Introduction

The Alliance for Automotive Innovation ("Auto Innovators") provides the following comments on the U.S. Environmental Protection Agency ("EPA") notice of opportunity for public hearing and comment California State Motor Vehicle Pollution Control Standards; Advanced Clean Cars II Regulations; Request for Waiver of Preemption. These comments are not about the general authority of California to establish motor vehicle emissions control programs including zero-emission vehicle ("ZEV") sales requirements. Indeed, California has taken significant actions to encourage ZEV sales, reaching a nationwide best 26% electric vehicle ("EV") market share in 2023 compared to the national average of just 9.5%.

However, we have continued concerns with the feasibility of meeting the ZEV sales requirements in the Clean Air Act § 177 states ("Section 177 States") in the timeframe required under the regulations set by California. Automakers and many Section 177 States will have a shared challenge to achieve the ZEV sales requirements at the same level of ambition and timing as California. The significant differences between California and other states will require substantial changes in terms of charging infrastructure and other supportive conditions to reach the requisite market acceptance levels.

Feasibility in Section 177 States

Auto Innovators asks EPA to consider the feasibility of meeting the ZEV sales requirements in Section 177 States as it considers the waiver request.

Feasibility is an important factor in EPA’s consideration of a waiver under Section 209(b) of the Clean Air Act. In determining whether to grant a waiver, EPA must assess whether the standards in question and their enforcement procedures are “consistent with section 202(a)” of the Clean Air Act. Section 202(a), in turn, requires the standards to be “not unduly burdensome”.

---

1 From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. Active in Washington, D.C. and all 50 states, the association is committed to a cleaner, safer and smarter personal transportation future.
2 www.autosinnovate.org.
3 Those matters are before the D.C. Circuit in Ohio v. EPA, in which Auto Innovators is not a party.
4 Herein, we comingle the terms “ZEV” and “EV” to broadly include battery electric, plug-in hybrid electric, and fuel cell electric vehicles. The regulations under consideration allow up to 20% of their sales requirement to be met with plug-in hybrid electric vehicles in addition to zero-emission vehicles.
5 A significant portion of U.S. electric vehicle sales in the U.S. are in California. Excluding California, national average electric vehicle sales in 2023 were 7.4%.
6 42 U.S.C. § 7543(b).
7 Id. § 7543(b)(1)(C).
provides that emissions standards under that section “shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.” This criterion is thus imported into EPA’s waiver consideration.

Automakers do not dispute the feasibility of ZEVs from a technology standpoint. Over 111 models of electric vehicles are available in the new vehicle market in just about every segment and price point.

The question here, however, concerns whether it is feasible to apply “the requisite technology” (here, ZEVs) to the new vehicle fleet in the proportions and timeframe required under the proposed standards, particularly in Section 177 States. In contrast to criteria emission regulations—which can generally be met through emission system designs and are thus generally within the control of automakers in markets throughout the country—compliance with a ZEV sales mandate requires consumers to choose to purchase the corresponding percentage of new vehicles of a specific type of powertrain. This, in turn, requires adequate electric charging and hydrogen fueling infrastructure, and will likely also require additional supportive policies such as purchase incentives and consumer education to encourage rapid increases in market uptake. Infrastructure and supportive policies are largely beyond the direct, sole control of automakers, and they vary remarkably between states.

In that context, EPA can and should consider feasibility of the ZEV sales requirements in Section 177 States. There is nothing in Section 209(b) that limits EPA’s discretion in considering whether a California regulation is feasible when adopted in Section 177 States. Indeed, it is illogical to conclude that the framers of Sections 209 and 177 intended for EPA to exercise significant oversight authority over California, but absolutely no oversight authority over the remainder of the 49 states that could elect to become Section 177 States – especially when such levels of consumer purchases are dependent on factors beyond the control of auto manufacturers.

This position is consistent with EPA’s past practice, where the agency has suggested that under certain circumstances it may be proper for it to consider a California regulation’s impact in Section 177 States. In the agency’s consideration of California’s 2008 amendments to the ZEV program—which also contained “travel provisions” allowing certain types of ZEVs placed in service to be counted towards compliance with the percentage ZEV requirements in all states that had adopted the program—EPA implied that it would be appropriate for the Agency to consider impacts in Section 177 States in the waiver evaluation. EPA, therefore, has already concluded that it is not expressly precluded by Section 209(b) from considering the impacts a California regulation has in Section 177 States, and Auto Innovators believes the agency should do so here.

**ZEV Sales and Supporting Conditions in Section 177 States**

While the ZEV sales requirements under consideration might be feasible (at least in the early years) for California, the feasibility of the period provided to reach the requisite sales in Section 177 States is far less certain. Many Section 177 States currently have far lower ZEV sales than California, and supportive measures

---

8 *Id. § 7521(a)(2).*
9 See Decision Document: California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption, Decision of the Administrator (Both Within the Scope and Full Waiver Decision for 2011 and Prior Model Years and Full Waiver Decision for 2012 and Later Model Years Zero-Emission Vehicles (ZEV)), Docket No. EPA-HQ-OAR-2009-0780 (Sept. 26, 2011) at 14 (“While it is arguable that the effect of California’s regulations on Section 177 States is irrelevant to review under section 209(b), California’s travel proportionality provisions are unique in that they actually provide specific requirements for manufacturers in Section 177 States.”).
in other states have not historically matched those of California. We’ve noted some of these challenges both in our statement regarding California’s ACC II regulations and in our recent Get Connected report.

Thus far, eleven states have explicitly adopted the ACC II regulations under CAA § 177. ACC II requirements start in model year (“MY”) 2026 in five of these states (Massachusetts, New York, Oregon, Vermont, and Washington), with the remainder of the eleven beginning requirements in MY 2027. Most states have adopted the full ACC II regulations for all model years, but three states (Colorado, Delaware, and New Mexico) have only adopted the regulations through MY 2032 so as to avoid an outright ban of gas-powered vehicles.

Electric vehicle sales will need to increase significantly in California and in Section 177 States for automakers to meet the ACC II ZEV sales requirements, even in the initial years of the regulations (Figure 1). Setting aside flexibilities, electric vehicle sales will need to more than double in all but one of the Section 177 States, and more than triple in five of the Section 177 States. The gaps become even more stark if EV-only manufacturers are excluded from consideration. Yet, MY 2026 is only one year away and MY 2027 two years away.

Figure 1: 2023 calendar year ZEV sales rates in California and Section 177 States compared to ACC II requirements in MYs 2026 and 2027. Note, ZEV sales requirements rapidly increase, reaching 51% in 2029, 76% in 2031, and 100% in 2035, leaving little or no room to make up deficits in a later year.

12 Herein, we exclude the District of Columbia given that there are currently no new vehicle dealerships located within it.
13 Additional states are also considering adoption of the ACC II regulations would implement requirements with two model years of lead-time.
14 Although flexibilities such as early-action credits are available, individual manufacturers are likely to have differing access to them and will still have significant compliance obligations.
15 Manufacturers can begin to build MY 2025 vehicles as early as January 2, 2024.
Given the question before EPA is whether the ZEV sales mandate in ACC II is feasible (including the period permitted to apply the requisite technology), EPA should determine the feasibility of the ZEV sales mandate in each state that has adopted ACC II. Feasibility is distinctly local – one state or local area might have sufficient infrastructure, while another does not. California has 55 hydrogen fueling stations, while all the Section 177 States combined have zero hydrogen fueling stations.\(^\text{16}\) Focusing on EV charging, nearly 27 percent of all public charging infrastructure is in the State of California alone, with the rest disbursed in varying amounts in the other states.\(^\text{17}\) Thus, what might be feasible in California is not necessarily feasible in the Section 177 States.

The ability of the industry to meet the rapidly increasingly ZEV sales requirements in each of the Section 177 States depends on individual states and local jurisdictions developing the infrastructure necessary to fuel the ZEVs, and on whether customers in each jurisdiction will accept ZEV technologies and purchase them in sufficient quantities. These are largely beyond the control of automakers, yet they are prerequisites to the industry being able to achieve the sales volumes required under the pending waiver. Thus, EPA should include an assessment of whether the ZEV sales requirements in ACC II are feasible in Section 177 States. This assessment should include consideration of the following:

- Most current EV buyers are affluent single-family homeowners who can both afford the higher up-front purchase cost of EVs and have ready access to reliable, low-cost, and convenient home charging. Affluent single-family homeowners might make up most new car buyers, but the transition to 100 percent ZEVs in ACC II requires not just “most new car buyers” but “all new car buyers.”

- Meeting the ACC II ZEV sales requirements also requires used car buyers (including the third, fourth, and fifth vehicle owners, who are less likely to have access to home charging) to embrace ZEVs. Without a robust used ZEV market, the new ZEV market will collapse due to very high depreciation rates associated with ZEVs. A failing used ZEV market would impact both the new vehicle lease rates (which include the end-of-lease residual value) and the finance charges on new vehicle loans.

- Although average ZEV transaction prices have dropped over the last year, prices remain well above $50,000.\(^\text{18}\) Kelly Blue Book reports the average transaction price for an EV in January 2024 was $55,353.\(^\text{19}\) This is substantially higher than the average vehicle transaction price ($47,401) and over twice the average transaction price of a compact car ($26,899). While affluent new car buyers might be able to afford the higher prices, the ZEV sales mandate requires the majority of new car buyers to purchase ZEVs in just three model years (2028MY) and the vast majority closely thereafter.

- Public charging networks remain unable to keep up with charging demand. Long lines, complaints of unreliable stations, and too few stations throughout California and other states are very real concerns for current and prospective ZEV owners. As the ZEV sales requirements increase in the next few years, the portion of drivers that do not have home charging will increase and these drivers will be forced to rely on public charging, which is currently inadequate, unreliable, inconvenient, and expensive compared to home charging.

- Public charging and hydrogen fueling availability (for FCEVs) also varies dramatically from state to state.\(^\text{20}\)

---


\(^\text{17}\) See Alliance for Automotive Innovation, Get Connected (3Q 2023), available at [https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2023](https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2023).

\(^\text{18}\) Id.

\(^\text{19}\) Kelley Blue Book. "Kelley Blue Book Reports New-Vehicle Transaction Prices Continue to Tumble, Down 3.5% Year Over Year in January." Feb 13, 2024

Beyond infrastructure, incentives, and consumer education, each state's market is different. Consumer income, climate, topography, age of housing, and permitting requirements all determine whether the ZEV requirements are feasible, particularly in the 2029-2035 timeframe when ZEV sales must exceed 60 percent.

California has spent well over a decade and billions of dollars developing the infrastructure, providing incentives, and educating consumers about ZEVs. The sales shown in Figure 1 above demonstrate the impact this work has had in California. It also demonstrates that other states are still far behind in ZEV sales and market acceptance.

Closing

The U.S. auto industry is undoubtedly transitioning to electric vehicles as evidenced by the massive investments automakers have committed to the technology and their ongoing product announcements. And while California has long led the way in developing the EV market in that state, other states have not yet caught up. It is therefore important for policymakers to assess whether a ZEV regulation that is right for California is also right for other states, especially as EPA is poised to adopt the most stringent yet greenhouse gas and criteria rulemaking for light-duty vehicles for model years 2027-2032. We believe that EPA has a central role in deciding this question, and that this waiver proceeding is the opportune time for EPA to consider these issues.

Thank you for your consideration.