to the in-state transportation of domestic glass.

GPI encourages CARB to explore an alternative CAF schedule for EITE industries that is more protective, or to eliminate the CAF entirely for EITE industries. This approach is consistent with statutory changes to Health & Safety Code §38562(c)(2) made in AB 1207 (Irwin). These changes eliminate the statutory requirement that CARB apply a declining cap adjustment factor to industry allocations equivalent to the overall statewide emissions declining cap.

GPI would welcome the opportunity to engage with CARB staff further on this issue.

Manufacturing Decarbonization Incentives

GPI members are not averse to exploring options to decarbonize their operations.

Before federal funding was withdrawn, two GPI member companies were slated to receive Department of Energy Industrial Demonstration Grants. O-I Glass intended to use its grant to demonstrate and replicate glass container furnace pre-heating, melting, and heat capture technology with the potential to reduce carbon emissions by 40% at its facility in Tracy.

In the absence of federal investment in these efforts, it is essential that the state step in. We encourage you to advance a consistent incentive program.

Thank you for your consideration of these comments. GPI welcomes the opportunity to work with CARB staff on its recommendations.

Sincerely,



Scott DeFife
President