WANGER JONES HELSLEY PC
ATTORNEYS

TIMOTHY JONES*
MICHAEL S. HELSLEY
RILEY C. WALTER
PATRICK D. TOOLE
SCOTT D. LAIRD
JOHN P. KINSEY
KURT F. VOTE
ROBERT E. DONLAN
TROY T. EWELL
JAY A. CHRISTOFFERSON
AMANDA G. HEBESHA**
PETER M. JONES†
JEFFREY B. PAPE†
MARISA L. BALCH†
DEBORAH K. BOYETT
STEVEN K. VOTE
NICOLAS R. CARDELLA
GIULIO A. SANCHEZ
KATHLEEN D. DEVANEY
CRAIG A. CARNES, JR. †

* Also admitted in Washington
** Also admitted in Idaho
*** Emeritus
† Of Counsel
†† Also admitted in Texas

265 EAST RIVER PARK CIRCLE, SUITE 310
FRESNO, CALIFORNIA 93720

AND

400 CAPITOL MALL, SUITE 2550
SACRAMENTO, CALIFORNIA 95814

MAILING ADDRESS
POST OFFICE BOX 28340
FRESNO, CALIFORNIA 93729

TELEPHONE
(559) 233-4800

FAX
(559) 233-9330

Website:
www.wjhattorneys.com

Writer's E-Mail Address:
jkinsey@wjhattorneys.com

SHAWNDA M. GRADY†
ETHAN E. MORA†
BENJAMIN C. WEST
HUNTER C. CASTRO
STEPHANIE M. HOSMAN
IAN J. QUINN††
KEVIN W. BURSEY
RACHEL L. POMBO
NATHAN J. MARTIN
COLTEN D. BALLINGER
COLLEEN E. LITTLE
DANIKA E. JONES
DANIEL J. FREA
JESSICA L. VIVED
JOSHUA P. JENDIAN
RACHEL L. ALSTROM
HANNAH L. RAVIZZA

OLIVER W. WANGER***

LEGAL ADMINISTRATOR
LYNN M. HOFFMAN

September 15, 2025

VIA ELECTRONIC SUBMISSION AND UNITED STATES MAIL

Clerk's Office
CALIFORNIA AIR RESOURCES BOARD
1001 "I" Street
Sacramento, CA 95814

Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

Dear Clerk to the California Air Resources Board:

On behalf of Western States Trucking Association ("WSTA"), I am submitting the following comments on the Advanced Clean Fleets Regulation in response to the Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations (the "Amendments").

I

INTRODUCTION

The Initial Statement of Reasons ("ISOR") fails to provide the public with adequate critical analysis of the for the Proposed Amendments' economic impacts based on today's reality, contrary to the requirements of the Administrative Procedure Act ("APA"). The ISOR's cost estimates are based on a prior assessment that was itself deeply flawed (i.e., the ACF Regulation's economic assessment). Yet rather than addressing those flaws, the ISOR compounds them by failing to account for recent developments and current market conditions that have fundamentally altered the zero emission vehicle ("ZEV") industry landscape, including the rescission and withdrawal of various Clean Air Act waivers and the increasing cost of ZEVs. At the same time, it fails to

acknowledge and analyze significant economic impacts that have never been adequately analyzed previously, including costs incurred by businesses to comply with the unenforceable aspects of the ACF Regulation and the emerging trend of "ratioing" among ZEV manufacturers. As a result, the ISOR's economic analysis is deeply flawed and fails to comply with the APA.

The environmental analysis performed pursuant to the California Environmental Quality Act ("CEQA") fares no better. The patchwork of statutory and categorical exemptions CARB relies upon to conclude the Project is exempt from CEQA are based on conclusory legal analyses, non-existent case law authorities, and speculative factual assumptions. None of the cited exemptions are applicable and, even if that were not the case, no substantial evidence supports CARB's conclusion regarding the absence of unusual circumstances and cumulative impacts. CARB cannot evade its environmental review obligations by relying on CEQA's statutory and categorical exemptions.

Perhaps recognizing this, the ISOR alternatively concludes that no further environmental review is needed because the project's potential impacts have been adequately analyzed by the ACF Regulation Environmental Assessment ("ACF EA") and the LCFS Regulation Environmental Assessment ("LCFS EA"). However, CARB cannot rely on the ACF EA or the LCFS EA to analyze the Proposed Amendments' potential environmental impacts. The circumstances attending CARB's adoption of the Proposed Amendments are very different from those attending CARB's adoption of the ACF Regulation and the LCFS Regulation. Due to significant new information and substantial changes in the surrounding circumstances, including, inter alia, Congress' disapproval of the Clean Air Act preemption waivers issued for the Advanced Clean Cars II, Advanced Clean Trucks, and Heavy Duty Omnibus programs and CARB's withdrawal of its request for a preemption waiver for the Advanced Clean Fleets regulation, CEQA requires preparation of a subsequent environmental document. Although CARB attempts to avoid this result, its conclusion that the Proposed Amendments will not cause new or different impacts than those previously analyzed is unsupported. The ACF EA cannot be used to evaluate the Proposed Amendments' potential impacts. Its apples-to-oranges comparison of emissions benefits and emissions impacts to make significance determinations is entirely speculative now that the assumed benefits will no longer occur. Further, by analyzing the potential for new or different environmental impacts against an environmental baseline that includes unenforced and unenforceable regulatory programs, CARB is in effect relying on an improper, hypothetical baseline rather than actual, existing conditions, as CEQA requires.

In short, the ISOR's APA and CEQA analyses are seriously flawed. To ensure compliance with CEQA and the APA, CARB must rectify the ISOR's deficiencies and recirculate the documents for further public review.

///

///

II

CALIFORNIA ADMINISTRATIVE PROCEDURE ACT

"[T]he APA provides a procedural vehicle to review proposed regulations or modifications thereto in order to 'advance meaningful public participation in the adoption of administrative regulations by state agencies' and create 'an administrative record assuring effective judicial review.'" (*John R. Lawson Rock & Oil, Inc. v. State Air Res. Bd.* (2018) 20 Cal.App.5th 77, 111 [quoting *Western States Petroleum Assn. v. Bd. of Equalization* (2013) 57 Cal.4th 401, 424-425].) Pursuant to their applicable "procedural requirements, agencies must, among other things, (1) give the public notice of the proposed regulatory action; (2) issue a complete text of the proposed regulation with a statement of reasons for it; (3) give interested parties an opportunity to comment on the proposed regulation; (4) respond in writing to public comments; and (5) maintain a file as the record for the rulemaking proceeding." (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *POET, LLC v. Calif. Air Res. Bd.* (2013) 218 Cal.App.4th 681, 743-44]; see also Govt. Code, § 11346.5, subd. (a).)

CARB "must include '[f]acts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.'" (*Western States*, *supra*, 57 Cal.4th at 425.) In making this determination, CARB must "assess the potential for adverse economic impact on California business enterprises and individuals, avoiding the imposition of unnecessary or unreasonable regulations or reporting, recordkeeping, or compliance requirements" through the preparation of "a standardized regulatory impact analysis," which "shall address" several factors including the "creation or elimination of jobs within the state," the "creation of new businesses or the elimination of existing businesses within the state," and the "competitive advantages or disadvantages for businesses currently doing business within the state." (Govt. Code, § 11346.5, subd. (c)(1).) CARB must also describe "all cost impacts . . . that a representative private person or business would necessarily incur in reasonable compliance with the proposed action," (Govt. Code, § 11346.5, subd. (a)(9)), a summary of the conclusions of the standardized regulatory impact analysis, (*id.*, subd. (a)(10)); and a summary of impacts on small businesses. (Cal. Code Regs., tit. 1, § 4.)

While the initial determination need not be "all-inclusive," it must evaluate adverse economic impacts that are "significant," and make an "initial showing" that there was at least "some factual basis for [its] decision." (*Western States*, *supra*, 57 Cal.4th at 428-29.) "Once the initial assessment is complete, 'affected parties may comment on the agency's initial determination and supply additional information relevant to the issue,'" and CARB "must respond to the public comments and either change its proposal in response to the comments or explain why it has not." (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *Western States*, *supra*, 57 Cal.4th at 429].)

If CARB ultimately "decides to enact the regulation" following the public comment period, "it must prepare a 'final statement of reasons' for adopting the proposed rule, which must include

'[a]n update of the information contained in the initial statement of reasons.'" (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *Western States*, *supra*, 57 Cal.4th at 426].) "This final statement "must also include '[a] summary of each objection or recommendation made regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change.'" (*Id.* [quoting *Western States*, *supra*, 57 Cal.4th at 426].)

A. The Economic Analysis Fails to Comply with the APA

As explained below, the ISOR fails to provide the public with adequate critical analysis of the Proposed Amendments' economic impacts, is fundamentally flawed, and is not based on substantial evidence.

1. The ISOR's cost estimates are flawed and unsupported by substantial evidence

According to the ISOR, the cost analysis is based on the original analysis for the ACF Regulation. (ISOR, p. 112.) However, as explained in WSTA's comments on the ACF Regulation, that cost analysis was deeply flawed and failed to account for real world data regarding known cost impacts, among other things. (See generally Exhibit A.) Because the ISOR relies extensively on the economic and environmental analyses performed for the ACF Regulation, which were themselves deeply flawed (and being challenged in pending litigation), WSTA hereby incorporates the entirety of its comments on the ACF Regulation in relation to the Proposed Amendments. To the extent CARB is relying on analyses performed for the ACF Regulation for the Proposed Amendments, WSTA's comments on the ACF Regulation apply with equal force to the Proposed Amendments.

In fact, the cost estimates prepared for the ACF Regulation are even less defensible now than they were when the ACF Regulation was adopted. As explained in the attached technical review prepared by Sean R. Edgar of CleanFleets.net, recent studies have provided even more evidence that ZEVs are not cost efficient and can increase fleet costs up to 114% due to the operational inefficiencies and upfront costs. (See Exhibit B, p. 2; Exhibit C, p. 9.) Furthermore, because the SLG provisions represent just 30% of the total ZEVs that were mandated by the ACF Regulation, manufacturers will be forced to spread ZEV-related research and development costs incurred in anticipation of the entire ACF Regulation across fewer vehicles, resulting in higher retail prices. Indeed, a recent study by the International Council on Clean Transportation demonstrated that ZEV upfront costs are increasing dramatically, contrary to the ISOR's forecast of lower ZEV prices. (See Exhibit B, p. 3; Exhibit D, pp. 29–30.)

Similarly, the ISOR claims that "[d]eclining battery and component costs, in addition to economies of scale, are expected to lower the incremental costs of ZEVs as the market expands." (ISOR, p. 122.) However, this is contrary to CARB's own findings. The September 25, 2024,

Clean Truck Availability Analysis found that costs for "California zero-emission trucks have increased in price by an average of $86,512 since 2021-22." (Exhibit E, p. 10.)

The ISOR relies on the Clean Truck Partnership ("CTP") to justify its economic analysis, (see, e.g., ISOR, pp. 11–12, 141), but the CTP's signatories are now seeking to invalidate the agreement. (See generally Exhibit F.) Further, the United States Department of Justice has publicly stated that the CTP is preempted by the federal Clean Air Act and initiated litigation to prevent its enforcement. (See Exhibit G.) The CTP's unenforceability further undermines CARB's cost estimates. The ISOR contains no evidence to support the illogical assumption that a market with fewer vehicles for sale would drive the increase in research and development necessary to achieve the projected decline in prices.

Additionally, the ISOR repeatedly touts the "continued growth of the ZEV market in coming years, claiming this will "expand the options for utility-specialized vehicles." (ISOR, p. 26; see also *id.* pp. 28 [stating that "staff expects more . . . configurations to become available in the future" as "the market continue to expand"], 28–29 [stating that "staff anticipate that more specialty FCEVs will become commercially available in the upcoming years as the technology expands"], 29 [stating that "technology is developing and will greatly increase the options available to public agencies"].) However, the only evidence cited to support these assertions are claims that some "manufacturers have announced significant investments," (*id.* at 26), while others "are evaluating certification of NZEVs, which may lead to future products." (*Id.* at 29.) The ISOR's repeated suggestion that these preliminary steps will "greatly increase the options available to public agencies" in the coming years is not only highly speculative, but also completely fails to address or acknowledge the potential for a market contraction as a result of the ACT Regulation and CTP being preempted by the federal Clean Air Act. (See Exhibits F, G.)

2. The ISOR fails to consider significant economic impacts to businesses

The ISOR claims businesses that took steps to comply with the ACF Regulation did so "voluntarily" because "CARB widely circulated a broad notice to affected fleets of CARB's decision to delay any enforcement action on the drayage or high priority fleet" requirements and advised regulated entities "they could voluntarily request extensions and exemptions under the ACF regulation until U.S. EPA granted a preemption waiver or determined a waiver is not necessary." (ISOR, pp. 111–112.) This is incorrect.

CARB expressly reserved its rights to enforce the ACF Regulation during the period of non-enforcement, thereby retaining the threat of civil penalties for any non-compliance. In the referenced notice, CARB expressly stated that it "reserve[d] ***all of its rights to enforce the ACF regulation in full for any period for which a waiver is granted*** or for which a waiver is determined to be unnecessary, including (but not limited to) the right to remove non-compliant vehicles added to fleets ***while the waiver request is pending***." (Exhibit H, p. 1 [emphasis added].) Because CARB reserved its right to enforce the ACF Regulation in full during the period of non-enforcement, regulated entities were compelled to incur costs to comply with the ACF Regulation or face the

prospect of steep civil penalties when the enforcement stay was lifted. To suggest these costs were incurred "voluntarily" simply because CARB promised to ***delay*** its exercise of enforcement authority is incorrect and highly misleading. The ISOR itself recognizes the coercive effect the ACF Regulation has had, and continues to have, on regulated entities. (See ISOR, pp. 15–16 [stating that Proposed Repeal is necessary because "keeping such elements in place may cause confusion and uncertainty for entities that are currently subject to those requirements because they will be unsure if they must comply with those requirements now or in the future"].) Costs incurred by regulated entities to comply with the ACF Regulation must be analyzed and discussed in the ISOR.

In addition, while the ISOR recognizes the SLG Amendments may result in costs to private fleets due to "manufacturers subject to the ACT regulation [] need[ing] to shift sales from the public agency utility fleet to a private fleet" when the new exemptions are claimed, no attempt is made to analyze these costs. But these costs can be significant. According to CARB's Clean Truck Availability Analysis, many manufacturers have begun implementing a "rigid policy to require each dealer or upfitter to purchase a certain number of ZEVs from the manufacturer before they can get any ICEs whether or not the manufacturer offers ZEVs in the market segment the dealer specializes," with some manufacturers insisting on the purchase of one ZEV for every ICE. (Exhibit E, p. 4.) This practice, known as "ratioing," is already widespread and is likely to increase in the future. (*Id.* at 4–5.)

Furthermore, it is likely that SLG fleets will increase user rates to cover the higher upfront costs they will be forced to incur, and these increased rates will inevitably be paid by the businesses and individuals that the SLG fleets serve. The ISOR contains no analysis of these costs.

3. No substantial evidence supports the ISOR's claims regarding the Proposed Amendments' purported benefits.

The ISOR acknowledges that "the Proposed Repeal means that all of the emissions benefits and health benefits originally estimated in . . . the 2022 ISOR for the Advanced Clean Fleets regulation would not be achieved." (ISOR, p. 80.) According to the 2022 ISOR, these benefits included approximately 420,000 tons of reduced NOx emissions, approximately 8,600 tons of reduced PM 2.5 emissions, and approximately 307 million metric tons of reduced CO2 emissions. (2022 ISOR, p. 148.) The elimination of these emissions reductions dwarfs the paltry emission reductions resulting from the SLG Amendments. (Compare *id.* with ISOR, p. 89, Table 8.) Nevertheless, the ISOR goes on to claim that the "Proposed SLG Amendments are expected to reduce NOx and PM 2.5 emissions . . . resulting in health benefits," such as "reduced cases of asthma onset and symptoms" among children. (ISOR, p. 80–82.)

Similarly, the 2022 ISOR claimed the ACF Regulation would avoid approximately 5,000 cardiopulmonary deaths, (2022 ISOR, p. 120), approximately $57.8 billion in healthcare costs, (*id.* at 123), and approximately $36.4 billion in carbon social costs, (*id.* at 134)—all primarily among low-income and disadvantaged communities. (*Id.* at 137–138.) The 2025 ISOR acknowledges

that "all of the[se] emissions benefits and health benefits" will "not be achieved," (ISOR, p. 80), but then goes on to claim $8,797 in "total statewide health benefits [] from criteria emissions." (*Id.* at 86.)

The ISOR's attempt to compartmentalize the impacts of the Proposed Repeal and the SLG Amendments is, at best, highly misleading. The ISOR does not even attempt to estimate the net emissions and health benefits after accounting for the lost benefits resulting from the Proposed Repeal. Presumably, this is because such an analysis would show the SLG Amendments' purported "heath benefits" are entirely illusory. However, CARB cannot compartmentalize various aspects of the proposed action to mask its net impacts. The APA requires analysis of the "proposed action" and, in this case, the "proposed action" includes the Proposed Repeal and the SLG Amendments. (See Govt. Code, § 11346.5; Notice of Public Hearing to Consider Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulation, pp. 2–4.) The ISOR's failure to acknowledge or analyze the net effect of the various components comprising the proposed action is arbitrary and capricious, and contrary to the letter and spirit of the APA.

III

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires agencies to "refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects." (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 [citing *Mountain Lion Found. v. Fish & Game Comm.* (1997) 16 Cal.4th 105, 134].) "The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish. This examination is intended to provide the fullest information reasonably available upon which the decision makers and the public they serve can rely in determining whether or not to start the project at all, not merely to decide whether to finish it." (*NRDC v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271.)

Some projects that would otherwise be subject to CEQA are exempted by statute ("statutory exemptions") while others are exempted by the CEQA Guidelines ("categorical exemptions"). Unlike statutory exemptions, "which are 'absolute' and not subject to exceptions, categorical exemptions are subject to exceptions in the Guidelines." (*Save Our Schools v. Barstow Unified School Dist. Bd. of Education* (2015) 240 Cal.App.4th 128, 140.) Additionally, "[c]ategorical exemptions are strictly construed, 'in order to afford the fullest possible environmental protection,'" (*id.* [quoting *Save Our Carmel River v. Monterey Peninsula Water Management District* (2006) 141 Cal.App.4th 677, 697), and "will not be unreasonably expanded beyond their terms." (*California Farm Bureau Federation v. California Wildlife Conservation Bd.* (2006) 143 Cal.App.4th 173, 187.)

CARB must respond to the issues raised by the public by providing a "good faith, reasoned analysis in response, and at a level of detail that matches the level of detail in the comment." (CEQA Guidelines, § 15088(c); *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.) If CARB disagrees with the "recommendations and objections raised in the comments," the "recommendations and objections" "must be addressed in detail," with the agency "giving reasons why specific comments and suggestions were not accepted." (CEQA Guidelines, § 15088(d).) "Conclusory statements unsupported by factual information will not suffice." (*Id.*)

A. CARB's Cannot Evade Its Environmental Review Obligations Through Reliance on Statutory and Categorical Exemptions

In an effort to yet again side-step its responsibility to adequately inform the public of the environmental consequences of its action, CARB staff has offered a jumble of incoherent and unsupported CEQA theories, none of which are applicable here or supported by the record. In fact, few of the cases cited by CARB even stand for the proposition cited, and one appears not to exist at all.

1. CARB must clarify how it is relying on the various exemptions cited

The ISOR repeatedly states that exemptions apply to the entire CEQA "project" without distinguishing between the various individual components of the Proposed Amendments. (See ISOR, pp. 103, 104, 105.) To the extent CARB intends to rely on a patchwork of exemptions, with each covering some, but not all, of the CEQA "project," this is improper. (See *Association for a Cleaner Environment v. Yosemite Community College Dist.* (2004) 116 Cal.App.4th 629, 640 [holding that lead agency's reliance on categorical exemption "fails because it is premised on an underinclusive view of the activities constituting the project" and "does not cover the whole of the action that constitutes the project"].)

Even if it were permissible, CARB fails to identify the specific aspects of the Proposed Amendments it believes the exemption to cover and those which it recognizes are beyond its scope. The public and decisionmakers should not be forced to guess the extent to which CARB intends to rely on particular exemptions, particularly given the agency's novel applications in this case and the lack of explanatory support for the authorities relied upon. By failing to explain the extent to which CARB intends to rely on each of the various exemptions, CARB is depriving the public and decisionmakers of a meaningful opportunity to comment on the agency's exemption determinations.

2. The Project is not statutorily exempt from CEQA as a "specific action necessary to prevent or mitigate an emergency"

Public Resources Code section 21080, subdivision (b)(4) exempts "[s]pecific actions necessary to prevent or mitigate an emergency." The purported "emergency" asserted by CARB is that "if CARB finds that a suitable zero-emission vehicle replacement is not available and the

lack of a suitable zero-emission vehicle replacement would result in a significant risk to public health, safety, or welfare, effective October 1, 2024, and Proposed SLG Amendments set for September 25, 2025, which support reliability during wildfires and disasters." This assertion is unintelligible and does not pass the red face test.

CEQA defines "emergency" as "a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. 'Emergency' includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage." (Pub. Res. Code, § 21060.3.) For the exemption to be applicable, "the administrative record must disclose substantial evidence of every element of the contended exemption as defined in section 21060.3." (*Western Mun. Water Dist. v. Superior Court* (1986) 187 Cal.App.3d 1104, 1113.)

There is no showing that providing additional compliance options to emergency services providers would in any way prevent a specific, ***imminent*** disaster or emergency. Additionally, the Project "is not limited to those specific actions 'necessary to prevent or mitigate an emergency' as required by the exemption contained in Public Resources Code section 21080, subdivision (b)(4)." (*Castaic Lake Water Agency v. City of Santa Clarita* (1995) 41 Cal.App.4th 1257, 1267 [quoting Pub. Res. Code, § 21080, subd. (b)(4)].) Nor is there any showing that a mandate concerning local agency vehicle turnover could somehow "prevent" a "sudden, unexpected occurrence." (Pub. Res. Code, § 21060.3.) Indeed, if such actions were sufficient, then virtually any activity involving emergency service providers would be exempt from CEQA, which is plainly not the law. (See *Western Mun. Water Dist.*, *supra*, 187 Cal.App.3d at 1112 ["[I]t is difficult to imagine a large-scale public works project . . . which could not qualify for emergency exemption from an EIR on the grounds that it might ultimately mitigate the harms attendant on a major natural disaster. The result could hardly be intended by the careful drafting of the Legislature, and is unmistakably opposed to the policy of construing CEQA to afford the maximum possible protection of the environment."].)

Moreover, CARB's interpretation of the emergency exemption is at odds with its conclusions in other areas of the ISOR. First, the suggestion that the Proposed Amendments are needed to prevent or mitigate an imminent emergency strongly suggests the ACF Regulation imposed restrictions on local emergency service providers that exacerbate dangerous conditions associated with wildfires. However, the ACF EA did not acknowledge or analyze any such potential impacts. Further, the Proposed Amendments claimed public health benefits are extraordinarily modest, and inconsistent with any suggestion the Proposed Amendments are somehow necessary to forestall imminent danger. (See ISOR, Tables 4–7.)

WSTA is also concerned about the authorities provided by CARB in support of this argument. For example, "*Castaic Lake Water Agency v. City of Santa Clarita* (1998) 65

Cal.App.4th 1357" does not exist.[1] (ISOR, p. 102.) Moreover, the primary cases cited in the ISOR do not even concern emergencies or CEQA exemptions: *Napa Citizens for Honest Gov't v. Napa Cnty. Bd. of Supervisors* (2001) 91 Cal.app.4th 342, 356–359; *Sierra Club v. California Coastal Com.* (2005) 35 Cal.4th 839, 854–856; and *San Diego Navy Broadway Complex Coalition v. City of San Diego* (2010) 185 Cal.App.4th 924, 936–938.[2] In light of these very significant issues, WSTA is concerned this section, and perhaps others, may have been the product of AI hallucination.

In short, the emergency exemption simply cannot excuse CARB from performing environmental review of the Proposed Amendments.

3. The Project is not categorically exempt under the Class 7 or 8 categorical exemptions

Section 15307 of the Guidelines states:

> Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption.

(Guidelines, § 15307.)

This provision is inapplicable because the primary objective of the Proposed Amendments is not to maintain, restore, or enhance "natural resources," but rather to repeal portions of a regulation, expand compliance options for utility SLGs, and direct that certain hydrogen facilities get the benefit of LCFS credits. Nothing concerns the "maintenance, restoration, or enhancement of a natural resource . . . ." (*Id.*)

---

[1] There is no case with the pin cite of 65 Cal.App.4th 1357, and page 1357 of that reporter is within *Harris v. Civil Services Commission* (1998) 65 Cal.App.4th 1356. Moreover, while there is a reported 1995 case between the Castaic Lake Water Agency and the City of Santa Clarita that concerned the use of the emergency services exemption, the court in that case found the emergency services exception inapplicable, finding the exemption available only where a threat to human life was imminent. (*Castaic Lake Water Agency v. City of Santa Clarita* (1995) 41 Cal.App.4th 1257, 1267–1268 ["For example, if a dam is ready to burst or a fire is raging out of control and human life is threatened as a result of delaying a project decision, application of the emergency exemption would be proper."].)

[2] The only cited case that even mentions the emergency services exemption is *CREED-21 v. City of San Diego* (2015) 234 Cal.App.4th 488, 505, but in that case the Petitioner's counsel below specifically argued "***no one disputes the emergency or the emergency exemption***. That was totally fine, totally appropriate." (*Id.* [emphasis added].)

But even if CARB could argue the Proposed Amendments benefit "natural resources"—and there is no evidence they do—the exemption is inapplicable where an action strengthens some protections but reduces others. (See, e.g., *Save Our Big Trees v. City of Santa Cruz* (2015) 241 Cal.App.4th 694, 710-12; see also *Dunn-Edwards Corp. v. Bay Area Air Quality Mgmt. Dist.* (1992) 9 Cal.App.4th 644, 656-58, *disapproved on other grounds by Western States Petroleum Ass'n v. Superior Court* (1995) 9 Cal.4th 559.) As noted above, the Proposed Amendments repeal some portions of the ACF Regulation, and expand compliance options for certain SLG fleets. Moreover, CARB itself recognizes the Proposed Amendments will result in the construction of new and modified facilities that will result in potentially significant environmental effects, which CARB has not quantified to date, even though it is feasible to do so. (See Exhibit A; ISOR, pp. 95, 97.) And those negative effects dwarf the alleged benefits of the Proposed Amendments, which are admittedly virtually imperceptible, providing a ***total*** public health benefit quantified at ***just under $9,000*** for the ***entire life of the Proposed Amendments***. (See ISOR, p. 86.) These facts completely preclude the application of the Class 7 categorical exemption to the Proposed Amendments.

Section 15397 of the Guidelines states:

> Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

(Guidelines, § 15308.)

Similar to the Class 7 exemption, the Class 8 exemption is inapplicable because the primary objective of the Project is not environmental protection, but rather to repeal portions of the ACF Regulation, to provide relief to certain segments of SLG fleets, and to give credits to certain hydrogen facilities. (See ISOR, pp. 7–8.)

The mere possibility of environmental benefits does not exempt a project from review. (See *Dunn-Edwards Corp. v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th 644, 656–58 [finding agency could not rely on Class 8 exemption for action tightening standards for volatile organic carbon (VOC) architectural coatings where industry groups provided evidence VOCs would increase due to the need for increased coatings of paint]; see also *Save Our Big Trees v. City of Santa Cruz* (2015) 241 Cal.App.4th 694, 710–12 [invalidating ordinance designed to protect heritage trees where aspects of ordinance could result in greater impacts to tree resources].) A Class 8 exemption is inapplicable where a regulation designed to reduce one environmental effect has the capability of causing other adverse environmental effects. (See, e.g., *Calif. Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist.* (2009) 178 Cal.App.4th 1225, 1246-47 [use of Class 8 exemption for regulation requiring roadway paving to offset air quality

emissions was inapplicable because there was no evidence supporting the agency's claim that no significant adverse impacts associated with road paving would occur].) The Proposed Amendments repeal regulations that CARB claimed were necessary to protect the environment. (2022 ISOR, pp. 100–117.) Further, the ISOR admits the Proposed Amendments will cause significant environmental effects resulting from the construction of new and modified facilities, which CARB has yet to quantify. (ISOR, pp. 95, 97.) Moreover, as noted above, the alleged benefits of the Proposed Amendments are essentially imperceptible. Under these circumstances, the Proposed Amendments are plainly capable of causing adverse environmental effects and CARB cannot rely on the benefits found under the ACF EA.

Neither the Class 7 nor the Class 8 exemption applies to the Proposed Amendments. CARB must comply with its obligations under CEQA and conduct environmental review prior to approving the Proposed Amendments.

4. The Project is not categorically exempt under the Class 1 exemption for existing facilities

Section 15301 of the CEQA Guidelines provides an exemption for "operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use." This exemption is inapplicable on its face. The Proposed Amendments include the repeal of the Drayage and HPF components of the ACF Regulation, additional compliance options for certain SLG fleets, and LCFS credit incentives for certain hydrogen facilities. (See ISOR, pp. 7–8.) The Proposed Amendments are not a project that seeks to permit an existing facility, nor in any way similar to such a project. (*California Farm Bureau Federation v. California Wildlife Conservation Bd.* (2006) 143 Cal.App.4th 173, 189 [activities for which categorical exemption is claimed must be "similar in kind to the listed examples" in the Guidelines].)

In fact, the reliance on this exemption is absurd because the ISOR specifically notes the Proposed Amendments will continue to incent the construction of new facilities without the corresponding emissions reductions the ACF EA claimed to offset the environmental impacts of those activities. (See ISOR, pp. 95 [recognizing "potentially significant adverse impacts . . . due to short-term, construction-related emissions"], 97 [stating that the "proposed modifications [to the ACF regulation] do not change the type of facilities or projects that may be developed in response to the existing ACF regulation, nor do staff anticipate that they will alter the compliance responses by regulated entities covered by the program."].)

Furthermore, the cases cited in support of this exemption are unrelated to the propositions for which the cases are cited and no explanation is provided. Neither *Save the Plastic Bag Coal. v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 174–176, nor *San Lorenzo Valley Cmty. Advocates v. San Lorenzo Valley Unified Sch. Dist.* (2006) 139 Cal.App.4th 1356, 1380–1382, concern Class 1 exemptions.

5. The Project is not categorically exempt under the Class 11 exemption for accessory structures

Section 15311 of the Guidelines exempts "construction, or placement of minor structures accessory to (appurtenant to) existing commercial, industrial, or institutional facilities," such as on-premise signs, small parking lots, or the placement of seasonal or temporary use items. In the ISOR, CARB claims the "Proposed LCFS Amendments enhance crediting for hydrogen stations which could result in minor alterations to existing facilities" and therefore the "Project is exempt as minor accessory additions." (ISOR, p. 105.) This is entirely inapplicable to the CEQA "project," which concerns the repeal of regulations, additional compliance options for certain SLG fleets, and LCFS credits for certain hydrogen facilities. (See ISOR, pp. 7–8.)

Here again, the cases cited to support the Class 11 exemption do not support CARB's conclusions and do not concern the Class 11 exemption. *Citizens for Envtl. Responsibility v. State of Cal.* (2015) 242 Cal.App.4th 555, 573–575 and *Don't Cell Our Parks v. City of San Diego* (2018) 21 Cal.App.5th 338, 351–353 do not even mention the Class 11 exemption or Section 15311 of the Guidelines.

6. Even if one or more categorical exemptions did apply—and none do—unusual circumstances require environmental review

Categorical exemptions are not absolute. Rather, even where an exemption facially applies, there are several exceptions that require environmental review. (Guidelines, § 15300.2.) The "unusual circumstances exception," for instance, prohibits agencies from relying upon categorical exemptions "where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." (Guidelines, § 15300.2, subd. (c).) Indeed, courts have repeatedly declined to allow agencies to rely upon categorical exemptions for projects where the evidence shows a ***possibility*** that a potentially significant impact could result. (*Dunn-Edwards*, *supra*, 9 Cal.App.4th at 656-58; see also *Save Our Big Trees*, *supra*, 241 Cal.App.4th at 710-12.)

The Proposed Amendments repeal portions of the ACF Regulation that CARB asserted provide an emissions benefit. (See 2022 ISOR, pp. 120, 134, 137–138, 148.) The ISOR likewise suggests the Proposed Amendments will continue to incent the construction of various new and expanded facilities to provide the infrastructure to support the SLG fleets, (see ISOR, pp. 95, 97), despite declining repeatedly to quantify those impacts. (See Exhibit A, pp. 20–27.) And the alleged benefits of the Proposed Amendments provide no offset, as those benefits are essentially imperceptible. (See *supra* at § II.A.3.)

CARB asserts a "repeal" is not an unusual circumstance. (ISOR, pp. 104–105.) But CARB does not support that conclusion with substantial evidence. To the contrary, the Proposed Amendments seek to eliminate emissions reductions, reducing the benefits to an amount that even the ISOR suggests is imperceptible. (See *id.* at 80 ["[T]he effect of the proposed changes including

the Proposed Repeal means that all of the emissions benefits and health benefits originally estimated in . . . the 2022 ISOR for the Advanced Clean Fleets regulation would not be achieved."].) And while the Amendments have virtually no benefits, they will continue to incent the construction of new and expanded facilities to support the SLG fleets, resulting in environmental impacts that have never been quantified or analyzed. (See ISOR, pp. 95, 97.) Enacting a regulation with no public benefit, and substantial environmental and economic costs, is plainly unusual. To the extent CARB could propose other measures to achieve similar emissions reductions, the contention is speculative. Even if CARB had definite plans to propose other emissions reduction measures to offset the elimination of the claimed benefits of the ACF Regulation, a reasonable possibility of significant environmental impacts nevertheless exists.

The ISOR claims "[t]here are no 'cumulative impacts' under section 15300.2(b), as the amendments are part of a coordinated emission reduction strategy." (ISOR, p. 104.) This is inaccurate. The Project will eliminate the emissions reductions claimed in support of the ACF Regulation, including reduced NOx emissions of approximately 420,000 tons, reduced PM 2.5 emissions of approximately 8,600 tons, and reduced CO2 emissions of approximately 307,000,000 metric tons. (2022 ISOR, p. 148.) In the 2022 State Strategy for the State Implementation Plan, CARB expressly stated it "would undertake the actions detailed for" the ACF Regulation, and that if staff were to recommend that the board not pursue the ACF Regulation, staff's recommendation "***would include a demonstration that the overall aggregate commitment will be achieved despite that rule not being pursued***." (2022 State Strategy for State Implementation Plan, p. 32.[3]) No such demonstration has been made and therefore the Proposed Amendments are inconsistent with the applicable air quality plan. Further, CARB's conclusory assertion that the Proposed Amendments are "part of a coordinated emission reduction strategy" is inaccurate and does not relieve the agency of its obligation to perform environmental review in accordance with CEQA. (ISOR, p. 104.)

Further, no substantial evidence supports CARB's conclusion that the cumulative impact of the Proposed Repeal, combined with the impact of Congress' rescission of Clean Air Act waivers for the ACT and Omnibus Regulations, (see ISOR, pp. 104–105), and the unenforceability of the CTP, (see Exhibits F, G), is not significant. Given that CARB has not shown how the overall aggregate commitment in the 2022 State Strategy will be achieved, it is reasonably foreseeable the anticipated emissions reductions of those programs will not be achieved and that the incremental effect of the Proposed Repeal will be cumulatively considerable. (See Guidelines, §§ 15065, subd. (c), 15355; see also Kostka & Zischke, Practice Under the California Environmental Quality Act ["Kostka"], § 5.73 ["None of the categorical exemptions applies when the cumulative impact of successive projects of the same type in the same place over time is significant."].) The combined

[3] Available at https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf (last accessed Sept. 10, 2025). This document is being submitted to CARB in connection with the adoption of the Proposed Amendments pursuant to Government Code section 11347.3, subdivision (b)(6). WSTA requests that this document be included in its entirety in the APA rulemaking file and the CEQA administrative record and will provide a copy of the document in an appropriate format if requested to do so. (See *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 746; *Consolidated Irrigation Dist. v. Superior Court* (2012) 205 Cal.App.4th 697, 723.)

effect of these actions is likely to be significant. Among other things, it is likely to impair or prevent the state's ability to achieve air quality goals in non-attainment areas, as those measures were deemed necessary to achieve the state's air quality when they were approved and new programs capable of achieving similar emissions reductions have not been developed or approved.

7. The "common sense" exemption is inapplicable

Under the "common sense" exemption, an activity is not subject to CEQA "[w]here it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment . . . ." (CEQA Guidelines, § 15061, subd. (b)(3).) That is, it applies only to "obviously exempt" projects. (*Myers v. Board of Supers.* (1976) 58 Cal.App.3d 413, 425.) The "common sense" exemption must be supported by substantial evidence. (See *CREED-21 v. City of San Diego* (2015) 234 Cal.App.4th 488, 510-11, 513.) And if "legitimate questions [are] raised about the possible environmental impacts of the [project], the [agency has] the burden to elucidate the facts that justified its invocation of [the] common sense exemption." (*Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 387.)

The ISOR acknowledges "the effect of the proposed changes including the Proposed Repeal means that all of the emissions benefits and health benefits originally estimated in . . . the 2022 ISOR for the Advanced Clean Fleets regulation would not be achieved." (ISOR, p. 80.) That the Proposed Amendments will eliminate all the ACF Regulation's purported benefits is by itself sufficient to conclude they are not "obviously exempt" from CEQA. (*Myers*, *supra*, 58 Cal.App.3d at 425.) CARB's apparent reliance on a patchwork of exemptions never before applied to a project of this type based on unsupported legal theories further evidences the Proposed Amendments are not "obviously exempt" from CEQA. (*Id.*) Additionally, while the Proposed Amendments have virtually no emissions benefits, they will continue to incent the construction of various new and expanded facilities to provide the infrastructure to support the SLG fleets, resulting in environmental impacts that have never been quantified or analyzed. (ISOR, pp. 95, 97.) Under these circumstances, CARB cannot plausibly argue that "it can be seen with certainty that there is no possibility" the Proposed Amendments may have a significant environmental impact. (Guidelines, § 15061, subd. (b)(3).)

B. CARB Cannot Avoid Its Environmental Review Obligations Through Reference to Prior Environmental Documents

CARB's reliance on the ACF EA and the LCFS EA is facially absurd. A lead agency may reuse an EIR prepared for an earlier project for another project only if the "circumstances of the projects are essentially the same" and none of the "conditions described in Section 15162 would require preparation of a subsequent or supplemental EIR." (Guidelines, § 15153, subds. (a), (d).) Neither of these requirements are satisfied here.

///

1. The circumstances of the ACF Regulation, the LCFS Regulation, and the Proposed Amendments are not "essentially the same"

The circumstances of the LCFS Regulation and the ACF Regulation are not "essentially the same." (Guidelines, § 15153, subd. (a).) The LCFS Regulation and the ACF Regulation are different regulatory programs with different regulatory objectives, different regulatory mechanisms, different regulated communities, and different environmental impacts. As such, CARB cannot rely on the LCFS EA to amend or repeal the ACF Regulation, nor can it rely on the ACF EA to amend the LCFS Regulation.

Similarly, the "circumstances" surrounding the Proposed Repeal and SLG Amendments are very different from the circumstances surrounding the adoption of the ACF Regulation—as are the circumstances surrounding the LCFS Amendments and the adoption of the LCFS Regulation. The LCFS EA and the ACF EA were certified ***before*** Congress' rescission of Clean Air Act waivers for the ACT and Omnibus Regulations and ***before*** CARB withdrew its ACF waiver request. (See ISOR, pp. 104–105.) Any suggestion the CTP mitigates these changed circumstances is speculative. (See Exhibits D, E.) At a minimum, it is reasonably foreseeable the CTP will be held unenforceable. (See *id.*) Further, because CARB has not demonstrated how the overall aggregate commitment in the 2022 State Strategy will be achieved without the emissions reductions anticipated from the ACT Regulation, the Omnibus Regulation, and the ACF Regulation, it is likewise reasonably foreseeable that CARB will be unable to develop enforceable regulatory strategies to achieve emissions reductions substantially equivalent to those programs.

2. A subsequent environmental document is required because major revisions are needed to address changed circumstances and significant new information

A subsequent EIR is required if significant new information or substantial changes in the project or surrounding circumstances necessitate major revisions to a prior EIR. (See *Moss v. County of Humboldt* (2008) 162 Cal.App.4th 1041, 1057; see Guidelines, § 15162, subd. (a).) That is the case here.

Public Resources Code section 21166 requires the preparation of a subsequent or supplemental environmental impact report where "[s]ubstantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report" or where "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete becomes available." Both of these conditions are applicable here and therefore CEQA requires CARB to prepare a subsequent environmental document.[4]

[4] Although CARB prepared the ACF EA pursuant to its certified regulatory program, it remains subject section 21166 of CEQA. "A certified regulatory program remains subject to the provisions of CEQA outside the scope of the exemption provided by subdivision (c) of section 21080.5." (*POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 714.) Section 21080.5, subdivision (c) exempts certified regulatory programs from "Chapter 3

"Section 21166 is intended to provide a balance against the burdens created by the environmental review process and to accord a reasonable measure of finality and certainty to the results achieved." (*Bowman v. City of Petaluma* (1986) 185 Cal.App.3d 1065, 1074.) It "comes into play precisely because in-depth review has already occurred" and requires consideration of "whether circumstances have changed enough to justify repeating a substantial portion of the process." (*Martis Camp Community Association v. County of Placer* (2020) 53 Cal.App.5th 569, 604 [internal quotations omitted]; *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1051. Thus, "[i]f one of the conditions described in section 21166 applies, the lead agency ***must*** prepare either a subsequent EIR or a supplemental EIR." (*Martis Camp Community Association v. County of Placer* (2020) 53 Cal.App.5th 569, 604 [emphasis added].)

Significant new information and substantial changes in the circumstances under which the Proposed Amendments will be undertaken necessitate major revisions to the environmental document, including (i) President Trump signing into law House Joint Resolutions 87, 88, and 89 providing congressional disapproval of U.S. EPA's Clean Air Act preemption waivers for California's Advanced Clean Cars II, Advanced Clean Trucks, and Heavy Duty Omnibus programs; (ii) CARB's decision not to enforce the ACF Regulation's HPF, Drayage, or vehicle sales requirement following the ACF Regulation's adoption; (iii) CARB's withdrawal of the request for an EPA preemption waiver for the ACF Regulation; (iv) the initiation of litigation by the U.S. Justice Department and various CTP signatories to invalidate the CTP under the federal Supremacy Clause; and (v) CARB's proposal to repeal the HPF, Drayage, and vehicle sales requirement due to concerns regarding its ability to obtain an EPA Clean Air Act preemption waiver.

These developments drastically alter the baseline environmental conditions as well as the potential environmental impacts that may result from the Proposed Amendments and have not been adequately analyzed. In our prior comments, we raised concerns about the fact that the emissions benefits of the ACF Regulation were quantified with specificity, but the negative environmental impacts associated with the infrastructure and new/expanded facilities needed to accommodate ZEVs were deemed to be significant and unavoidable, but only assessed at the qualitative level. Thus, the ACF EA concluded that qualitatively-analyzed adverse impacts resulting from the ACF Regulation would be offset by quantitatively-analyzed purported emissions reductions and therefore that air quality, energy demand, and greenhouse gas emissions and climate change would all experience a ***net beneficial impact***. (See ACF EA, Appx. B.) Similarly, the ACF EA concluded that qualitatively-analyzed impacts to aesthetics, agriculture and forestry resources, biological resources, and cultural resources, among others, were potentially ***significant and unavoidable***. (See *id.*) These findings were all premised on ***full*** implementation of the ACF

(commencing with Section 21100), Chapter 4 (commencing with Section 21150), and Section 21167." Section 21166 is located in Chapter 6 of CEQA. Accordingly, CARB's certified regulatory program is not exempt from section 21166 and a supplemental EA must be prepared if any of the conditions set forth in that provision are satisfied.

Regulation, which never occurred. Now CARB seeks to rescind the only portions of the ACF Regulation that purported to provide benefits, even though the Proposed Amendments will continue to require the construction of new and expanded facilities, a significant environmental impact that CARB has not been adequately analyzed.

Because the Proposed Amendments will remove the alleged benefits of the ACF Regulation, while at the same time furthering the alleged detriments that would have been offset by the benefits, CARB cannot claim Guidelines section 15162 prohibits the preparation of a subsequent environmental document. On the contrary, because significant new information and substantial changes in the circumstances under which the Proposed Amendments will be undertaken show a significant likelihood of new or different environmental impacts than analyzed in the ACF EA, Guidelines section 15162 requires CARB to prepare a subsequent environmental document. (See Guidelines, § 15162, subd. (a).)

3. A supplemental environmental document is not permitted because the necessary revisions are not minor

The Guidelines state that a supplemental, rather than a subsequent, EIR is permitted where the conditions described in Guidelines section 15162 would otherwise require a subsequent EIR but "only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation." (Guidelines, § 15163, subd. (a)(2).) Here, the significant new information and substantial changes in the circumstances under which the Proposed Amendments will be undertaken necessitate major revisions, including to the environmental and legal baseline, the impact analysis, the cumulative impact analysis, the significance determinations, and the mitigation measures. Accordingly, a subsequent EIR, rather than a supplemental EIR, must be prepared.

4. An addendum is not permitted because the conditions described in Guidelines section 15162 are satisfied

The Guidelines state that an addendum to a previously certified EIR may be prepared "if some changes or additions are necessary but none of the conditions described in [Guidelines] Section 15162 calling for preparation of a subsequent EIR have occurred." (Guidelines, § 15164, subd. (a).) As shown above, significant new information and substantial changes in the circumstances under which the Proposed Amendments will be undertaken necessitate major revisions to the environmental document. Therefore, an addendum is prohibited.

C. CARB's Environmental Analysis Is Inadequte and Contrary to CEQA

CARB's environmental analysis is extremely unclear and, to the extent it can be discerned, appears to be contrary to the letter and spirit of CEQA. CARB fails to provide crucial details regarding the baseline used for its environmental analysis. In addition, the analysis appears to be based on an improper hypothetical condition baseline rather than actual existing conditions

baselines. And its reliance on a deficient environmental document, the ACF Regulation Final EA, to analyze circumstances that were never considered in that document is fundamentally flawed.

1. CARB's discussion of baseline conditions is unclear

The ISOR states that for "the economic and emissions impacts of the Proposed SLG Amendments are evaluated against the business as usual (BAU) scenario each year for the analysis period from 2026 to 2029 for the public agency utility fleets only." (ISOR, p. 88.) According to the ISOR, "this baseline is referred to as the 'Section 100 Baseline' because it includes the non-discretionary AB 1594 changes approved by OAL on August 26, 2024, i.e., allows for more exemptions to purchase ICE vehicles for public agency utility fleets." (*Id.*) The Section 100 Baseline is "limited to years 2026-2029" and "reflects the same conditions as ACF's Adjusted Legal Baseline, which is a forward-looking, business-as-usual baseline used for APA, air quality and economic analysis purposes that includes the implementation of all existing State and federal laws and regulations on the vehicles the Proposed SLG Amendments would affect," including "ACT, Heavy Duty Omnibus, Clean Truck Check, and the . . . LCFS" regulations." (*Id.*) According to the ISOR, the "ACF Adjusted Legal Baseline" also includes the "HDI&M and the federal CTP regulations."

Although the ISOR states the Section 100 Baseline is used for "APA purposes," it is unclear what role, if any, it has in connection with CARB's environmental analysis for purposes of CEQA. (*Id.* at 88.) The environmental analysis refers to the "Adjusted Legal Baseline" in several places, (see *id.* at 107–108), which CARB states "reflects the same conditions" as the Section 100 Baseline. (*Id.* at 88.) However, CARB does not explain the differences between the Section 100 Baseline and the Adjusted Legal Baseline (even though the ISOR claims such an explanation is provided).[5] Nor does it explain how each is used in relation to the APA and CEQA analyses, or why these metrics are appropriate baselines for purposes of the APA and CEQA analyses. The lack of clarity regarding how the Section 100 Baseline and the Adjusted Legal Baseline factor into CARB's CEQA and APA analyses undermines informed decision-making and meaningful public participation and must be addressed.

2. CARB's assessment of potential impacts is based on an improper, hypothetical baseline

"A long line of Court of Appeal decisions holds, in similar terms, that the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework." (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 320–321; see *Riverwatch v. County of San Diego* (1999) 76

[5] The ISOR claims that "[t]he difference between ACF's Adjusted Legal Baseline and the Section 100 Baseline are discussed previously in Section 100 Changes." (ISOR, p. 88.) However, the Section 100 Changes section contains no reference to or discussion of the ACF Adjusted Legal Baseline or how it different from the Section 100 Baseline and WSTA was unable to locate any such discussion in the ISOR. (See *id.* at 13.)

Cal.App.4th 1428, 1452–1453; *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278–1280; *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357, 370–371.) In those cases, the courts consistently held that "the baseline for CEQA analysis must be the existing physical conditions in the affected area, that is, the real conditions on the ground, rather than the level of development or activity that *could* or *should* have been present according to a plan or regulation." (*Communities*, *supra*, 48 Cal.4th at 321 [citation modified] [emphasis in original].)

As explained above, the basis for CARB's environmental analysis is not clear. However, to the extent CARB's environmental analysis is based on the Adjusted Legal Baseline it improperly assumes hypothetical conditions that "*could* or *should* have been present" when evaluating potential environmental impacts rather than the "real conditions on the ground." (*Id.*)

CARB's analysis of potential impacts appears to be based on the "Adjusted Legal Baseline." (See ISOR, p. 108.) The Adjusted Legal Baseline includes emissions reductions claimed for the ACT Regulation, the HD Omnibus Regulation, the Clean Truck Check Regulation, the LCFS Regulation, the HDI&M Regulation, and the CTP. (See *id.* at 88, 92, 97 n. 142.) However, while CARB anticipated enforcing all these regulations when the ACF EA was certified, due to the withdrawal and recission of several Clean Air Act waivers, most of these programs are now unenforceable and cannot generate any emissions reductions. (See id. at 33–34, 80; see also Exhibits F, G.) Nevertheless, by relying on the Adjusted Legal Baseline, CARB relies on the emission reductions claimed for these unenforceable regulations to determine that no significant new impacts may occur. (See *id.* at 108 [stating that "[e]missions from implementing the SLG portion of the ACF regulation are not expected to increase above those shown as the Adjusted Legal Baseline" and therefore "the conclusions found [in] the Final ACF EA about the compliance responses for the ACF regulation or potential environmental impacts to any resource areas have not changed"].)

Whether the Proposed Amendments will cause emissions in excess of a hypothetical baseline based on unenforceable regulatory programs is immaterial. CARB must consider the potential for environmental impacts in relation to the "real conditions"—i.e., the environmental conditions that exist ***without*** CARB's unenforceable regulations. CARB cannot assume, without substantial supporting evidence, that equivalent emissions reduction programs will be implemented in the same time frame as the programs it previously adopted in expectation of Clean Air Act preemption waivers.

3. The ACF EA cannot be used to analyze potential impacts from the Proposed Amendments

The ACF EA's environmental analysis was problematic because it performed a detailed quantitative analysis of the ACF Regulation's purported emissions benefits but only a cursory qualitative analysis of its adverse emissions impacts, resulting in an inadequate analysis of

potentially significant adverse impacts and false and misleading comparison between the regulation's emissions reductions and emissions increases. (See Exhibit A, pp. 20–23.)

The ACF Regulation identified numerous potentially significant environmental impacts but ultimately concluded those impacts would be outweighed by the emissions reductions that would result from implementation of the ACF Regulation. The ACF Regulation EA found that "[a]ny net increase in ZEV sales would correspond to an increase in the manufacturing of new ZEVs or ZEV drivetrains which could include the construction of new manufacturing facilities or an increase in the intensity of ZEV component manufacturing at existing facilities." (ACF EA, pp. 17–18.) It also found that the ACF Regulation "would require the construction and operation of new infrastructure systems to support charging or refueling of ZEVs," "increase[] extraction of raw materials required to produce ZEVs such as lithium, platinum, or other elements," "increase demand for [ZEV] batteries" and "their production and manufacture, resulting in the likely expansion of and/or construction of new facilities" as well as "increased rates of disposal of these batteries and hydrogen-fuel cells." (*Id.* at 18–19.) Despite recognizing the potential for significant environmental impacts, the ACF EA nevertheless determined that "emission reductions resulting from the implementation of the Proposed Program are expected to ***far outweigh*** any long-term operational-related emissions increases and would result in high net positive overall health benefits over the life of the Proposed Program," concluding, for instance, that "long-term operational-related air quality impacts would be ***beneficial***." (ACF EA, p. 45 [emphasis added].) As WSTA explained in its comments, this approach failed to adequately analyze the ACF Regulation's potential adverse impacts. (See Exhibit A, pp. 20–27.)

According to the ISOR, "[t]he compliance responses from SLG fleets implementing the ACF regulation is expected to be a fraction of the magnitude of the compliance responses that would have occurred from the drayage, high priority and federal fleets portion of the ACF regulation, simply because of the dramatically lower number of affected vehicles required to be replaced with ZEV." (ISOR, p. 107.) Nevertheless, the ISOR concludes "[e]missions from implementing the SLG portion of the ACF regulation are not expected to increase above those shown as the Adjusted Legal Baseline." (*Id.* at 108.) Therefore, "the conclusions found [in] the Final ACF EA about the compliance responses for the ACF regulation or potential environmental impacts to any resource areas have not changed." (*Id.*) This is a non-sequitur. The ACF EA's conclusions regarding impacts to resources areas ***expressly relied on emissions reductions that the ISOR acknowledges will no longer occur.*** (See ISOR, p. 97.) Yet the ISOR also acknowledges that ***the potentially significant operational and construction-related impacts the ACF EA recognized will still occur***. (See ISOR, 95, 97; ACF EA, pp. 17–18.) Because these impacts have never been adequately analyzed, there is no substantial evidence for CARB's conclusion that potential environmental impacts have not changed from the conclusions in the ACF EA. The ACF EA did not analyze potential impacts associated with discreet portions of the ACF Regulations, such as the SLG provisions, and CARB's reliance on for that purpose is misguided and contrary to CEQA.

///

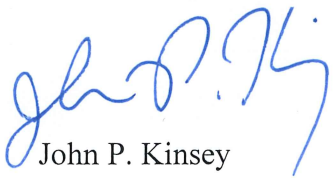
IV

CONCLUSION

CARB should not adopt the Proposed Amendments. CARB should instead continue to work with affected stakeholders to ensure the ACF Regulations will not adversely affect private individuals and small businesses or cause significant adverse environmental effects. If CARB intends to proceed with the Proposed Amendments, prior to taking any action to adopt the Proposed Amendments, CARB must revise its economic impact analysis in accordance with the requirements of the APA and must perform adequate environmental review in accordance with its obligations under CEQA.

Thank you for your consideration of these comments.

Respectfully submitted,



John P. Kinsey

Enclosures

EXHIBIT “A”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

WANGER JONES HELSLEY PC
ATTORNEYS

OLIVER W. WANGER
TIMOTHY JONES*
MICHAEL S. HELSLEY
RILEY C. WALTER
PATRICK D. TOOLE
SCOTT D. LAIRD
JOHN P. KINSEY
KURT F. VOTE
TROY T. EWELL
JAY A. CHRISTOFFERSON
MARISA L. BALCH
AMANDA G. HEBESHA**
PETER M. JONES†
STEVEN M. CRASS†
JEFFREY B. PAPE†
LAWRENCE M. ARTENIAN†
DEBORAH K. BOYETT
STEVEN K. VOTE
NICOLAS R. CARDELLA
GIULIO A. SANCHEZ
CHRISTOPHER A. LISIESKI***
BENJAMIN C. WEST
HUNTER C. CASTRO
STEPHANIE M. HOSMAN
RACHEL L. POMBO
NATHAN J. MARTIN
JOSHUA B. BAILEY

* Also admitted in Washington
** Also admitted in Idaho
*** Also admitted in Virginia
† Of Counsel

265 E. RIVER PARK CIRCLE, SUITE 310
FRESNO, CALIFORNIA 93720

MAILING ADDRESS
POST OFFICE BOX 28340
FRESNO, CALIFORNIA 93729

TELEPHONE
(559) 233-4800

FAX
(559) 233-9330

CLOVIS OFFICE:
642 Pollasky Avenue
Suite 100
Clovis, California 93612

OFFICE ADMINISTRATOR
LYNN M. HOFFMAN

Writer's E-Mail Address:
jkinsey@wjhattorneys.com

Website:
www.wjhattorneys.com

October 17, 2022

VIA ELECTRONIC SUBMISSION AND UNITED STATES MAIL

Honorable Chair Liane Randolph
Honorable Board Members
CALIFORNIA AIR RESOURCES BOARD
c/o Clerk of the Board
1001 "I" Street
Sacramento, CA 95814

Re: Comments on Proposed Advanced Clean Fleets Regulation

Dear Chair Randolph and Members of the California Air Resources Board:

I am submitting the following comments on behalf of California Trucking Association ("CTA") and Western States Trucking Association ("WSTA") concerning the California Air Resources Board's ("CARB") proposed Advanced Clean Fleets Regulation (the "ACF Regulation"). For the reasons stated below, CTA and WSTA request that CARB decline to adopt the ACF Regulation, and instead consider the alternatives they have proposed.

In support of these comments, I have enclosed reports from the following experts concerning the potential negative unintended economic and environmental consequences of the proposed ACF Regulation: (i) Julia Lester and Varalakshmi Jayaram of Ramboll, and (ii) Sean Edgar of CleanFleets. (See Exhibits "A" and "B.")

I.

INTRODUCTION

CARB should decline to adopt the ACF Regulation at its October 27, 2022, meeting for several reasons. As an initial matter, the ACF Regulation would be preempted by state and federal law. The ACF Regulation runs directly afoul of the Federal Aviation Administration Authorization Act of 1994 (the "FAAAA"), Pub. L. No. 103-305 § 601(c), 108 Stat. 1569, 1606 (codified, as amended, at 49 U.S.C. § 14501(c)), which prohibits states from "enact[ing] or enforce[ing] a law, regulation, or other provision having the force and effect of law related to a price, route, or service of any motor carrier . . . with respect to the transportation of property." (49 U.S.C. § 14501, subd. (c)(1).) Here, the ACF Regulation directly affects and relates to the pricing, routes, and service of motor carriers.

The ACF Regulation is also preempted by Clean Air Act ("CAA") Section 209(a). Although California under some circumstances may obtain a preemption waiver from EPA, that is not the case here, as the ACF Regulation does not meet the requirements of CAA Section 209(b). The ACF Regulation contravenes multiple provisions of the CAA by, *inter alia*, establishing classes or categories of vehicles based on impermissible factors, failing to make the required technical determinations, failing to adequately consider the cost of compliance within each period, and declining to include an appropriate lead-time for compliance. The ACF Regulation is also inconsistent with the Clean Fuel Fleet Program included in Section 246 of the CAA.

The adoption of the ACF Regulation would also violate the California Administrative Procedures Act, Govt. Code, § 11340, *et seq.* (the "APA"). CARB's economic analysis is incomplete because it does not include numerous factors that are required to assess the true cost of ownership. The economic analysis also impermissibly rejects alternatives proposed by CTA, WSTA, and others, even though those alternatives would spare fleets from the massive economic impacts of the ACF Regulation, while at the same time achieving its core objectives.

CARB's environmental analysis in support of the ACF Regulation is also fundamentally flawed. For instance, the Environmental Analysis ("EA") quantifies the alleged emissions benefits of the ACF Regulation in detail. At the same time, the EA includes only a qualitative assessment of the potential air quality and greenhouse gas impacts of the ACF regulation, preventing an apples-to-apples comparison between benefits and negative impacts. Moreover, for those significant and unavoidable impacts, the EA fails to identify or adopt adequate mitigation under CEQA, instead speculating on what other agencies may or may not do to avoid potentially significant impacts.

The EA's assessment of specific resources is also incomplete. The EA contains no assessment of lifecycle emissions for electricity, declines to assess the increase in vehicle miles traveled, and fails to assess impacts to the reliability of California's electric grid. As with the economic impact analysis in the Initial Statement of Reasons ("ISOR"), that EA's alternatives

analysis is fundamentally flawed because the project objectives are drafted to narrowly, essentially foreclosing the adoption of any alternative that does not include the deployment of EVs.

In addition, CARB has not complied with Section 57004 of the Health & Safety Code because there is no evidence that CARB has sought peer review of the scientific portions of the ACF Regulation. Further, CARB should decline to adopt the ACF Regulation on the ground that it is inconsistent with the useful life provisions of Section 43021 of the Health & Safety Code.

For each of the foregoing reasons, CARB should reject the ACF Regulation. CARB should, instead, either take no action or alternatively consider one of the alternatives to the ACF Regulation that they have previously submitted.

II.

THE ACF REGULATION IS PREEMPTED BY STATE AND FEDERAL LAW

A. The ACF Regulation Would Be Preempted by Federal Law Prohibiting State Laws and Regulations that Relate to the Prices, Routes, or Services of any Motor Carrier

The proposed ACF Regulation—or anything resembling it—would run afoul of the preemption provision of the FAAAA. The FAAAA prohibits states from "enact[ing] or enforce[ing] a law, regulation, or other provision having the force and effect of law related to a price, route, or service of any motor carrier . . . with respect to the transportation of property." (49 U.S.C. § 14501, subd. (c)(1).) Congress enacted that provision to advance the strong federal policy favoring a trucking industry shaped primarily by competitive market forces, against a background of uniform federal regulation, which it began with economic deregulation at the federal level in the Motor Carrier Act of 1980, Pub. L. No. 96-296, 94 Stat. 793. In the wake of federal deregulation, it became clear that Congress could not achieve its goals as long as burdensome and inconsistent *state* regulation of the trucking industry persisted. Concluding that state regulation of the trucking industry "causes significant inefficiencies," "increase[s] costs, and "inhibit[s] . . . innovation and technology," Congress enacted the FAAAA's preemption provision to ensure that "national and regional [motor] carriers attempting to conduct a standard way of doing business" would not be hindered by "[t]he sheer diversity of [state] regulatory schemes." (H.R. Conf. Rep. No, 103-677 at 87.) As the Supreme Court has observed, the broad preemptive scope of the FAAAA preemption provision reflected the concern that "state requirements could easily lead to a patchwork of state service-determining laws, rules, and regulations," which would be "inconsistent with Congress' major legislative effort to leave such decisions, where federally unregulated, to the competitive marketplace." (*Rowe v. N.H. Motor Transp. Ass'n* (2008) 552 U.S. 364, 373.) The adoption of the ACF Regulation would represent a direct regulation of the trucking industry, with acute impacts on motor carrier prices, routes, and services, and would massively interfere with the Congressional policy favoring regulatory uniformity for the industry.

The ACF Regulation's impact on motor carrier prices is indisputable. The capital costs of a zero-emission tractor are projected to be 227% to 628% higher than a comparable conventional tractor.[1] In addition, the total cost of ownership of these vehicles may be significantly higher,[2] taking into account a variety of considerations, including the comparative costs of electricity or other alternative technologies as compared to diesel, as well as increased maintenance and support infrastructure costs, increased dwell, and lost payload. These costs—vehicle costs, fuel, and maintenance—represent as much as 46% of motor carriers' marginal costs. (See American Transportation Research Institute, An Analysis of the Operational Costs of Trucking: 2002 Update, at 20, *available at* https://truckingresearch.org/wp-content/uploads/2022/08/ATRI-Operational-Cost-of-Trucking-2022.pdf.) Thus, motor carriers cannot simply absorb these increased costs—the ACF Regulation would inevitably require motor carriers to upwardly adjust their prices accordingly.

With respect to motor carrier routes, the impact of the ACF Regulation would be at least as, if not more, significant. Conventional diesel tractor-trailers have an average range of approximately 500-800 miles dependent on fuel tank size. That, combined with the ubiquitous availability of diesel refueling facilities, means that for all intents and purposes motor carriers can run any legally-available route, with their choices dictated (as Congress intended) solely by efficiency and market considerations. Electric-powered tractor-trailers, by contrast, are expected to have a range of approximately 200-250 miles before requiring a recharge, and the necessary recharging facilities are comparatively non-existent. Motor carriers forced to operate electric vehicles will thus be directly restricted to the subset of legally available routes that have sufficient recharging facilities in sufficient density. For the foreseeable future, this will have a significant impact on motor carrier's choice of routes.

And for many motor carriers who have terminals strategically located at points along frequently-travelled routes that conventional trucks can reach on a single fueling, and who depend on that terminal network to route shipments from origin to destination, the ACF Regulation would wreak havoc on their routes. Such carriers would need to build additional terminal facilities in closer proximity to one another to account for the shorter range of electric trucks, and would have to engage in a wholesale reconfiguration of their routes accordingly.

Similar considerations mean that the ACF Regulation would drastically restrict the services motor carriers would be able to provide to their shipper customers. Federal law regulates the amount of time in a given day and week that a commercial driver can work. (See 49 C.F.R. § 395.3(a)(2) [limiting commercial drivers of property-carrying vehicles to a 14-hour period between coming on-duty and being relieved of duty for 10 consecutive hours]; *id.* § 395.3(b) (limiting cumulative duty hours to 60 per 7-day period or 70 per 8-day period).

[1] https://theicct.org/wp-content/uploads/2022/01/Final-Report-eTruck-Virtual-Teardown-Public-Version.pdf

[2] https://www.nrel.gov/docs/fy21osti/71796.pdf

Refueling or recharging a truck is typically an on-duty activity that consumes those available duty hours. Given that electric trucks will need to be recharged more frequently than conventional trucks, and given that it will take longer to recharge an electric truck than it does to refuel a conventional truck, the ACF Regulation will dictate that drivers spend a significantly smaller portion of their available duty time actually providing the service of moving freight. Indeed, given that electric trucks will likely need to be recharged on average 274 times a year compared to 75 refueling events of a conventional truck, and on average 105 minutes to recharge compared to 5 minutes to refuel, the ACF Regulation can be expected to consume an additional 480 hours of a driver's available yearly duty hours (and because, in reality, drivers do not typically work to the full limit of the federal duty hour restrictions, the impact on their productivity will be even higher).

In addition to this steep reduction in service productivity, the ACF Regulation would render flatly *impossible* some services that motor carriers are free to provide under federal rules, and which the marketplace regularly demands. For example, a motor carrier operating conventional trucks might be able to offer a time-sensitive shipper the service of moving a load 400 miles in an eight-hour window. However, a motor carrier operating an electric truck would not be able to do so, because the need for a lengthy recharge (or two) mid-trip would consume too much time to complete the delivery within the specified window. In other words, in addition to reducing the level of services motor carriers can provide across the board, in many specific instances it will as a practical matter prohibit some services altogether.

Each of these direct, significant impacts on motor carrier prices, routes and services would, standing alone, be sufficient to render the ACF Regulation preempted under the clear language of FAAAA. Additionally, these effects, individually and in combination, would represent a profound interference with the Congressional policy embodied in that statute; preventing motor carriers from adopting nationally uniform business practices shaped primarily by market forces rather than a patchwork of state-by-state policy preferences. (See, e.g., *Am. Airlines v. Wolens* (1995) 513 U.S. 219, 229 n.5 [applying equivalent preemption provision of the Airline Deregulation Act and observing that Congress's "overarching deregulatory purpose" means that "States may not seek to impose their own public policies . . . on the operation of a . . . carrier"] [internal quotation marks omitted].)

B. The ACF Regulation Is Preempted by the Clean Air Act

1. The ACF Regulation Cannot Be Implemented Unless and Until EPA Grants a Waiver of Preemption Under Section 209(b)

CAA section 209(a) preempts states from adopting or attempting to enforce "any standard relating to the control of emissions from new motor vehicles . . . ." (CAA § 7453(a) [otherwise known as section "209(a)"]; see also *Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist*. (2004) 541 U.S. 246 ("*EMA*")].) This prohibition against state-level regulation of new mobile source emissions is both "categorical" and expansive. (*EMA*, 541 U.S. at 252-53). Because the ACF Regulation requires fleet operators to purchase ZEVs, it constitutes a standard

relating to motor vehicle emissions and is preempted under CAA section 209(a) unless and until EPA grants a waiver under section 209(b). Until this occurs, CARB cannot implement or enforce the ACF regulation. EPA has historically taken well over two years to act on California's waiver requests.[3] Most recently, CARB submitted its request for a waiver associated with Advanced Clean Trucks and associated regulations on October 22, 2021, which remains pending approximately one year later. While ACF requires fleet owners to comply beginning January 1, 2024, CARB cannot implement or enforce the regulation in the absence of a waiver.

Nor can CARB avoid the requirement of a waiver by characterizing the ACF regulation as an "in-use" standard. Section 209(d) provides that states have the right "to control, regulate, or restrict the use, operation, or movement of registered or licensed motor vehicles." These "in-use" controls extend to measures such as "carpool lanes, restrictions on car use in downtown areas, and programs to control extended idling of vehicles," (*Pacific Merchant Shipping Ass'n v. Goldstene* (2008) 517 F.3d 1108, 1115), and "[i]nspection and maintenance programs." (*In re Volkswagen* (N.D. Cal. 2017) 264 F. Supp, 3d 1040, 1051.) CARB has previously relied on the exemption for "in-use" regulations to circumvent the need for a waiver, for example, in developing the Truck and Bus Rule. But the Truck and Bus Rule did not mandate the purchase of particular types of vehicles; as an in-use requirement, it allowed operators the flexibility to retrofit, purchase newer used vehicles, or entirely new vehicles. (California Air Resources Board, Initial Statement of Reasons, Truck and Bus Rule, p. 40 (October 2008).) The ACF Regulation makes no such provisions, and instead seeks to achieve its primary aim of limiting all new purchases to ZEVs. (ACF Regulation, § 2015.1(a).) As the Supreme Court has already established, such a mandate is an emissions standard which is preempted in the absence of a waiver. (See *EMA*, 541 U.S. at 255.) CARB may not enforce the ACF regulation unless and until such waiver is granted and, as discussed below, EPA is prohibited from granting the waiver.

2. EPA Cannot Grant a Waiver Because the ACF Regulation Does Not Meet the Requirements in CAA Section 209(b)

Though EPA can grant waivers from the preemptive effect of CAA section 209(a), it must make particular findings in order to do so. Under CAA section 209(b), EPA may only grant a waiver if EPA finds (i) the State's determination that the rule will be at least as health protective as federal rules is not arbitrary and capricious, (ii) the State needs such standards to meet compelling and extraordinary conditions, and (iii) the State standards and accompanying enforcement procedures are consistent with section 202(a). Because EPA cannot make these findings, it cannot grant a waiver of preemption under CAA section 209(b) for the ACF Regulation.

[3] 82 Fed. Reg. 6500 (Jan. 19, 2017) (waiver request submitted on May 28, 2014; approved January 19, 2017, two years and 7 months after submittal); 81 Fed. Reg. 78144 (Nov. 7, 2016) (approval of waiver request submitted February 12, 2014, two years, eight months later).

a. The ACF Regulation Contravenes Multiple Provisions of CAA Section 202(a)

The ACF Regulation Establishes Classes or Categories of Vehicles Based on Inappropriate Factors. CAA section 202(a)(3)(A)(ii) requires that, "[i]n establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, *or other appropriate factors*" (emphasis added). The ACF Regulation does not utilize appropriate factors to develop classes or categories of new motor vehicles or new motor vehicles engines as required by this section.

When applying this section, EPA generally categorizes vehicles by class into Light Duty (Class 1-2), Medium Duty (Class 3-6), and Heavy Duty (Class 7-8). EPA defines vehicle categories, also by Gross Vehicle Weight Rating ("GVWR"), for the purposes of emissions and fuel economy certification, such as Class 2 (trucks with a GVWR of 6,001-10,000 lbs.) or Class 8 (heavy-duty trucks with GVWR over 33,001 lbs.). EPA has also adopted classes or categories based on the vehicle's primary function, frontal area, special features, or capacity. (See, e.g., 40 C.F.R. §§ 86.1803-01.) In every case, the class or category is defined by factors intrinsic to the vehicle itself. EPA previously rejected a proposal to treat vehicles as different classes based on method of manufacture because to do so would result in a different class for a vehicle with "exactly the same function and market" as an existing category. (81 Fed. Reg. 73478, 73518-19 (Oct. 25, 2016).)

That is exactly what CARB proposes to do here. The ACF Regulation creates sub-categories of normal classes which means that vehicles with "exactly the same function and market" may be subject to the ACF Regulation in some instances, but not in others. This sub-categorizing by CARB to create standards which vary in their applicability to the same vehicle is not based on appropriate factors under CAA section 202(a).

The ACF Regulation applies to "any entity that owns, operates, of directs one or more vehicles in California that is either:

(1) an entity or combination of entities operating under common ownership or control that have $50 million or more in total gross revenue in the prior year;

(2) is a fleet owner that owns, operates, or directs 50 or more vehicles in the total fleet, excluding light-duty package delivery vehicles;

(3) is a fleet owner or controlling party whose fleet in combination with other fleets operated under common ownership and control total 50 or more vehicles in the total fleet, excluding light-duty package delivery vehicles; or

(4) is any federal government agency.

(ACF Regulation, § 2015(a)(1).)

Under the ACF Regulation, the same truck (as characterized by EPA) would have a different standard to comply with (1) whether operated in a fleet greater than 50 trucks or a fleet less than 50 trucks, or (2) whether operated in a fleet with an entity with greater than $50 million revenue or less than $50 million revenue. CARB has provided no explanation as to how vehicles require different emissions classifications merely as a function of their ownership. There is nothing in the emissions or operations of the selected vehicles that necessitates sub-classifications with different emissions standards.

In addition, the ACF Regulation's definitions of "controlling party" and "common ownership or control" create unreasonable and incoherent classes or categories of vehicles regulated separately under the ACF. Under the ACF Regulation, common ownership or control means being owned or managed on a day-to-day basis by the same person or entity and includes "vehicles owned by different entities but operated using common or shared resources to manage the day-to-day operations using the same motor carrier number, *displaying the same name or logo*, or contractors whose services are under the day-to-day control of the hiring entity are under common ownership or control" (emphasis added). This means that, for example, sprinter vans provided by a third party who services an online retailer could count as under common control by the retailer only in certain instances. The online retailer may have to count vans with their logo on them as part of their fleet, but if the vans do not have the retailer's logo, they may not count as part of the retailer's "fleet" for purposes of the ACF Regulation. The online retailer is not the operator of the fleet in either instance, but the regulation considers some vans to be part of the retailer's "fleet" because the retailer is the "controlling party." (See ACF Regulation, § 2015(b) ["Controlling party" means the motor carrier, broker, or entity that directs or otherwise manages the day-to-day operation of one or more fleets under common ownership or control to serve its customers or clients].)

In this instance, CARB is not regulating the vehicle itself nor even the owner or operator of the van, but the client the van serves and is treating vehicles with the same function as different for purposes of emission control standards.[4] In comparison, any vehicle emission standard promulgated by EPA under the CAA would apply to the vehicle itself, regardless of how it is used or by whom. The ACF Regulation's complicated determination of which vehicles are regulated and which are not thus conflicts with the CAA section 202 requirement that the determination of classes or categories to be regulated under the section are based on appropriate factors.

[4] EPA has promulgated its own definitions of "ownership" and "control" applicable to a purchase standard implemented as part of an authorized Clean Fuel Fleet Program, discussed *infra*, with which the ACF is also inconsistent. (40 C.F.R. § 88.302-94.)

The ACF Regulation Does Not Make the Required Technological Determinations. CAA section 202(a)(3)(A)(i) requires the EPA to adopt vehicle emission standards which represent "[t]he greatest degree of emission reduction achievable *through the application of technology which the Administrator determines will be available for the model year to which such standards apply*, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology" (emphasis added). This analysis requires EPA to complete an exhaustive process in which it assesses the technologies that will be available in each model year in order to determine the emission reductions that are achievable each year. (See, e.g., EPA, Final Rule for Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, 86 Fed. Reg. 74434, 74473-488 (Dec. 30, 2021) [assessing technical feasibility of final standards including projected target levels by manufacturer, projected per vehicle cost for each manufacturer, projections of EV and PHEV technology penetration rates, and explaining why the final standards are technologically feasible]; see also EPA, Revised 2023 and Later Model Year Light-Duty Vehicle GHG Emissions Standards: Regulatory Impact Analysis, Chapter 2: Technology Feasibility, Effectiveness, Costs, and Lead-Time.)[5]

Instead of following this required section 202 process, CARB has inverted it. Rather than complete a full assessment of the technologies that will be available in each model year in order to determine the emissions reductions achievable in that year, CARB has picked an emission level (zero-emission) and then told fleet operators that they have to comply with that level regardless of technology or commercial availability. By allowing for ZEV unavailability exemptions, daily usage exemptions, and vehicle delivery delay extensions, (ACF Regulation, § 2015.3), CARB has admitted that it has not undertaken the analysis required by section 202 to determine in advance which technologies will be available for each class or category of vehicles in each model year. This analysis is the cornerstone of any vehicle emission standard. If neither CARB nor EPA has completed a thorough assessment of the various options for compliance in each model year, how are fleets supposed to understand what technologies are available for compliance and plan accordingly? By failing to complete this analysis, CARB has rendered the ACF Regulation unable to qualify for a waiver of preemption.

Nowhere in the 296-page ISOR does CARB conduct a thorough technological assessment of vehicles available in each model year for which the ACF Regulation will apply. CARB explains that "[i]t is somewhat challenging to precisely predict which ZE technologies fleets would use for complying with the proposed ACF regulation." (ISOR at 171.) CARB frames its lack of analysis as "flexibility," forcing covered owners to make their own determination as to what technology is available at the time of compliance subject to CARB's review. (ISOR at 100, 269.) CARB takes itself off the hook by mandating that regulated parties themselves prove which vehicles are commercially unavailable and then petition CARB. (ACF Regulation, § 2015.3(e).) For the ZEV unavailability exemption, CARB states that it will maintain a list of vehicle configurations that are eligible for the exemption on the CARB

[5] https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013ORN.pdf

Advanced Clean Fleets webpage, *i.e.*, vehicles that are commercially unavailable. However, no such list exists. Appendix J to the ISOR is a list of commercially available ZEVs as of 2022, however, the ISOR states that Appendix J is only "a partial list of medium- and heavy-duty ZEVs that are currently available or that can be ordered" and is not the list of commercially *unavailable* vehicles that the ISOR says CARB will produce. In crafting the ACF Regulation in this way, CARB has turned the required technological assessment into an individual assessment of various regulated parties' statements about which vehicles are or are not commercially available, rather than the class by class assessment that CARB is required to undertaken pursuant to section 202(a).

Moreover, CARB has defined commercially available to mean a vehicle that is available to order or has had at least one model delivered to a customer. (ISOR at 9-10, 70, 91, 93, 98.) Commercially available typically means a technology is available for purchase within a reasonable time and at an ordinary commercial price. It is clear that many of the vehicles CARB has listed on Appendix J are open for order but are not being delivered in a reasonable time or at the amount ordered. During the rulemaking process, many commenters reported about orders which were decreased in volume or for which they waited extreme amounts of time to receive their vehicles. This does not amount to being commercially available. CARB has also repeatedly emphasized the nuanced requirements for specialized fleets, (ISOR at 91, 98), yet has not and cannot ensure that the technology the ACF Regulation will require is commercially available for all regulated entities. (ISOR at 171-72 [admitting that BEVs have not yet proven functional for fleets with high range or high payload needs, but not discussing what technology will be available to address those needs as ACF standards begin to apply to those uses]; see also *id.* [discussing the mix of ZEVs CARB assumes for purposes of the economic analysis and stating that there are currently "limited small-scale deployments of fuel cell electric truck tractors by several small and major truck manufacturers" and "fuel cell electric technologies leading to commercialization in the latter half of the decade," yet also assuming that FCEVs will be 10% of the fleet until 2027 and 25% afterwards].)

The ACF Regulation Does Not Give Appropriate Consideration to the Cost of Compliance Within Each Period. CAA section 202(a)(2) and (a)(3)(A)(i) requires that, in adopting vehicle emission standards, EPA give appropriate consideration to the cost of compliance *within each period*. Given that, as discussed above, CARB does not actually identify the technology with which specific classes or categories of vehicles will comply with the rule, it is not possible for CARB to have undertaken an analysis of the actual cost of compliance during each period that the ACF Regulation will apply. In fact, the various compliance options (Model Year Schedule and ZEV Milestone Option) and the multiple exemptions from rule applicability (ZEV unavailability, daily mileage usage, infrastructure construction delay, and vehicle delivery delay) make it impossible to assess the cost of compliance within each period. The Department of Finance also noted the uncertainty in whether and how certain regulated parties would comply with the ACF Regulation in its comments on the Standard Regulatory Impact Assessment ("SRIA"). Appendix C-2: Department of Finance Comment Letter, pp. 1-2 (stating that the SRIA assumes that the purchase requirements of the ACF regulation will complement the sales requirements in the Advanced Clean Trucks regulation, but noting that differences in timing

between the ACF Regulation and Advanced Clean Trucks may hinder compliance of fleets that utilize heavier vehicle classes and asking that the SRIA include a sensitivity analysis to analyze this issue). CARB did not revise the SRIA as requested but merely responded that "CARB staff believe the assumptions staff made are appropriate . . . ." (Appendix C-3: Summary and Response to Department of Finance SRIA at 2.)

In addition, CARB's SRIA looks not at the cost of compliance within each period based on determined methods of compliance, but at the macroeconomic costs of the ACF Regulation as a whole across the state compared to baseline operations. (ISOR at 157-58.) Further, major changes were made to the proposed ACF Regulation after CARB completed its SRIA. (*Id.* at 159-60.) As explained in the ISOR, CARB's SRIA modeling assumed that high priority fleets would comply solely through meeting the ZEV milestone requirements. However, in the proposed regulation, high priority fleets by default must meet the Model Year Schedule, but may opt-in to the ZEV Milestone Option if they waive their useful life rights (see discussion above). For this reason, the SRIA cannot accurately predict the cost of compliance within each period as required by section 202(a).

CARB has identified numerous cost-barriers to ACF implementation, including high vehicle upfront costs and the real concern that ZEVs will not be able to replace existing combustion-powered vehicles on a one-to-one basis due to payload, mileage, or other issues. (ISOR at 200 [stating that "higher upfront cost of ZEVs can place a barrier in vehicle purchasing patterns" and that ZEVs can meet *most* daily needs on a one-to-one basis provided the ZEV is placed in applications where it is suitable].) Yet CARB conveniently ignores these real challenges in its SRIA. This economic analysis is not sufficient to meet the demands of section 202(a).

The ACF Regulation Does Not Meet the Lead Time Requirement. CAA section 202(a)(3)(C) provides, "Any standard promulgated or revised under this paragraph and *applicable to classes or categories of heavy-duty vehicles or engines* shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated" (emphasis added). These Congressionally-mandated lead time and stability periods allow individual truck manufacturers to make the capital investments necessary to respond to new regulations. Congress determined that these lead times and stability provisions were essential to successful implementation of the CAA's technology-forcing objectives.

Here, the ACF Regulation is slated to be adopted in spring 2023. To comply with the lead time provisions, the regulation cannot apply before model year 2028. Under the Model Year Schedule option for the high priority/federal fleets and for drayage fleets, the regulation would take effect in 2024, requiring the purchase of only ZEVs starting on January 1, 2024. (ACF Regulation, § 2015.1.) This directly contravenes section 202(a). In addition, the fleet ZEV Milestone Option requires 10 percent of a fleet's vehicles to be ZEVs in 2025 for milestone group 1 and 10 percent of a fleet's vehicles to be ZEVs in 2027 for milestone group 2. (ACF

Regulation, § 2015.2.) Thus, the Milestone Option also directly contravenes the required 4-year lead time.

This conclusion is supported by federal case law and by EPA's own prior waiver determinations. Specifically, in *American Motors Corporation v. Blum* (D.C. Cir. 1979) 603 F.2d 978, the D.C. Circuit held that where Congress has specified a lead time period for certain types of mobile source regulations, CARB is bound to comply with that specified lead time just as much as EPA. If CARB fails to provide that congressionally mandated lead time, the CARB regulations are not consistent with CAA section 202(a) and thus are ineligible for a waiver of preemption under section 209(b). (*Id.*)

EPA consistently has followed the D.C. Circuit's reasoning in *Blum*, and has explicitly addressed the applicability of section 202(a)(3)(C) to California as a requirement to obtain a waiver under section 209(b). EPA issued a memorandum on September 16, 1994, signed by then-Assistant Administrator Mary Nichols that expressly concluded that CARB must comply with the Congressionally-mandated four-year lead time provision of section 202(a)(3)(C) in order for CARB's regulations to be consistent with CAA section 202(a) and to qualify for a waiver of preemption. (See Decision Document, Sept. 16, 1994, pp. 30, 32.)[6] EPA explained:

> EPA disagrees with CARB's conclusion [that *Blum* is not applicable to its heavy-duty regulations]. EPA believes that *Blum* indicates that California would be required to provide the statutory lead time required under section 202(a)(3)(C) for its proposed gasoline and diesel standards. . . .
>
> EPA believes this case to be similar to the facts in *Blum* in that Congress specified a specific amount of lead time to be provided for heavy-duty manufacturers. The Congressional concern for adequate lead time for manufacturers under certain conditions must be incorporated by California in determining the adequacy of lead time to permit the development of new technology to meet new requirements. . . .
>
> The *Blum* court concluded that . . . a Congressional mandate of a specific amount of lead time should be grafted into section 202(a) and that the California standards may not be inconsistent with this required lead time. Given that *Blum* decision, EPA believes that the heavy-duty lead time requirement, already a part of section 202(a), should be provided in order for California standards to be considered consistent with section 202(a).

(*Id.* at 26, 28, 29-30 [emphasis added]; see also 46 Fed. Reg. 22032 (April 15, 1981) [holding by EPA that when Congress has specified a lead time period, California "must make provision for the extra lead time Congress itself found necessary"].)

[6] *Available at* https://www.regulations.gov/document/EPA-HQ-OAR-2022-0332-0020

CARB has alleged in its Advanced Clean Trucks ("ACT") proceeding that "the lead-time provisions of section 202(a)(3)(C) of the CAA do not apply to the ACT regulation" because section 202(a)(3)(C) only applies to standards "promulgated or revised under this paragraph [section 202(a) of the CAA]," that is, to standards promulgated by the EPA Administrator and not CARB. (CARB, Final Statement of Reasons, Advanced Clean Trucks Regulation ("ACT FSOR") at 107 (March 2021).) However, to grant a waiver of CAA section 209(a) preemption, EPA must find that CARB's regulation is consistent with section 202(a), including the lead time requirement. CARB argues that "[s]ince 1970, U.S. EPA has typically applied a "2-pronged" test of whether California standards are consistent with CAA section 202(a) as required by section 209(b)(1)(C). The standards must be: (1) technologically feasible in the lead time provided considering the cost of compliance, and (2) compatible with the federal test procedures so that a single vehicle could be subjected to both tests. No more should be required." (*Id.*) However, this is patently incorrect with respect to both the determination in *Blum* and the 1994 determination by EPA with a memorandum signed by then-Assistant Administrator Mary Nichols concluding that CARB must comply with the four-year lead time provision of section 202(a)(3)(C) in order for CARB's regulations to be consistent with CAA section 202(a) and to qualify for a waiver of preemption.

While CARB may wish to do whatever it pleases, under the guise of state law authority, neither case law nor previous EPA action support its incorrect view that it can adopt standards without regard to compliance with CAA section 202(a), and yet receive a waiver of preemption from EPA. Nor is there a need to conduct a tortured analysis of the CAA's legislative history to attempt to support CARB's incorrect view. (See ACT FSOR at 107 [attempting to argue that the legislative history of the CAA and its amendments support the fact that "it is unlikely Congress intended to apply the specific 4-year requirement to California"].) Federal statutes must be construed to give full effect to their plain meaning, and when statutes are unambiguous the plain language of the statute controls, without the need to explore any matters beyond the clear terms of the statute. (See *United States v. Barnes* (D.C. Cir. 2002) 295 F.3d 1354, 1359.)

Here, the relevant provisions of the CAA are clear and unambiguous. In order for CARB to receive a waiver for the ACF Regulation, those standards must be "consistent with section 7521(a) [202(a)]" of the CAA. Since the ACF Regulation establishes classes or categories of vehicles based on inappropriate factors, does not appropriately consider cost for compliance within each period, does not make the required technological determinations, and fails to provide the mandated four years of lead time, it is inconsistent with section 202(a), and thus ineligible for a waiver of federal preemption under CAA section 209(b)(1)(C).[7]

[7] Nor can CARB avoid its obligation by asserting that ACF Regulation is applicable only to owners and operators, not manufacturers. The Supreme Court readily saw through such a distinction in *EMA*. "A command, accompanied by sanctions, that certain purchasers may buy only vehicles with particular emission characteristics is as much an 'attempt to enforce' a 'standard' as a command, accompanied by sanctions, that a certain percentage of a manufacturer's sales volume must consist of such vehicles." (*EMA*, 541 U.S. at 255.)

b. The ACF Regulation Is Inconsistent With the Clean Fuel Fleet Program

The CAA both contemplates and commands that states impose purchase mandates to increase the proportion of clean fuel vehicles—but *only* in compliance with specific federal requirements. The ACF regulation has not been developed consistent with the CAA's substantive or procedural requirements. It is therefore preempted.

Section 246 of the Act (42 U.S.C. § 7586) created the Clean Fuel Fleet Program ("CFFP"), which covers vehicle acquisition decisions by individuals, corporations, and all levels of state government. The purchase requirements in section 246 apply to "covered fleets," which are broadly defined to mean "10 or more motor vehicles which are owned or operated by a single person." (42 U.S.C. § 7581(5).) "Person" sweeps within the regulation any "individual, corporation, partnership association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof." (*Id.* at § 7602(e)). A program enacted through Section 246 would require a specified percentage of all new covered fleet vehicles to be clean-fuel vehicles, meeting the CAA's mandated emissions standards. (*Id.* at § 7586.) Notably, section 7585 prohibits EPA from enacting any standard applicable to heavy-duty vehicles of more than 26,000 GVWR. (*Id.* at § 7585(a).) Congress mandated states develop a purchase standard, and at the same time Congress exempted the heaviest vehicles from its requirements.

The Supreme Court in *EMA* explained that the CAA's CFFP prescribes "numerous detailed requirements" that must be complied with to avoid preemption. (541 U.S. at 254 n.6, 257-58.) Among other things, section 246 requires that States participating in the CFFP program submit their fleet regulation programs to EPA as SIP revisions, to ensure federal review and oversight. (42 U.S.C. 7586(a).) Section 246(b) additionally sets out specific phase-in requirements. (42 U.S.C. 7586(b).) Most importantly, section 246(d) requires States to give fleet operators the choice of what type of fuel to use and what type of vehicle to buy, so long as other congressionally specified requirements are met. (42 U.S.C. 7586(d).) As the Supreme Court explained, any fleet purchase standard "must comply strictly with federal specifications, being neither more lenient nor more demanding." (*EMA*, 541 U.S. at 257-58.)

While CARB may seek SIP approval of the ACF Regulation, it fails to meet the other requirements of the CFFP. The ACF Regulation's phase-in requirements are inconsistent with those in section 246(b). Moreover, section 246(d) is clear that fleet operators are to be "provide[d] the choice of clean-fuel vehicles and clean alternative fuels" under any compliant plan. The ACF Regulation provides no such optionality. While section 246 offers the choice among any vehicle in a class or category certified to meet model year clean-fuel vehicle standards, (42 U.S.C. § 7581(7)), the ACF Regulation mandates the purchase of only zero

emission vehicles.[8] The CAA requires any compliant purchase standard to allow operators to choose freely among "clean alternative fuels," broadly defined to include:

> *any fuel* (including methanol, ethanol, or other alcohols (including any mixture thereof containing 85 percent or more by volume of such alcohol with gasoline or other fuels), reformulated gasoline, diesel, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity) *used in a clean-fuel vehicle that complies with the standards and requirements applicable to such vehicle under this subchapter when using such fuel or power source*

(42 USC § 7581(2) [emphasis added].) But the ACF regulation would prohibit a choice among these fuels, mandating the use of electricity or hydrogen. Because the ACF regulation irreconcilably conflicts with the requirements of CFFP, it is preempted. Additionally, the ACF regulation imposes purchase standards on the acquisition of Class 7 and Class 8 trucks in violation of section 7585.

California cannot circumvent the care with which Congress calibrated the CAA's provisions balancing federal and state authority over fleet vehicle emissions by attempting to adopt its own purchase standard separate and apart from CFFP.[9] Section 246 and its associated provisions demonstrate that Congress intended the federal government to occupy the field of establishing new motor vehicles emissions standards and intended that states regulate new fleet vehicle purchases only in accordance with EPA's oversight and the CAA's design. "Congress's prescription of numerous detailed requirements for such programs [is] inconsistent with unconstrained state authority to enact programs that ignore those requirements." (*EMA*, 541 U.S. at 254 n.6.)

As the Supreme Court explained, "what is the use of imposing such a limitation if the States are entirely free to impose their *own* fleet purchase standards with entirely different specifications?" (*EMA*, 541 U.S. at 258 [emphasis added].)

[8] There is a limited allowance for near zero emission vehicles until 2035, but this cannot save the rule.

[9] The CAA does provide that a state may opt out of the CFFP by providing an alternative program equally capable of achieving the anticipated emissions reductions. (42 U.S.C. § 7511a(c)(4)(B).) In 1999, California did exactly that, substituting its Low Emissions Vehicle program for the CFFP. (64 Fed. Reg. 46849-01 (Aug. 27, 1999).) The Low Emissions Vehicle program did not include a purchase standard, instead creating more stringent emissions standards.

III.

ECONOMIC ASSESSMENT UNDER THE CALIFORNIA APA

A. CARB's Economic Impact Analysis

1. CARB's Obligation to Assess the Economic Impacts of the ACF Regulation

"[T]he APA provides a procedural vehicle to review proposed regulations or modifications thereto in order to 'advance meaningful public participation in the adoption of administrative regulations by state agencies' and create 'an administrative record assuring effective judicial review.'" (*John R. Lawson Rock & Oil, Inc. v. State Air Res. Bd.* (2018) 20 Cal.App.5th 77, 111 [quoting *Western States Petroleum Assn. v. Bd. of Equalization* (2013) 57 Cal.4th 401, 424-425].) Pursuant to their applicable "procedural requirements, agencies must, among other things, (1) give the public notice of the proposed regulatory action; (2) issue a complete text of the proposed regulation with a statement of reasons for it; (3) give interested parties an opportunity to comment on the proposed regulation; (4) respond in writing to public comments; and (5) maintain a file as the record for the rulemaking proceeding." (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *POET, LLC v. Calif. Air Res. Bd.* (2013) 218 Cal.App.4th 681, 743-44]; see also Govt. Code, § 11346.5, subd. (a).)

As part of its disclosures at the outset of the public comment period, CARB "must include '[f]acts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.'" (*Western States*, *supra*, 57 Cal.4th at 425.) When, as here, CARB "makes an initial determination that the action will not have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states, it shall make a declaration to that effect in the notice of proposed action." (Govt. Code, § 11346.5, subd. (a)(8); see also Notice of Public Hearing at 10.) Prior to making this determination, CARB must "assess the potential for adverse economic impact on California business enterprises and individuals, avoiding the imposition of unnecessary or unreasonable regulations or reporting, recordkeeping, or compliance requirements" through the preparation of "a standardized regulatory impact analysis," which "shall address" several factors including the "creation or elimination of jobs within the state," the "creation of new businesses or the elimination of existing businesses within the state," and the "competitive advantages or disadvantages for businesses currently doing business within the state." (*Id.*, subd. (c)(1).)

In addition to an assessment of the potential for a regulation to have a "significant, statewide adverse economic impact directly affecting business," CARB must also describe "all cost impacts . . . that a representative private person or business would necessarily incur in reasonable compliance with the proposed action," (Govt. Code, § 11346.5, subd. (a)(9)), a summary of the conclusions of the standardized regulatory impact analysis, (*id.*, subd. (a)(10)); and a summary of impacts on small businesses. (Cal. Code Regs., tit. 1, § 4.)

If CARB ultimately "decides to enact the regulation" following the public comment period, "it must prepare a 'final statement of reasons' for adopting the proposed rule, which must include '[a]n update of the information contained in the initial statement of reasons.'" (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *Western States*, *supra*, 57 Cal.4th at 426].) "This final statement "must also include '[a] summary of each objection or recommendation made regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change.'" (*Id.* [quoting *Western States*, *supra*, 57 Cal.4th at 426].)

While the initial determination need not be "all-inclusive," it must evaluate adverse economic impacts that are "significant," and make an "initial showing" that there was at least "some factual basis for [its] decision." (*Western States*, *supra*, 57 Cal.4th at 428-29.) "Once the initial assessment is complete, 'affected parties may comment on the agency's initial determination and supply additional information relevant to the issue,'" and CARB "must respond to the public comments and either change its proposal in response to the comments or explain why it has not." (*John R. Lawson*, *supra*, 20 Cal.App.5th at 111 [quoting *Western States*, *supra*, 57 Cal.4th at 429].)

2. CARB Failed to Adequately Assess Cost of Ownership to the Regulated Industry

CARB's assessment of cost of ownership is not supported by substantial evidence. Nor does the Public Notice comply with Section 11346.5(a)(9) of the Government Code. Specifically, prior to the release of the Notice of Public Hearing—which appears to be CARB's notice of proposed action under Section 11346.5(a)—WSTA and the Truck & Engine Manufacturers Association ("EMA") submitted evidence to CARB demonstrating CARB's projected cost of the ACF Regulation on regulated parties was far too low. Unfortunately, these issues have not been addressed in CARB's Total Cost of Ownership ("TCO") analysis attached as Appendix G to the ISOR.

Sean Edgar of CleanFleets performed a technical review of the TCO, which is attached as Exhibit "B" to this letter. Mr. Edgar notes several inaccurate assumptions in the TCO. For instance, the TCO ignores data from EMA showing "ZEV purchase costs that are too low," and that ZEVs cost a company much more to purchase than traditional vehicles. (Exhibit "B" at 2.) Conversely, the "ZEV residual values" in the TCO "are too high." (*Id.*) In addition, the TCO does not take into consideration the fact that ZEVs "are not able to perform the same amount of work as traditional trucks," requiring the purchase of additional ZEVs to perform the same tasks as a smaller number of traditional vehicles. (*Id.*)

The TCO also does not take into account the fact that the transition from traditional ZEVs will "require new maintenance facilities and equipment investments" on the part of fleet owners, as well as "the build-out and maintenance of a completely new electricity charging or hydrogen fueling infrastructure." (Ex. "B" at 2.) Nor is there any effort to quantify the "lost productivity" associated with charging ZEVs, the infrastructure costs for sleeper cab tractors, and the

maintenance costs for electric infrastructure. (*Id.*) Each of these issues will substantially increase the costs to fleet owners beyond that stated in the TCO. As a result, the TCO is incomplete and unsupported by substantial evidence.

The TCO also fails to take into consideration data collected by CARB on its central to the cost of ownership. For instance, CARB, working in collaboration with the U.S. Department of energy's National Renewable Energy Laboratory ("NREL"), recently published a report on a demonstration project concerning heavy-duty EVs at Foothill Transit (the "Foothill Report"). The purpose of the Foothill Report was to "compare performance and cost of the BEBs [Battery-Electric Buses] to that of conventional technology in similar service and track progress over time." (Ex. "B" at 3.) The Foothill Report included numerous important findings that undermine the conclusions in the TCO, including the fact that "electricity is 5 to 6.5 times more expensive than CNG fuel," that EVs have much higher per-mile maintenance costs than CNG vehicles, and that EVs have much greater downtime than CNG vehicles. (*Id.*) Despite the fact that CARB participated in the Foothill Report, the TCO contains none of the data or lessons learned in the report.

As explained by Mr. Edgar, the TCO also significantly understates the upfront costs of ZEV trucks. For instance, Mr. Edgar's report contains examples showing the actual price of certain ZEVs is over twice as much as the TCO presumes. The TCO also erroneously assumes that the price of ZEVs will decrease. Mr. Edgar provides data from 2022 showing that the price of ZEVs is actually increasing substantially. (Ex. "B" at 3-5.)

In short, the TCO is flawed as an informational document because it does not include important information regarding costs of ownership, including CARB's own information. Before considering the ACF Regulation, the TCO should be updated significantly to provide further information regarding cost of ownership.

B. CARB's Analysis of Alternatives Under the APA

The Legislature requires state agencies, including CARB, to avoid unnecessary or unduly burdensome regulation. To this end, the Legislature requires agencies to analyze alternatives to the proposed action. "Reasonable alternatives to be considered include, but are not limited to, alternatives that are proposed as less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation." (Govt. Code, § 11346.2, subd. (b)(4)(A).)

CARB may not adopt regulations unless it has determined no alternative to its proposal would be "as effective and less burdensome to affected private persons than the proposed action, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law." (Govt. Code, § 11346.5, subd. (a)(13).) Likewise, in the initial statement of reasons, CARB must affirm and explain, with "supporting information," that "no alternative" it has considered "would be more effective and less

burdensome to affected private persons than the adopted regulation, or would be more cost effective to affected private persons and equally effective" in meeting the proposal's legislative objective. (Govt. Code, § 11346.9, subd. (a)(4) [emphasis added].)

Here, CARB has failed to adequately consider numerous alternatives to the ACF Regulation, including alternatives proposed by EMA (Match Advanced Clean Trucks and Advanced Clean Fleets Zero-Emission Vehicle Deployments Exactly), CTA (Exempt Group 2 and 3 Vehicles and Extend Timeline Six Years to Purchase Group 1 Zero-Emission Vehicles), and WSTA (Credit for Zero-Emission or Natural Gas Vehicles). (ISOR at 255-57, 261-62.)

Each of the above alternatives would achieve CARB's objective of reducing criteria pollutant and GHG emissions. They would also be far "less burdensome to affected private persons than the proposed action," and would also "be more cost effective to affected private persons and equally effective" in meeting the proposal's legislative objective." (Govt. Code, §§ 11346.5, subd. (a)(13), 11346.9, subd. (a)(4).)

As a result of the foregoing, CARB should decline to adopt the ACF Regulation and should instead seriously consider other less burdensome alternatives.

IV.

CARB's ENVIRONMENTAL REVIEW OBLIGATIONS UNDER CEQA

A. Overview of CARB's Obligations Under CEQA

State agencies such as CARB must "refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects." (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 [citing *Mountain Lion Found. v. Fish & Game Comm.* (1997) 16 Cal.4th 105, 134].) To perform this evaluation, CARB must "first . . . identify the environmental effects" of a proposed regulation, "and then . . . mitigate [any] adverse effects through the imposition of feasible mitigation measures or through the selection of feasible alternatives." (*Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1233.) "The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish. This examination is intended to provide the fullest information reasonably available upon which the decision makers and the public they serve can rely in determining whether or not to start the project at all, not merely to decide whether to finish it." (*NRDC v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271.)

State regulatory programs "that meet certain environmental standards and are certified by the Secretary of the California Resources Agency are exempt from CEQA's requirements for preparation of EIRs, negative declarations, and initial studies." (*City of Arcadia*, *supra*, 135 Cal.App.4th at 1421.) The scope of this exemption, however, is narrow, and only excuses ARB

from complying with the requirements found in Chapters 3 and 4 of CEQA (*i.e.*, Pub. Res. Code, §§ 21100-21154) in addition to Public Resources Code § 21167. (Pub. Resources Code, § 21080.5(c).) However, "[w]hen conducting its environmental review and preparing its documentation, a certified regulatory program is subject to the broad policy goals and substantive standards of CEQA." (Kostka & Zischke, Practice Under Cal. Env. Quality Act (2016 update) § 21.10] ["Kostka & Zischke"] [citing *City of Arcadia*, *supra*, 135 Cal.App.4th at 1422; *Sierra Club*, *supra*, 7 Cal.4th 1215; *Californians for Native Salmon & Steelhead Ass'n v. Dept. of Forestry* (1990) 221 Cal.App.3d 1419; *Envt'l Protection Info. Ctr. v. Johnson* (1985) 170 Cal.App.3d 604, 616].) The broad policy goals of CEQA include: (1) providing public agencies and the public with detailed information about the effect that a proposed project is likely to have on the environment, (2) identifying the ways in which the significant effects of a proposed project might be minimized, and (3) identifying alternatives to the proposed project. (See Pub. Resources Code, §§ 21002, 21002.1(a), 21061; CEQA Guidelines, § 15362.) Thus, the CEQA Guidelines expressly provide that "[i]n a certified program, an environmental document used as a substitute for an EIR must include '[a]lternatives to the activity and mitigation measures to avoid or reduce any significant or potentially significant effects that the project might have on the environment.'" (*City of Arcadia*, *supra*, 135 Cal.App.4th at 1422 [quoting CEQA Guidelines, § 15252(a)(2)(A)].)

CARB must respond to the issues raised by the public by providing a "good faith, reasoned analysis in response, and at a level of detail that matches the level of detail in the comment." (CEQA Guidelines, § 15088(c); *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.) If CARB disagrees with the "recommendations and objections raised in the comments," the "recommendations and objections" "must be addressed in detail," with the agency "giving reasons why specific comments and suggestions were not accepted." (CEQA Guidelines, § 15088(d).) "Conclusory statements unsupported by factual information will not suffice." (*Id.*)

B. The EA Does Not Adequately Assess the Environmental Impacts Associated with the New Facilities and Infrastructure

1. By Assessing the Alleged Benefits of the ACF Regulation in a Quantitative Manner and the Potential Impacts in a Qualitative Manner, CARB Has Failed to Provide Data Allowing the Public and CARB's Decisionmakers to Adequately Assess the Potential Impacts of the ACF Regulation

In support of the ACF Regulation, CARB staff performed a detailed quantitative analysis of alleged emissions benefits associated with the adoption of the ACF Regulation. This assessment includes supposed air quality benefits from mobile source emissions in both the South Coast and San Joaquin Valley air basins, as well as statewide. (See Appendix F, Tables 8-10.) These figures are stated in precise units of tons per day or tons per year, depending on the pollutant at issue. (*Id.*)

The EA, however, recognizes the ACF Regulation would result in the installation of an extensive amount of infrastructure needed to accommodate ZEVs, the construction of a large number of new and modified facilities built to increase the supply of ZEVs, an increase in the number of facilities required to produce electricity and hydrogen fuel, and the increased extraction of raw materials "such as lithium, platinum, or other elements." (EA at 19-21.) With respect to air quality and several other resources, the EA finds the impacts of these new facilities to be potentially significant and unavoidable. (See, e.g., *id.* at 40.) With respect to climate change and GHG emissions, the EA finds the impacts to be less than significant. (*Id.* at 64.)

Although the EA specifies "suggested" mitigation to offset these significant environmental effects, the EA does not identify any mitigation measures that would provide enforceable mechanisms to lessen the significant impacts of the proposed regulation. Instead, for each of the resources, the EA finds the impact would continue to be significant and unavoidable because CARB does not possess land use authority over new those new facilities. (See, e.g., *id.* at 39-40.) Nowhere, however, does CARB attempt to quantify the potential impacts associated with the installation of these new facilities.

In other words, the ISOR touts the alleged mobile source benefits of the ACF Regulation in a high level of detail, providing the public and CARB's decisionmakers the misleading picture that adoption of the ACF Regulation would result in those air quality benefits. This is simply not true, as the ACF Regulation would result in the installation of facilities that would themselves generate criteria pollutant and greenhouse gas emissions. CARB, however, has not even attempted to estimate those emissions, leaving the public and CARB decisionmakers with only half of the analysis. (*Cf. Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311 ["CEQA places the burden of environmental investigation on government rather than the public," and a lead agency "should not be allowed to hide behind its own failure to gather data."].)

CARB staff may argue it is speculative to assess the potential emissions associated with the installation of new facilities. Any such argument would be entirely inaccurate. For example, as explained by Ramboll, it is entirely feasible for CARB "to make a high-level determination of the number of EV chargers and substation installations that would be necessary to fuel" the new vehicle populations created by the ACF Regulation, "and then estimate the emissions impacts of the construction of this infrastructure." (Exhibit "A" at 2.) After this assessment is completed, it is entirely possible that the alleged emissions benefits of the ACF Regulation will be lowered substantially, if not eliminated.

By declining to perform an apples-to-apples assessment of these potential emissions, CARB staff has shielded from the public and CARB decision makers from evaluating the true consequences of the ACF Regulation. As a result, the ISOR and the EA should be overhauled substantially to include a quantitative assessment of ***both*** the benefits and negative effects of the ACF Regulation.

2. CARB's Findings that the ACF Regulation's Impacts to Resources Is Significant and Unavoidable, Without Actually Performing an Quantitative Assessment of those Impacts, Violated CEQA

An environmental document cannot simply label an impact "significant and unavoidable" without first providing adequate discussion and analysis, as this would "allow[] the agency to travel the legally impermissible easy road to CEQA compliance." (*Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1370.) Accordingly, the eventual adoption of a statement of overriding considerations does not excuse the lead agency from properly conducting environmental review in the first instance. (*Id.*) Rather, the lead agency must adequately quantify the impact, and consider feasible mitigation based on that analysis, prior to concluding that an impact is "significant and unavoidable." (See, e.g., *Sundstrom*, *supra*, 202 Cal.App.3d at 311.) As such, "sole reliance" on another agency's regulatory authority "is inadequate to address environmental concerns under CEQA." (*Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Cal.App.4th 1, 16.)

The EA claims there is "some inherent uncertainty in the degree of mitigation that would ultimately need to be implemented" because "decisions by the regulated entities regarding compliance options are unknown. (EA at 10-11.) Consequently, CARB states the EA's significance conclusions supposedly "tend[] to overstate the risk that feasible mitigation may not be implemented by the agency with authority to do so, or may not be sufficient to mitigate an impact to less than significant." (*Id.* at 11.) Nevertheless, the EA claims, "[i]t is also possible that the amount of mitigation necessary to reduce environmental impacts to below a significant level may be far less than disclosed in th[e] Draft EA" because "[i]t is expected that potentially significant impacts of many individual development projects would be avoidable or mitigable to a less than significant." (*Id.*) There are several problems with this approach.

First, "identification of the precise details of project-specific mitigation" is not necessary to determine "the degree of mitigation that would ultimately need to be implemented" in all cases, as the EA claims. (*Id.* at 26.) As explained by Ramboll, it is entirely feasible to generally estimate the potential consequences of the increased need for EV chargers and substation installations, as well as the potential effects of such new infrastructure. (See generally Exhibit "A" at 2.)

Second, by expressly claiming to overstate the risk that feasible mitigation may be insufficient while, at the same time, asserting that impacts could be reduced to less-than-significant levels by local lead agencies, the EA obscures the significance of its identified impacts. However, an environmental document that does not include sufficient information to "enable[] the reader to evaluate the significance of [] impacts" is inadequate under CEQA. (*Lotus v. Dept. of Trans.* (2014) 223 Cal.App.4th 645, 654.) CARB's approach "precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences." (*Id.* at 658.)

The fact that the proposed project's significant environmental impacts could potentially be mitigated by local lead agencies does not relieve CARB from its duty to consider and to quantify the project's environmental impacts.

Third, by relying solely on local lead agencies to enforce mitigation measures, the EA sidesteps analysis of important environmental impacts. Here, as in *Californians for Alternatives to Toxics*, CARB has "repeatedly deferred" to local and federal "regulatory scheme[s] instead of analyzing environmental consequences." (*Californians for Alternatives to Toxics*, *supra*, 136 Cal.App.4th at 16.) As such, CARB has failed to discharge its duty under CEQA to "meaningfully consider the issues raised by the proposed project." (*Id.*) In *Californians for Alternatives to Toxics*, the lead agency relied on another agency's regulatory scheme to support a finding of no significant impact. (*Id.* at 17.) Here, in contrast, CARB finds a significant impact, but then immediately asserts that the impact may not actually be significant in light of state and federal regulatory schemes. In both cases, however, the result is the same: the lead agency sidesteps CEQA's informational purpose and fails to "meaningfully consider the issues raised by the proposed project." (*Id.* at 16.)

3. The EA Does Not Propose Adequate Mitigation for New/Modified Facilities

CEQA requires mitigation measures to be enforceable through means that are legally binding. (Pub. Resources Code, § 21081.6, subd. (b); CEQA Guidelines, § 15126.4.) This requirement is designed to ensure that mitigation measures will actually be implemented. (*Fed. of Hillside & Cyn. Ass'ns v. City of Los Angeles* (2004) 83 Cal.App.4th 1252, 1261; *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1186.)

None of the mitigation measures identified in the EA are enforceable through legally binding means. Instead, the EA merely identifies "[r]ecognized practices routinely required to avoid and/or minimize impacts to" the relevant resource category. (See, e.g., EA at 28, 32, 34, 39, 103.) There is nothing in the proposed ACF Regulation, however, that ensures those "recognized practices" will actually be implemented. Although CARB defends this approach on the ground that it "does not have the authority to require implementation of mitigation related to new or modified facilities that would be approved by local jurisdictions," (see EA at 28, 32, 34, 39, 50, 53, 61, 68, 74, 90, 93, 98, 101, 103, 106), that is insufficient to discharge CARB's obligations under CEQA. The EA contains no discussion or analysis regarding CARB's consideration of feasible mitigation measures, other than to state in conclusory fashion that none exist. CARB must use whatever authority it has at its disposal to ensure that the mitigation measures identified in the EA are enforceable through legally-binding means. Thus, at the very least, CARB must analyze a range of potential mitigation measures and determine, based on the results of that analysis, whether such measures are feasible or not.

That being said, CARB is empowered by CEQA to adopt mitigation measures that another agency should implement, where their enforcement is not within CARB's jurisdiction. (*Tiburon Open Space Committee v. County of Marin* (2022) 78 Cal.App.5th 700, 745 ["CEQA is

not blind to the possibility of multiple jurisdictions or agencies having some degree of involvement or responsibility for a project. Mitigation may be within the jurisdiction of another entity, and a project may be approved with a finding that a mitigation measure 'should be[ ] adopted' by another entity that has exclusive jurisdiction."] [quoting Pub. Resources Code, § 21081, subd. (a)(2).)]; see also *City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 366 ["CEQA . . . . does not require a public agency to undertake identified mitigation measures, even if those measures are necessary to address the project's significant environmental effects, if the agency finds that the measures" are not within its jurisdiction to enforce.]; and see CEQA Guidelines § 15091 [specifically noting that a valid finding regarding significant impacts includes that changes to a project to reduce impacts are within jurisdiction of another agency and should be adopted by that agency].) CARB's failure to do so here violates CEQA.

C. Other Air Quality/GHG Impacts Are Not Adequately Assessed in the EA

1. The EA Fails to Evaluate Lifecycle Emissions for the GHG Reductions Contemplated Under the ACF Regulation

For numerous other rulemakings, including the Low Carbon Fuel Standard, CARB has used the CA-GREET3.0 Model to assess lifecycle GHG emissions associated with various fuels. In the ISOR, however, CARB declines to perform a similar lifecycle analysis for the ZEVs that will displace combustion engines. Had CARB used the CA-GREET3.0 model and attempted to perform a lifecycle analysis, the alleged emissions benefits would likely be reduced. Indeed, as explained by Ramboll, the American Transportation Research Institute (ATRI) has demonstrated the lifecycle emissions of BEVs is far higher than internal combustion engine vehicles and fuel cell electric vehicles. (Exhibit "A" at 4.) By declining to perform this analysis, CARB continues to obscure the impacts of the ACF Regulation on GHG emissions.

2. The EA Fails to Analyze Emissions Associated with the Operation of EVs

The EA's discussion of air quality impacts is also incomplete because it does not assess criteria pollutant emissions particular to EVs. For example, the EA does not analyze or include an assessment of the impacts on "ZEV weight on PM emissions from tire wear and entrained road dust." (Exhibit "A" at 3.) As explained by Ramboll, it is "reasonably foreseeable that ZEVs will be heavier than the internal combustion engine vehicles (ICEVs) currently on the road." (*Id.*) Because the weight increase is likely to outpace "the 2,000 lbs allowance under [AB] 2061 for alternative fueled vehicles, either more vehicles will be required to transport goods or the weight threshold for the vehicles will need to be further increased." (*Id.*) Under either circumstance, the ACF Regulation will result in PM10 emissions that are not addressed in the EA. As explained by Ramboll:

> If the former occurs, the increase in vehicle miles traveled (VMT) will result in an increase in PM emissions from tire wear and entrained road dust. If the latter occurs, the increased average vehicle weight will similarly result in an increase in PM emissions. . . . Given that non-exhaust emissions account for over 90% of PM10 and 85% of PM2.5 emissions from traffic, *the effects of increased vehicle weight may be significant*.

(*Id.* [emphasis added].)

D. CARB's Energy Assessment Fails to Meet CEQA's Requirements

CEQA requires that lead agencies evaluate the potential impacts of projects to energy consumption. Specifically, agencies are requires to assess whether a project "may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources," and if so recommend mitigation. (CEQA Guidelines, § 15126.2(b).) "This analysis should include the project's energy use for all project phases and components, including transportation-related energy . . . ." (*Id.*; see also CEQA Guidelines, Appendix F.)

1. The EA Does Not Discuss Baseline Conditions With Respect to Energy Consumption

As an initial matter, the EA is legally deficient under CEQA because it makes no effort to discuss baseline conditions—i.e., current energy consumption. This is highly problematic in the context of energy consumption, as there is nothing against which to compare the impacts of the ACF Regulation to determine whether impacts to energy consumption are potentially significant. (See CEQA Guidelines, § 15125.) By declining to include baseline conditions with respect to energy consumption, there is no way to evaluate whether the ACF Regulation will result in the "wasteful, inefficient, or unnecessary consumption of energy," and as such the EA violates CEQA.

2. The EA Does Not Adequately Analyze Whether the Project Will Result in the Wasteful, Inefficient, or Unnecessary Consumption of Energy

The EA recognizes that the "electrification of the various sectors affected by the [ACF Regulation] could increase local and regional energy use and impact supplies and requirements for additional capacity," and that the ACF Regulation may also "impact peak and base load period demands for electricity and other forms of energy. (EA at 57.) The EA, however, ultimately finds that these potential impacts could potentially be avoided in two ways:

> (1) Through "asset management, system design practices, and managed charging to shift a significant amount of the load away

> from system peaks. Charging management strategies beyond time-of-use rates, including those that reflect wholesale prices and carbon intensity, will be needed to align electric vehicle loads with daytime solar generation. And charging technologies should be coordinated with distribution systems to lessen the impact of charging timed to begin at off peak periods when appropriate." (EA at 57.)
>
> (2) Through other preexisting long-term planning initiatives, including SB 32, triennial updates to Title 24 Building Standards Code, federal Infrastructure Investment and Jobs Act, updates to California Energy Code, SB 100, SB 1505. (See EA at 58-59.)

Ultimately, the EA finds impacts to energy would be less than significant and beneficial. (EA at 56, 60.)

This method of analysis violates CEQA. First, the practices referenced above are not part of the "project" under CEQA. The ACF Regulation, of course, does not contemplate or otherwise compel "asset management, system design practices, and managed charging." Nor are any of the preexisting long-term planning initiatives themselves part of the "project." Rather, these measures are best described as "mitigation" that would allegedly avoid the ACF Regulation's potentially significant impacts. (Cf. CEQA Guidelines, § 15370 [defining mitigation as a measure that would avoid or minimize the potential impacts of a project].)

These avoidance measures fail as mitigation. They are not binding or otherwise enforceable against any person. (CEQA Guidelines, § 15126.4(a)(2).) For instance, if utilities and others were not engaged in optimal "asset management, system design practices, and managed charging" sufficient to reduce energy consumption, CARB would have no enforceable mechanism to change that behavior. More fundamentally, the EA provides no explanation of exactly how these measures would supposedly avoid the potential energy effects of the ACF Regulation, much less any attempt to quantify the potential impacts of the regulation.

There is likewise no discussion in the EA about grid reliability and the potential for the ACF Regulation to impact the ability of the state's electricity grid to deliver electricity reliably with projected load demand. This is particularly important given that summer-time threats of rolling blackouts have become the norm in California. Moreover, because much of the state's grid is powered by solar energy, which decreases toward the end of the day, much of the stress on the grid is felt most acutely in the late afternoon/early evening, prompting calls for consumers to conserve energy when they return home from work. This coincides with the end of work shifts and the return of trucks to the yard for charging. Despite this, the EA contains no discussion regarding grid reliability and California's ability to meet new energy demands associated with the ACF Regulation.

E. Traffic Impacts

As previously explained in WSTA's April 8, 2021, correspondence, "[c]urrent ZEVs are not a 'one to one' replacement and vehicles operating at their maximum legal weight face a significant weight penalty despite the 2,000 lbs weight allowance of AB 2061." In other words, fleet sizes will need to expand to accommodate the existing demand. This will require fleets to purchase additional trucks, which, in return, will result in additional vehicle miles traveled ("VMT") by those trucks. (Exhibit "A" at 3.) Despite this, there is no mention of this potential impact in the EA.

F. CARB's Analysis of Alternatives Violates CEQA

1. CARB's Obligation to Assess Project Alternatives

The requirement that environmental documents identify and discuss alternatives to the project stems from the fundamental statutory policy that public agencies should require the implementation of feasible alternatives or mitigation measures to reduce the project's significant impacts. (See, e.g., Pub. Resources Code, § 21002.) The lead agency must "focus on alternatives to the project . . . which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives. . . ." (CEQA Guidelines, § 15126.6(b).) Additionally, the range of alternatives "shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." (*Id.* at subd. (c).) The CEQA Guidelines specifically recognize that comments raised by members of the public on an environmental document are particularly helpful if they suggest "additional specific alternatives . . . that would provide better ways to avoid or mitigate the significant environmental effects." (CEQA Guidelines, § 15204.)

2. The EA Defines the Project Objectives Too Narrowly

"A lead agency may not give a project's purpose an artificially narrow definition." (*In re Bay-Delta* (2008) 43 Cal.4th 1143, 1162.) It is improper for a lead agency to "artificially narrow" the description of the project objectives to such an extent that the alternatives analysis "would be a foregone conclusion." (*We Advocate Through Environmental Review v. County of Siskiyou* (2022) 78 Cal.App.4th 683, 692.) Such an approach would turn the alternatives section of the environmental document "into an empty formality," (*id.* [citing *Bay-Delta*, *supra*, 43 Cal.4th at 1162]), which constitutes prejudicial error because it prevents informed decision making and public participation. (*Id.* [citing Pub Resources Code, § 21005, subd. (a); *North Coast Rivers Alliance* (2015) 243 Cal.App.4th 647, 668].)

While some of the project objectives here focus on the ultimate end of reducing criteria pollutant and greenhouse gas emissions, the majority of the project objectives articulated in the ISOR and the EA focus myopically on ZEVs as the specific means to achieve that end. For instance, Project Objective No. 1 seeks to facilitate "the attainment of NAAQS for criteria air pollutants" by "[a]ccelerat[ing] the deployment of ZEVs . . . ." (EA at 146.) Project Objective No. 3 seeks to "[d]ecrease GHG emissions . . . by adopting strategies to deploy medium- and

heavy-duty ZEV in California . . . ." (*Id.* [emphasis added].) Project Objective No. 6 seeks "the transition of California's medium- and heavy-duty transportation sector from internal combustion to all electric powertrains," and "to support ZEV sales . . . ." (*Id.*) Project Objective No. 10 seeks to promote acceleration of the development of "environmentally superior medium- and heavy-duty vehicles" by fostering "market certainty for zero-emission technologies . . . ." (*Id.* at 147.) Project Objective Nos. 8 and 12 focus solely on the means, seeking to, respectively, "[i]ncentivize and support "emerging zero-emission technology," and "[s]pur economic activity of zero-emission technologies in the medium- and heavy-duty vehicle sectors." (*Id.*) By focusing on CARB's preferred means—electric vehicles and other ZEVs—as opposed to the actual objectives of the regulation, the EA essentially prohibits CARB from considering other alternatives that also achieve emissions reductions and avoid the serious environmental consequences of the ACF Regulation. This is demonstrated in CARB's assessment of the alternatives proffered by CTA, WSTA, and EMA, all of which were rejected primarily on the grounds that they would result in the deployment of fewer ZEVs and thus would be less effective in achieving the above objectives than the ACF Regulation. (See EA at 155, 157, 158.)

3. Because the Alternatives Proposed by EMA, CTA, and WSTA Would Avoid the Significant and Unavoidable Impacts of the ACF Regulation, CARB's Rejection of those Alternatives Violates CEQA

The EA also impermissibly rejects the alternatives proposed by EMA, CTA, and WSTA. Each of these alternatives would rely more heavily than the ACF regulation on existing technologies and infrastructure. As a result, the three alternatives would not induce or require the construction of new facilities or the development of new infrastructure to the same extent as the ACF Regulation. Because virtually all of the impacts in the EA that were found to be significant and unavoidable were created by the need for new facilities or the development of new infrastructure, the three alternatives would either significantly reduce or avoid all of the significant and unavoidable impact identified in the EA. Because CARB must "focus on alternatives to the project . . . which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives," (CEQA Guidelines, § 15126.6(b)), CARB may not simply reject the proposed alternatives.

G. CARB's Certified Regulatory Program Violates CEQA Because it Contemplates Post Hoc Environmental Review and Delegation of CEQA Authority to the Executive Officer

The EA states that, following its public meeting on October 27, 2022, to approve the ADF Regulation, the CARB Board may direct the Executive Office to make further changes to the ACF Regulation and finalize the environmental review process without bringing those changes back to the CARB Board. (EA at 12-13.) If CARB proceeds in this fashion, it would violate CEQA's prohibitions on post hoc environmental review and delegation of environmental review authority to a person who did not initially approve the project.

1. CARB's Certified Regulatory Program Authorizes Post Hoc Environmental Review, in Violation of CEQA

As the Supreme Court explained in *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376 "[a] fundamental purpose of an EIR is to provide decision makers with information they can use in deciding whether to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved. If post-approval environmental review were allowed, EIR's would likely become nothing more than post hoc rationalizations to support action already taken." (*Id.* at 394; see *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 79; CEQA Guidelines, § 15004, subd. (a) ["Before granting any approval of a project subject to CEQA, every lead agency . . . shall consider a final EIR . . . ."] [emphasis added].) Moreover, the timing requirement set forth in § 15004 of the CEQA Guidelines "applies to the environmental review documents prepared by [C]ARB . . . in lieu of an EIR." (*POET*, *supra*, 218 Cal.App.4th at 716.)

By authorizing the Executive Officer to perform "further environmental review" associated with changes to the regulatory language pursuant to Government Code § 11346.8(c) "after [the state board] approves of the project," the EO would engage in post hoc environmental review in violation of CEQA. As explained above, both the initial regulatory proposal and any subsequent 15-day modifications are part of the same "project" under CEQA. The two actions would be "integral parts" of each other and the 15-day modifications are a "reasonably foreseeable consequence" of the original proposed regulations. (*Sierra Club*, *supra*, 128 Cal.App.4th at 698.) Therefore, authorizing the Executive Officer to perform "further environmental review" after the state board approves the project at issue would constitute impressible post hoc environmental review.

2. CARB's Certified Regulatory Program Violates CEQA Because it Authorizes the Delegation of CEQA Decision-making Authority to a Person Who Did Not Initially Approve the Regulation

Delegation to the Executive Officer is improper if the Executive Officer lacks the authority to approve or disapprove the project. This observation is consistent with the decision in POET in which the court held that:

> [T]he principle that prohibits the delegation of authority to a person or entity that is not a decision-making body includes a corollary proposition that CEQA is violated when the authority to approve or disapprove the project is separated from the responsibility to complete the environmental review. [Citations.] This conclusion is based on a fundamental policy of CEQA. For an environmental review document to serve CEQA's basic purpose of informing governmental decision makers about environmental issues, that document must be reviewed and considered by the same person or group of persons who make the decision to approve or

> disapprove the project at issue. In other words, the separation of the approval function from the review and consideration of the environmental assessment is inconsistent with the purpose served by an environmental assessment as it insulates the person or group approving the project "from public awareness and the possible reaction to the individual members' environmental and economic values."

(*POET*, *supra*, 218 Cal.App.4th at 731 [quoting *Kleist v. City of Glendale* (1976) 56 Cal.App.3d 770, 779] [emphasis added].)

The term "'[p]roject' means 'the whole of the action'" that otherwise qualifies as a "project" under CEQA. (*Concerned McCloud Citizens v. McCloud Community Servs. Dist.* (2007) 147 Cal.App.4th 181, 192 [quoting CEQA Guidelines, § 15378(a)]; see also Pub. Resources Code, § 21002.1(d) ["The lead agency shall be responsible for considering the effects . . . of all activities involved in a project."] [emphasis added].) It "'does not mean each separate governmental approval.'" (*Id.* [quoting CEQA Guidelines, § 15378(c)].) Rather, the term "project" "is broadly construed and applied in order to maximize protection of the environment." (*Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 271 [emphasis added].) Consequently, "[c]ourts have considered separate activities as one CEQA project and required them to be reviewed together where, for example, the second activity is a reasonably foreseeable consequence of the first activity … or both activities are integral parts of the same project." (*Sierra Club*, *supra*, 128 Cal.App.4th at 698.) Moreover, CEQA requires the lead agency to perform its environmental review "at the earliest possible stage." (*Calif. Oak Found. v. Regents of the Univ. of Calif.* (2010) 188 Cal.App.4th 227, 271.)

CARB's certified regulatory program purports to delegate to the Executive Officer authority to approve or disapprove the 15-day modifications to the proposed project, but they do not—and cannot—delegate to the Executive Officer authority to approve or disapprove the project, since that decision will have already been made by CARB. Consequently, "the authority to approve or disapprove the project [would be] separated from the responsibility to complete the environmental review." (*POET*, *supra*, 218 Cal.App.4th at 731 [emphasis added].) As the court in *POET* explained, "[f]or an environmental review document to serve CEQA's basic purpose of informing governmental decision makers about environmental issues, that document must be reviewed and considered by the same person or group of persons who make the decision to approve or disapprove the project at issue." (*Id.* [emphasis added].) CARB's potential course of action does just the opposite. It suggests CARB's governing board may approve the ACF Regulation, but then delegate authority to a different person, the Executive Officer, to approve the 15-day modifications and any associated environmental review. This improperly "insulates the person or group approving the project"—i.e., CARB—"'from public awareness and the possible reaction" regarding the 15-day modifications and their environmental impacts, since those issues are reviewed and approved by the Executive Officer. (*Id.* [quoting *Kleist*, *supra*, 56 Cal.App.3d at 779].)

As such, in the event CARB makes any changes to the proposed ACF Regulation after the October 27, 2022, hearing, the Executive Officer may not act on those modifications, and must instead bring the changes back to CARB's governing board.

V.

CARB FAILED TO ENGAGE IN EXTERNAL PEER REVIEW OF THE ACF REGULATION

Pursuant to Section 50074 of the Health and Safety Code, CARB may not "take any action to adopt the final version of a rule unless" it undertakes a peer review to evaluate the "scientific portions" of the rule. (Health & Saf. Code, § 57004(d).) Section 57004 was enacted by the Legislature in response to "[s]ignificant questions . . . raised by both the environmental and regulated communities about the scientific basis for some rules." (California Bill Analysis, S.B. 1320 Assem., 8/11/1997.) Thus, it requires CALEPA agencies, such as the CARB, to submit the "scientific portions" of a proposed regulation to an external peer reviewer "for the purpose of conducting an analysis of the science on which the regulation is based." (*Id.*) The peer reviewer must then "provide a written evaluation as to whether the scientific portion of the rule is based on sound scientific knowledge, methods and practices." (*Id.*; see also Health & Saf. Code, § 57004(d) [stating that "board, department, or office [must] submit[] the scientific portions of the proposed rule, along with a statement of the scientific findings, conclusions, and assumptions on which the scientific portions of the proposed rule are based and the supporting scientific data, studies, and other appropriate materials, to the external scientific peer review entity for its evaluation" and that the "external scientific peer review entity [must] prepare[] a written report that contains an evaluation of the scientific basis of the proposed rule"].) The "scientific portions" of a proposed regulation include "those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment." (*Id.*, subd. (a)(2).)

The proposed regulation contains numerous "scientific portions" that must be subjected to external peer review pursuant to § 50074 because they "are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment." (*Id.*, subd. (a)(2).) These "scientific portions" include, but are not limited to:

- The total cost of ownership of ZEVs, including the analysis in Appendix G to the ISOR.
- The alleged emissions benefits of the ACF Regulation as discussed in Appendix F of the ISOR, as well as the potential negative criteria pollutant and GHG emissions impacts associated with the new construction and infrastructure required to accommodate demand for new ZEVs.

- The assessment of the ACF Regulation's impact on the California energy grid and grid reliability.

As such, CARB must submit these portions of the rule, "along with a statement of the scientific findings, conclusions, and assumptions on which [they] are based and the supporting scientific data, studies, and other appropriate materials, to the external scientific peer review entity for its evaluation." (*Id.* at subd. (d)(2).) Because there is no evidence of CARB obtaining peer review for any of the above scientific portions of the ACF Regulation, CARB may not approve the ACF Regulation on October 27, 2022.

VI.

THE ACF REGULATION IS INCONSISTENT WITH THE USEFUL LIFE PROVISIONS OF SECTION 43021 OF THE HEALTH & SAFETY CODE

Section 2015.1 of the ACF Regulation contemplates that, after January 1, 2024, fleet owners may only add ZEVs to their fleets, and that no internal combustion engine vehicles ("ICEVs") may be added to a fleet after that date unless a waiver is obtained. These provisions, however, are contrary to the plain requirements of Section 43021 of the Health & Safety Code.

Section 43021 was enacted "to provide owners of self-proposed commercial motor vehicles . . . certainty about the useful like of engines certified by" CARB and other agencies "to meet required environmental standards for sale in the state." (Health & Saf. Code, § 43021, subd. (d).). As the Senate Bill Analysis for S.B. 1 explains, Section 43021 "[s]ets a 'useful life' period where truckers subject to future, undefined regulations can get a return on their investment before being asked to replace or modify the vehicle. Thus, if the California Air Resources Board (ARB) adopts future in-use regulations, trucks will not be required to turnover until they have reached 13 years from the model year the engine and emission control systems are first certified or until they reach 800,000 vehicle miles traveled. (California Bill Analysis, S.B. 1 Sen., 4/3/2017.) Accordingly, Section 43021 provides that, with limited exceptions inapplicable here, "the retirement, replacement, retrofit, or repower of a self-propelled commercial motor vehicle . . . *shall not be required* until the later of . . . [t]hirteen years from the model year the engine and emission control system are first certified" or when "the vehicle reaches the earlier of either 800,000 vehicle miles traveled or 18 years" from the certification of the engine and emission control system. (*Id.*, subd. (a) [emphasis added].)

Notably, Section 43021 contains no carve outs or exceptions that allow CARB to limit its protections for vehicles added to a fleet after January 1, 2024. Nor is there any language in the regulation that allows CARB to limit the use of ICEVs that are lawful under Section 43021 to certain compliance options. Moreover, after January 1, 2024, both California and U.S. EPA will continue to certify ICEVs for use in California. Those engines would plainly fall within Section 43021, which means CARB cannot require the "retirement, replacement, retrofit, or repower" of those engines.

As a result of the foregoing, Section 2015.1 should be substantially revised to conform to the requirements of Section 43021 of the Health & Safety Code.

VII.

CONCLUSION

CARB should not adopt the ACF Regulations. CARB should instead continue to work with affected stakeholders to ensure the ACF Regulations will not adversely affect private individuals and small businesses or cause significant adverse environmental effects.

Thank you for your consideration of these comments.

Respectfully submitted,

John P. Kinsey

Enclosures

EXHIBIT “A”

RAMBOLL

ENVIRONMENT
& HEALTH

MEMORANDUM

To: John Kinsey, Wanger Jones Helsley PC
Lee Brown, Western States Trucking Association
Chris Shimoda, California Trucking Association

From: Varalakshmi Jayaram and Julia Lester
Ramboll US Consulting, Inc.

Subject: **COMMENTS ON THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ANALYSIS IN THE DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED ADVANCED CLEAN FLEETS REGULATION**

Date: October 17, 2022

Ramboll
5 Park Plaza
Suite 500
Irvine, CA 92614
USA

T +1 949 261 5151
F +1 949 261 6202
www.ramboll.com

CEQA TECHNICAL COMMENTS

The CEQA analysis presented in the for the Draft Environmental Assessment (EA) for the Advanced Clean Fleets (ACF) regulation has numerous inadequacies and/or omissions which need to be corrected before the adoption of the proposed ACF regulation. When conducting a CEQA analysis, the California Air Resources Board (CARB) is required to consider the full environmental impact of a proposed regulation or project, yet fails to quantify the emissions impacts of electric fueling infrastructure construction, increased particulate matter (PM) emissions due to increased vehicle weight, and the life cycle greenhouse gas (GHG) emissions of medium/heavy duty vehicles (M/HDVs) affected by this proposal.

The environmental impacts of electric vehicle (EV) charger and infrastructure construction, PM emissions from brake and tire wear, and GHG emissions from zero emission vehicle (ZEV) production are possible to quantify and it is highly likely that they would be more than significant. CARB must complete these analyses and publish a revised draft EA that includes these revised analyses. Without this the CARB Board, stakeholders, and the public will not be able to understand the full impacts of the proposed ACF regulation and/or identify environmentally superior alternatives or revisions.

The following sections provide additional details on these inadequacies and/or omissions in CARB's CEQA analysis:

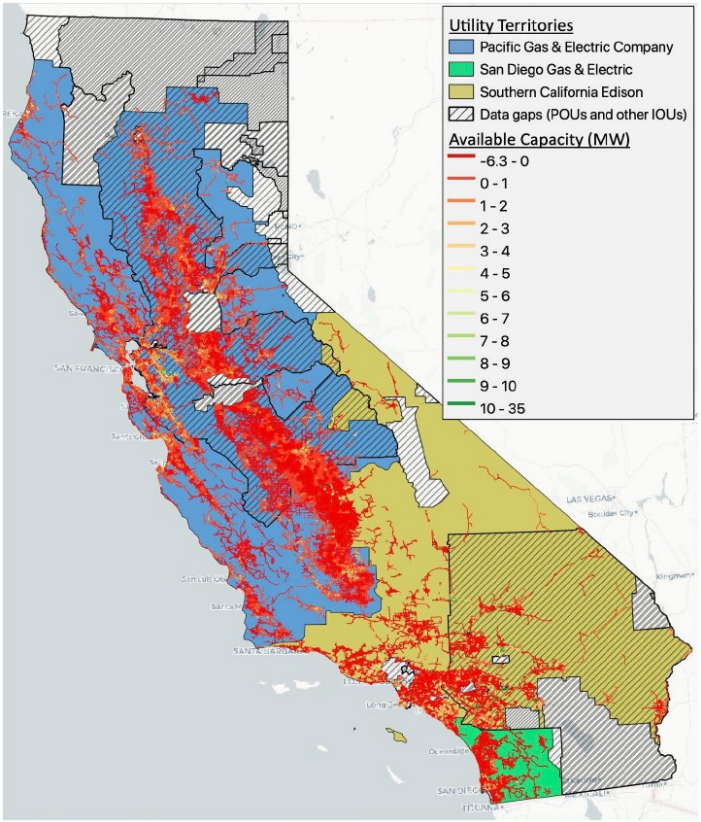
Inadequate Assessment of EV Fueling Infrastructure

One of the most direct impacts from CARB's proposed ACF regulation is the installation of EV charging infrastructure for hundreds of thousands of zero emission (ZE) M/HDVs that will be deployed across the state. It is critical that the impacts for infrastructure construction are properly considered in CARB's CEQA analysis. Given CARB's extensive research into the vehicle populations that will

be affected by the regulation,[1] CARB could conduct an analysis to make a high-level determination of the number of EV chargers and substation installations that would be necessary to fuel these vehicles and then estimate the emissions impacts of the construction of this infrastructure.

CARB does provide CEC projections for charger needs in the Draft EA,[2] stating that 157,000 chargers will be necessary by 2030 and 258,000 chargers by 2037 to support M/HDV electrification but does not project the number of new substations that would be required. As shown in the EA for the Advanced Clean Cars II regulation (ACC II) regulation, there is no excess grid capacity to support M/HDV charging throughout a majority of the state of California (**Figure 1**),[3] meaning infrastructure upgrades would be required for a significant majority of new EV charging stations. With assistance from utilities, CARB could determine how many new substations would be required to meet the increased electrical demand from these chargers and estimate the level of construction that will be required across the state.

Figure 1: Capacity Analysis from the California Energy Commission's EDGE Model[4]



[1] CARB. 2022. Appendix D Draft Environmental Analysis for the Proposed Advanced Clean Fleet Regulation. August 30. Available here: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/appd.pdf. Accessed: October 2022.

[2] Ibid.

[3] CARB. 2022. Appendix E Final Environmental Analysis for the Proposed Advanced Clean Cars II Program. August 24. Available here: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/acciifinalea.docx. Accessed: October 2022.

[4] Ibid.

CARB could use this data to quantify and evaluate the emissions impacts for charger and substation construction using their statewide land use emissions computer model CalEEMod®. This model includes default assumptions for construction and operation of a variety of projects and can be used to estimate criteria air pollutant and greenhouse gas emissions associated with the construction of EV charging stations and substations.

As the lead agency, it is CARB's responsibility to perform such an analysis in order to determine the reasonably foreseeable impact of the proposed ACF regulation for EV infrastructure development projects that will result from the regulation as a part of their CEQA analysis. Without the analyses discussed above, their impact analysis is incomplete and misleading.

Incomplete Assessment of PM Emissions

Under CEQA, CARB is required to assess all reasonably foreseeable emissions impacts associated with the regulation, yet CARB does not consider the impacts of ZEV weight on PM emissions from tire wear and entrained road dust. It is reasonably foreseeable that ZEVs will be heavier than the internal combustion engine vehicles (ICEVs) currently on the road. According to a report by the American Transportation Research Institute (ATRI), battery electric vehicles (BEVs) weigh more than their ICEV counterparts largely due to the significant battery sizes required for M/HDVs. For example, the GREET vehicle weight distribution assumptions for Class 8 Sleeper Cabs lists the battery weight has 17,108 pounds (lbs), for a total BEV weight of 32,016 lbs in comparison to the ICEV which weighs 18,216 lbs.[5]

Given that this weight increase far outpaces the 2,000 lbs allowance under Assembly Bill 2061 for alternative fueled vehicles, either more vehicles will be required to transport goods or the weight threshold for vehicles will need to be further increased. If the former occurs, the increase in vehicle miles traveled (VMT) will result in an increase in PM emissions from tire wear and entrained road dust. If the latter occurs, the increased average vehicle weight will similarly result in an increase in PM emissions. CARB's own methodology for calculating entrained road dust emissions per VMT is dependent of the average vehicle weight on the road[6] and a 2016 study titled "Non-exhaust PM emissions from electric vehicles" concluded that increased vehicle weight leads to increased PM emissions from both tire wear and road dust.[7] Given that non-exhaust emissions account for over 90% or PM_{10} and 85% of $PM_{2.5}$ emissions from traffic, the effects of increased vehicle weight may be significant.

CARB's Initial Statement of Reasons (ISOR) for the proposed ACF regulation[8] states that the ZEV weight increase is only expected to impact 10% of vehicles; CARB provides no supporting evidence or analysis for this assertion. However, they do indicate that there will be a weight increase for some of these vehicles and despite having the tools to conduct this analysis, CARB has not considered or attempted to quantify the emissions impact from tire wear or entrained road dust. Until they do so, the CEQA analysis for the proposed ACF regulation remains incomplete.

---

[5] American Transportation Research Institute (ATRI). 2022. Understanding CO_2 Impacts of Zero Emission Trucks. May. Available here: https://truckingresearch.org/wp-content/uploads/2022/05/ATRI-Understanding-CO2-Impacts-of-Zero-Emission-Trucks-May-2022.pdf. Accessed: October 2022.

[6] CARB. 2021. Miscellaneous Process Methodology 7.9: Entrained Road Travel, Paved Road Dust. March. Available here: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf. Accessed: October 2022.

[7] Timmers, Victor and Peter Achten. "Non-exhaust PM emissions from electric vehicles". March 2016. Available here: http://www.soliftec.com/NonExhaust%20PMs.pdf. Accessed: October 2022.

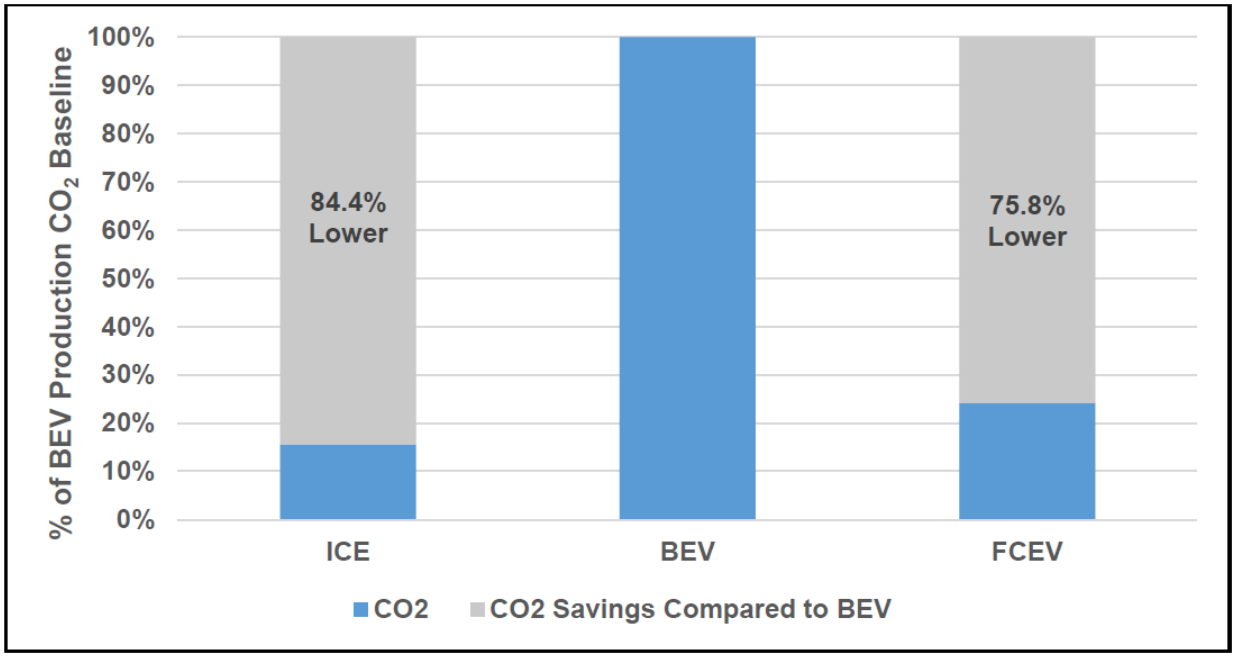
[8] CARB. 2022. Public Hearing to Consider the Proposed Advanced Clean Fleets Regulation. Staff Report: Initial Statement of Reasons. August 30. Available here: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/isor2.pdf. Accessed: October 2022.

Incomplete Assessment of GHG Emissions Impacts

The proposed ACF regulation will result in a dramatic transition of both the vehicle and fuel systems in our transportation system, from ICEV to ZEVs and from diesel and gasoline to electricity and hydrogen. As a part of this CEQA analysis, CARB should properly estimate the GHG emission impacts of the proposed regulation by evaluating the full life cycle emissions of the M/HDVs affected by this proposal. However, CARB continues to ignore the GHG emissions associated with vehicle production and upstream emissions associated with fuel production and only estimates the reductions in tailpipe GHG emissions that would occur with the implementation of their proposal.

The ATRI study titled "Understanding CO_2 Impacts of Zero Emission Trucks"[9] compares the vehicle cycle emissions of ICEV, BEV, and fuel cell electric vehicles (FCEV) (**Figure 2**). Using the GREET model, the study determined that the manufacturing of battery electric Class 8 Sleeper Cabs would result in the 478,055 lbs of total CO_2 emissions per vehicle whereas the production of ICEVs emits 74,728 lbs per vehicle. The study also highlights that over the past decade, the U.S. has imported nearly 100% of the critical minerals needed for battery production from other countries, which likely contributes to the high GHG intensity of ZEV production.

Figure 2. Vehicle Cycle GHG Emissions of Class 8 Sleeper Cabs[10]



A CEQA analysis must include <u>all</u> potential impacts of a regulation, including the full life cycle GHG emissions of M/HDVs, even if portions of it occur outside the state of California. By not including such impacts in their analysis, CARB is misrepresenting the benefits of the proposed ACF regulation and CEQA alternatives.

---

[9] ATRI. 2022. Understanding CO_2 Impacts of Zero Emission Trucks. May. Available here: https://truckingresearch.org/wp-content/uploads/2022/05/ATRI-Understanding-CO2-Impacts-of-Zero-Emission-Trucks-May-2022.pdf. Accessed: October 2022.

[10] Ibid.

ATTACHMENT A
AUTHOR RESUMES

JULIA LESTER, PhD

Principal

Dr. Julia Lester has over 32 years of experience in air quality services. She joined ENVIRON (now Ramboll) in 2004, after more than 14 years at the South Coast Air Quality Management District (SCAQMD). She has substantial expertise in the preparation and review of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents, particularly air emissions greenhouse gas and climate change impact, conformity, air quality and health risk assessments. She has conducted regulatory negotiations with many air agencies and supported clients, before city councils and in other public forums. She is a PhD Chemical Engineer and has the following air agency certifications: SCAQMD Certified Permitting Professional and San Joaquin Valley Air Pollution Control District Certified Air Permitting Professional. Her clients include local governments, California sea ports and goods movement operations, government agencies, wastewater / waste-to-energy facilities, industrial facilities, agricultural operations, and agencies/industries with specialized air regulatory challenges.

EXPERIENCE HIGHLIGHTS

- Prepared full CEQA Environmental Impact Report (EIR) for the City of Los Angeles Digester Gas Utilization Project (DGUP) at the Hyperion wastewater treatment plan certified in August 2013.
- Lead the Air Quality / Health Risk Assessment (AQ/HRA) for the I-710 Corridor Project between the San Pedro Bay Ports and the Downtown Los Angeles Railyards
- Prepared full CEQA EIR for the City of Los Angeles biosolids application at Green Acres Farm, certified in December 2014.
- Provided CEQA/NEPA and permitting/compliance/rule development assistance (analysis, documents, outside review) on several projects, including freeway projects in Central California and Los Angeles, an oil and gas production facility (CEQA Project Manager), waste-to-energy facilities (CEQA/NEPA, permitting, planning), a wastewater utility agency (permitting, compliance, planning assistance), sanitation district (CEQA, compliance, and regulatory negotiation), sea ports (CEQA/NEPA), and others.
- Provided expert services, declarations and/or testimony on several air quality-related hearing board and litigation matters.
- Provided City Council testimony on behalf of the City of Azusa during a mine development CEQA certification and the City of Cerritos (erroneously labeled the "air toxic hotspot" by USA).
- At the SCAQMD, prepared State Implementation Plans, conducted air quality modeling, developed particulate matter regulations (including first-in-the-nation rules).

CONTACT INFORMATION

Julia Lester

jlester@ramboll.com
+1 (213) 9436329

Ramboll
350 S Grand Avenue
Suite 2800
Los Angeles, CA 90071

EDUCATION

PhD, Chemical Engineering, California Institute of Technology

MS, Chemical Engineering, California Institute of Technology

BS, Chemical Engineering, Purdue University

CREDENTIALS

Certified Permitting Professional – South Coast Air Quality Management District

Certified Air Permitting Professional – San Joaquin Valley Air Pollution Control District

SELECTED EXPERIENCE

Waste and Waste-to-Energy Projects – Air Quality and CEQA

- Prepared full CEQA Environmental Impact Report (EIR) for the City of Los Angeles Digester Gas Utilization Project (DGUP) at the Hyperion wastewater treatment plan that was certified in August 2013.
- Prepared full CEQA EIR for the City of Los Angeles biosolids application at Green Acres Farm that was certified in December 2014.
- Prepared an SCAQMD Certified Permitting Professional permit application for a novel biosolids waste-to-energy facility with state-of-the-art control equipment.
- Provided technical assistance to a sanitation district concerning new biosolids composting regulations and current biosolids management operations.
- Assistance to several landfill-gas-to-energy facilities with permitting and compliance issues in South Coast and Santa Barbara County.

Transportation and Goods Movement – Air Quality and CEQA Service

- Preparing the Air Quality / Greenhouse Gas / Health Risk Assessment for the I-710 Corridor Project Environmental Impact Report / Environmental Impact Study, the main goods movement truck corridor between the Ports of Los Angeles/Long Beach and the downtown railyards.
- Assisted the Ports of Long Beach and Los Angeles in the review, development and assessment of the San Pedro Bay Ports Clean Air Action Plan (CAAP) and related CAAP measures.
- Provided peer review services to the Port of Long Beach for air quality and health risk assessment analyses in draft CEQA and NEPA documents.
- Prepared a Negative Declaration for a port control technology implementation project at the Port of Long Beach.
- Prepared several assessments of port-related control technologies, strategies, and clean air plans.
- Assisted the San Diego Unified Port District (SDUPD) in the development of its Clean Air Program (CAP).

Particulate Matter Projects

- Assisted the Imperial County Air Pollution Control District in its 2009 and 2018 PM10 State Implementation Plan (SIP) development, including analysis of appropriate Best Available Control Measures (BACM) for fugitive dust, and exceptional events documentation. Assisted with Ozone SIP development, including analysis of Reasonably Available Control Technology (RACT) and Section 179(B) 'but-for' international emissions attainment demonstration.
- Assisted the Great Basin Unified Air Pollution Control District in its 2016 PM10 State Implementation Plan development for the Owens Valley, including analysis of significant sources and appropriate Best Available Control Measures (BACM) for fugitive dust.
- Conducted an independent third-party review of the fugitive dust controls, rule compliance and Environmental Impact Report assessments of a proposed large-scale aggregate mining operation for the City of Azusa. Included legal counsel support and City Council testimony.

General Permitting and Compliance Assistance

- Provided permitting, compliance and CEQA assistance (analysis and documents) to several facilities subject to air district regulations throughout California. Clients include an oil and gas production facility (CEQA Project Manager), waste-to-energy facilities (CEQA/NEPA, permitting, planning), a landfill gas-to-energy operator (multiple sites), a wastewater utility agency (permitting, compliance, planning assistance), sanitation district (CEQA, compliance, and regulatory negotiation), aggregate facilities, a glass manufacturer, a carpeting manufacturer, dairy and poultry farms, and others.

VARALAKSHMI JAYARAM

Senior Managing Consultant

Varalakshmi Jayaram is a Senior Managing Consultant in Ramboll's Air Quality Practice with over twelve years of experience in air quality management and climate change issues. She has substantial expertise in developing criteria air pollutant and greenhouse gas emission inventories, evaluating control technologies, air permitting and compliance including CEQA and NEPA, air dispersion modeling, and health risk assessments. Her clients span a broad range of industries including transportation agencies, seaports, airports, utilities, commercial and residential developers, and manufacturing facilities. She is a PhD Chemical and Environmental Engineer (UCR) and a Certified Permitting Professional in the South Coast Air Quality Management District (SCAQMD). She is currently serving as the Chair on FuturePorts Board of Directors. She also represents FuturePorts on the SCAQMD's Air Quality Management Plan Advisory Group.

COURSES/CERTIFICATIONS

Certified Permitting Professional - South Coast Air Quality Management District (N62101), 2012 - Present

MEMBERSHIPS

FuturePorts
Harbor Association of Industry and Commerce (HAIC)
Air and Waste Management Association (AWMA)

EXPERIENCE HIGHLIGHTS

- Prepared air quality, greenhouse gas, and health risk assessments (CEQA/NEPA) for several transportation, warehouse, and mixed-use development projects including but not limited to the I-710 Corridor Project, Brightline West Cajon Pass High-Speed Rail Project, K4 Warehouse and Cactus Channel Improvement Project, San Diego State University Mission Valley Campus Master Plan Project, Great Park Neighbourhoods and The Villages of Lakeview. This involved developing construction and operational criteria air pollutant and greenhouse gas inventories; developing and accessing AQ/GHG mitigation measures; performing air dispersion modeling to estimate ambient air quality impacts; estimating health risk impacts; preparing the air quality, health risk assessment, greenhouse gas, and energy technical reports; preparing the Air Quality and Greenhouse Gas sections of the Draft Environmental Impact Reports; addressing responses to comments received from the public, local agencies, and government agencies; and participating in public outreach meetings.
- Assisted with technical evaluations and comment development related to on-road vehicle policy and rulemaking, such as: California Air Resources Board's (CARB's) Mobile Source Strategy, Advanced Clean Trucks (ACT) Regulation, Advanced Clean Fleet (ACF)

CONTACT INFORMATION

Varalakshmi Jayaram

vjayaram@ramboll.com
+1 (949) 798-3689

Ramboll
5 Park Plaza, Suite 500
Irvine, CA 92614
United States of America

EDUCATION

2006-2011
PhD, Chemical & Environmental Engineering, University of California, Riverside, California, United States

2003-2005
MS, Mechanical Engineering, Ohio University, Athens, Ohio, United States

1999-2003
BTech, Chemical Engineering
Madras University, Chennai, India

Regulation, Advanced Clean Cars II (ACC II) Regulation, CARB's 2022 Draft Scoping Plan Update, and SCAQMD's Warehouse Indirect Source Rule with a focus on AQ, GHG, and cost analysis of emerging NZE/ZE vehicle (Low NOx, Battery Electric, Fuel Cell) and fuel (natural gas, electric, hydrogen) technologies for various clients.

- Provided peer review services for air quality, greenhouse gas, and health risk analyses for two large warehouse projects located in the inland empire. Developed air quality and greenhouse gas mitigation measure packages for these projects that included potential greenhouse gas, criteria air pollutant, and diesel particulate matter emission reductions associated for each mitigation measure option. The mitigation measure options spanned across a variety of emission sources including passenger cars, trucks, construction equipment, building energy use, water use, and vegetation.
- Prepared an air quality and health risk analysis protocol for CEQA/NEPA analyses of proposed projects at the Port of Long Beach. Provided peer review services for the Pier B On-Dock Rail Support Facility Project's air quality, greenhouse gas, and health risk analyses in the draft CEQA document.
- Evaluated the siting guidance established by California Air Resources Board in their 2005 Air Quality and Land Use Handbook for sensitive receptors near warehouses. This involved health risk assessments of warehouse scenarios using the latest emissions inventory model and risk assessment methodology.
- Provided AQ/GHG technical and regulatory assistance to Southern California Gas Company since 2016, including but not limited to: analyses and commenting assistance during SCAQMD and California Air Resources Board (CARB) rule development; analysis of multiple AQ (ambient/indoor) and GHG technical articles; commenting assistance during the development of the CEC's 2022 Energy Code and SCAQMD's 2022 Air Quality Management Plan, technical review of SCAQMD's Net Emissions Analysis Tool that estimates NOx/GHG benefits of residential appliance electrification, and development of a Residential Distributed Generation Comparison Tool that evaluates costs and emissions for a variety of power generation technologies/scenarios.
- Assisting the City of Commerce with the development of a Global Warming and Climate Change chapter for their General Plan update. This involves identifying the existing GHG emissions contributors within the City and developing GHG reduction goals, policies, and action items that target these contributors.
- Assisted Los Angeles Work Airports (LAWA) with technical analysis and update of their Alternative Fuel Vehicle Requirement Program that encourages the conversion of conventional diesel and gasoline fueled commercial vehicles operating in the airport to less polluting alternative fuel/vehicle technologies. This involved developing various options for a revised program and evaluating criteria air pollutant and GHG benefits for these options.
- Provided regulatory and technical assistance to the Los Angeles Metropolitan Transportation Authority (LA Metro) Advanced Transit Vehicle Consortium (ATVC) to evaluate the lifecycle cost and cost-effectiveness of near-zero and zero emission transit bus technologies. This analysis involved the development of life-cycle oxides of nitrogen (NO_X) and greenhouse gas (GHG) emissions associated with each near-zero and zero-emission technology. Technologies evaluated include: Low NO_X natural gas buses operating on renewable natural gas, battery electric buses charging at the bus depot only or charging in-route only, and hydrogen fuel cell buses that operate on hydrogen produced on-site by steam methane reformation of renewable natural gas or by electrolysis of water

EXHIBIT “B”

October 17, 2022

John P. Kinsey
Wanger Jones Helsley PC
265 E. River Park Cir., Suite 310
Fresno, CA 93720

Ref: Technical Review of Total Cost of Ownership (TCO) Discussion for the Advanced Clean Fleets Regulation (Appendix G, Posted on August 31, 2022 for the October 27, 2022 Board Hearing)

Dear Mr. Kinsey:

CleanFleets.net provides the following comments in our capacity as an advisor to truck fleet owners affected by CARB regulations. As Director, I have served the trucking industry since the CARB Diesel Risk Reduction Plan adoption in Year 2000 and have participated in the CARB zero emission (ZE) truck process since the initial "Last Mile Delivery" vehicle workshop in 2016. Our firm currently serves more than 100 trucking fleets with consulting services relating to CARB regulatory compliance and advanced technology options. As such, I have gained expertise in how trucking companies prepare to evaluate and deploy trucks, particularly those in the High Priority and Federal Fleets (HPF) category.

The Executive Summary of the TCO analysis concludes, "[I]n summary, the results show that battery-electric vehicles appear cost competitive with the established combustion technologies by 2025 in a variety of use cases." The assumptions used to reach this conclusion are overly optimistic, unsupported by the underlying evidence, and do not reflect real world data prepared by the National Renewable Energy Laboratory (NREL) over the past eight years of ZE bus demonstrations. Throughout the TCO document, CARB relies upon unproven forecasts that truck fleet operators affected by the ACF would experience favorable economic results from switching from internal combustion engine (ICE) trucks to ZE trucks. If this were true, and we do not believe it is, then no purchase mandate would be needed as the basic laws of supply and demand would drive both for-profit fleets and budget-conscious municipalities to move to ZE trucks as rapidly as possible. In any event, the TCO analysis is not supported by empirical data known to CARB and therefore the proposed regulation does not adequately identify the cost impact to businesses affected by the proposed ACF.

1. The TCO assumptions are incorrect based on the ZE trucks manufacturers' statements made in the past year on the draft TCO and CARB has failed to validate those assumptions as requested by the manufacturers. Furthermore, in the Environmental Assessment (EA) for ACF, CARB staff rejected a common-sense proposal from the manufacturers to match their CARB-mandated supply (per the ACT Regulation) with the consumer purchase requirements proposed in this ACF.

The Truck & Engine Manufacturers Association (EMA) has communicated to CARB the state of ZE trucks:

> "Unfortunately, compared to traditional vehicles, ZEVs currently (i) cost a trucking company more to purchase, (ii) are not able to perform the same amount of work as traditional trucks, (iii) require new maintenance facilities and equipment investments, (iv) have lower residual values, and (v) require the build-out and maintenance of a completely new electricity charging or hydrogen fueling infrastructure."[1]

Commercial trucks are highly customized specialty vehicles that HPF-affected fleets must rely on to profitably serve customers. The costs to regulated fleets to address and overcome the barriers above are not adequately explained in the TCO. The most glaring examples of "inaccurate assumptions" were noted by EMA:

- ZEV purchase costs that are too low.
- ZEV residual values are too high.
- No lost productivity to charge a ZEV.
- Average mileage will be adequate when trucks are often needed for peak operation.
- Charger costs based on power ratings that are too low for heavy trucks.
- No infrastructure costs for sleeper cab tractors.
- No maintenance costs for infrastructure."

Based on overly-optimistic assumptions, the draft cost discussion document concludes that cost parity between ZEVs and traditional vehicles will occur soon. We request that CARB validate the assumptions in the draft cost discussion documents by conducting ***case studies of the medium- and heavy-duty ZEV pilot and demonstration projects*** that are underway in California."[2] (emphasis added he EMA proposal to CARB, titled *"Alternative 5: Match ACT and ACF ZEV Deployments Exactly"* in the EA, was rejected with inadequate analysis in our view. As stated in the EA:

> "The basic concept would require fleets to purchase ZEVs on a schedule that matches the number of ZEV sales required by the ACT regulation starting with the 2024 model year. This alternative would shift where ZEV sales occur but would result in no more ZEVs nor NZEVs than the baseline nor what would otherwise be expected under the No Project Alternative. This alternative would increase administrative burden to implement the fleet requirements and would primarily distribute costs between manufacturers and regulated fleets without increasing ZEV and without achieving any new emissions reductions."

---

[1] See Truck & Engine Manufacturers Association comments filed with CARB today at https://www.arb.ca.gov/lists/com-attach/105-acf-comments-ws-V2VUYlBjVjRSC1Bh.pdf

[2] See Truck & Engine Manufacturers Association comments filed with CARB today at https://www.arb.ca.gov/lists/com-attach/105-acf-comments-ws-V2VUYlBjVjRSC1Bh.pdf

First, the "baseline" is a figment of CARB staff imagination and not reflective of what the manufacturers have indicated they can (or will) produce. One need only look at the Advanced Clean Trucks adoption by CARB in 2020 to verify this. Prior to adoption, CARB staff proposed higher percentages of sales than the manufacturers stated they could produce. So the "baseline" established in the ACT is not grounded in reality, but rather by wishful thinking and we see no evidence in the record that the "baseline" percentages can be met due to the statements of the manufacturers themselves. It appears that the EMA's Alternative 5 would be to match the ambitious increase percentages adopted at the last minute by the CARB Board prior to adoption. To reject this Alternative with the justification that it, "would result in no more ZEVs nor NZEVs than the baseline…," is not reasonable given that the baseline set by the ACF does not reflect the capacity of the manufacturers to produce ZEVs (e.g. the monumental task of extracting critical minerals and refining those into ZEV batteries). In very simple terms, economic disruption is lessened when the supply of a product and the consumer demand for the product are similar. Due to many factors explained by EMA during the ACT Regulation,[3] "beachheads" represent ZE vehicle types for specific customers that are more suitable for manufacturing and use by fleet customers. The initial production required for the ACT when adopted was in the tens of thousands of ZE trucks. With the "100 Percent" proposal in this ACF that manufacturing appears to now be over 500,000 ZE trucks. CARB has failed to provide a thorough analysis or identify the basis for the conclusion that the manufacturing supply chain will produce hundreds of thousands of ZE vehicles ***in excess of*** what the manufacturers have indicated they can produce.

2. The CARB Board did receive and take testimony on September 22, 2022 from NREL on a multi-year ZE bus evaluation that further demonstrates the TCO for ACF uses assumptions not supported by the facts.[4]

Since EMA made the comments above nearly a year ago, NREL issued its final report on the demonstration project at Foothill Transit. In the introduction to NREL's Final Report, NREL states indicates that, "Foothill Transit is collaborating with the California Air Resources Board (CARB) and the
U.S. Department of Energy's (DOE's) National Renewable Energy Laboratory (NREL) to evaluate the buses in revenue service. The focus of the evaluation is to compare performance and cost of the BEBs [Battery-Electric Buses] to that of conventional technology in similar service and track progress over time."

A brief review of the Final Report shows the TCO does not reflect real world experience such as Foothill Transit. For instance, in comparing a compressed natural gas (CNG) ICE fleet to a ZE bus fleet, the Foothill results do not support the TCO's conclusions:

---

[3] See https://ww2.arb.ca.gov/applications/public-comments?p=comm&s=bccommlog&l=act2019

[4] Jeffers, Matthew and Leslie Eudy. 2021. Foothill Transit Battery Electric Bus Evaluation: Final Report. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5400- 80022. https://www.nrel.gov/docs/fy21osti/80022.pdf.

- More costly fuel: CNG fuel compared to diesel equivalent basis shows that *electricity is 5-6.5 times more expensive* than CNG fuel, depending on the time of year. The TCO, in contrast, erroneously assumes that CNG and electricity are equally expensive.
- Increased maintenance costs: After removing accident- and warranty-related items for both fleets, the average per-mile maintenance cost was $0.50/mi for the BEB 35FC fleet, $0.56/mi for the BEB 40FC fleet, and $0.32/mi for the CNG fleet, compared to the assumptions of maintenance cost savings for ZEVsin the TCO;
- More vehicle downtime: In the Arcadia Fleet, BEB 40E2 fleet was available 81.9% of time and CNG available 93.5% of time. Unfortunately, there is no mention of vehicle downtime in the TCO, but it is common knowledge that the lack of vehicle reliability translates into more vehicles needed to accomplish the work. Stated another way, if nearly 20% of a battery electric fleet is down at any given time than additional vehicles are needed to maintain the same service level. This cost should be included in the TCO and for that reason the TCO is incomplete.

None of these facts indicate to a reasonable person that heavy duty ZE vehicles are cheaper to own and operate and are reliable as the TCO states.

3. The TCO understates and downplays the upfront costs of ZE trucks and includes predictions for ZE truck cost reductions that are not supported

The TCO shows the cost as follows: “Class 8 Refuse Packer – Battery-Electric $299,932.” Media reports, however, show that the cost of a similar Class 8 Refuse Packer are actually around $600,000.[5] As a measure of the incremental cost of a ZE truck versus diesel, the CARB Hybrid Voucher Incentive Program (HVIP) has stated that its incentive amount can cover that incremental cost. A check of the HVIP website lists ZE vehicle incentives for Class 7-8 vehicles in the range of $85,000 to $240,000.[6] The Table 5: New Vehicle Price Forecast in the TCO shows a maximum of $98,000 in cost difference for the heaviest Class 8 vehicles. The TCO should be substantially revised because its estimates for the price of new ZE vehicles are underestimated. We have noted the same issue with other vehicle types and CARB provides no quotes or validation for the completed vehicle examples modeled in the TCO. There is a lack of transparency to the consumer as it relates to heavy duty ZEVs. Unlike conventional trucks, the consumer can go to the OEM website (e.g. Ford) and view what the MSRP is of vehicles.

[5] An electric garbage truck? Zero-emission rigs look to go mainstream - The San Diego Union-Tribune (sandiegouniontribune.com)
[6] https://californiahvip.org/vehicles/

The TCO also predics decreasing BEV costs. However, these conclusions are entirely undermined by statements from the industry. For example, an August 9, 2022 announcement from Ford Motor Company gave notice of a $7,000 or more price increase for Ford Motor Company's Lightning pickup. As explained in the announcement, "Due to significant material cost increases and other factors, Ford has adjusted MSRP starting with the opening of the next wave of F-150 Lightning orders." Similarly, in June 2022, Tesla (TSLA) announced that it "has significantly increased the prices of its electric cars across its entire lineup with some models going up by as much as $6,000."[7] Lighter duty ZEVs have been in production for several decades and have not reached price parity with their gasoline counterparts so the conclusion that ZE trucks will be close in cost to conventional vehicles is not supported by the facts.

In conclusion, the TCO assumptions are incorrect based on the ZE trucks manufacturers' statements and data collected by NREL in collaboration with CARB. The NREL study metrics should be included in the TCO. Finally, because the upfront cost of ZE trucks is downplayed, the calculated "payback period" is not valid and is not reliable. All of these factors indicate that the TCO does not meet the requirements of the Administrative Procedures Act as it is incomplete, inaccurate and does not disclose the cost impact to businesses.

Sincerely,

Sean R. Edgar
Director

[7] See "Ford Increases Lightning Base Price For Second Time In Two Months" https://www.motor1.com/news/614555/ford-lightning-price-increase/#:~:text=In%20August%2C%20Ford%20announced%20it%20was%20increasing%20the,at%20%2453%2C769%20with%20the%20%241%2C795%20destination%20fee%20included. and "Tesla (TSLA) significantly increases its electric car prices across its lineup," at https://electrek.co/2022/06/15/tesla-tsla-increases-electric-car-prices-across-lineup/

Air Resources Regulatory Experts

Sean Edgar
Director

Sean R. Edgar has thirty years of public policy development and field experience in transportation, construction and air quality projects for clients in both the public and private sectors. Mr. Edgar gained experience in the public policy arena while serving in the Office of Governor Pete Wilson. There he participated in the formation of the California Environmental Protection Agency in 1991-1993.

In the 1990's Mr. Edgar joined International Technology (IT) Corporation where he managed 25 field personnel in the closure of Hamilton Army Airfield in Marin County, California. For two years, he coordinated waste storage, packaging, transportation, and disposal for the US Department of Energy at Lawrence Livermore National Laboratory. Mr. Edgar was the owner's representative for the closure of the West Contra Costa Sanitary Landfill involving earthwork over 40 acres of the landfill site.

For the past 25 years, Mr. Edgar's consulting practice has consisted of association management and regulatory advocacy relating to transportation and air quality issues. Mr. Edgar has an established presence at the California Air Resources Control Board (CARB) since the September 2000 adoption of the Diesel Risk Reduction Plan (DRRP) and has participated in every major on-road and off-road rulemaking for more than twenty years. Among his other accomplishments, he represented the private solid waste collectors (California Refuse & Recycling Council) in the development and implementation of the CARB Solid Waste Collection Vehicle Rule, the first private carrier rule enacted by CARB. In 2009 Mr. Edgar was appointed by CARB to their Truck Regulations Advisory Committee. In 2011 he was authorized by CARB through a competitive bid process to train business owners about CARB rules. In the past nine years he has educated more than 6,000 fleet owners in six western states through over 150 personal appearances. He is a recognized expert regarding on-road fleet rule implementation and technology options. In 2016 Mr. Edgar was appointed to the CARB Advanced Clean Local Trucks Committee that resulted in the Advanced Clean Trucks Regulation approved by CARB in June 2020. In 2019 he was named Technical Director for the CARB Diesel Filter Replacement Grant Program which resulted in the distribution of $3 million in grant funds to repair or replace recalled emission systems for public agencies and private fleet owners. As Director he supervises the firm's staff of six professionals servicing more than 200 public and private fleet owners with regulatory compliance services.

Mr. Edgar holds a Bachelor of Arts degree in Political Science from the University of California at Berkeley. Additionally, in 2006 he earned an Air Quality Management Certificate from California State University Fresno Extension and has completed substantial technical training and continuing education in the fields of environmental law and regulation, hazardous materials management, and occupational safety and health. He is fluent in Spanish and is a resident of Sacramento, California.

WANGER JONES HELSLEY PC
ATTORNEYS

OLIVER W. WANGER
TIMOTHY JONES*
MICHAEL S. HELSLEY
RILEY C. WALTER
PATRICK D. TOOLE
SCOTT D. LAIRD
JOHN P. KINSEY
KURT F. VOTE
TROY T. EWELL
JAY A. CHRISTOFFERSON
MARISA L. BALCH
AMANDA G. HEBESHA**
PETER M. JONES†
JEFFREY B. PAPE†
DEBORAH K. BOYETT
STEVEN K. VOTE
NICOLAS R. CARDELLA
GIULIO A. SANCHEZ
KATHLEEN D. DEVANEY
BENJAMIN C. WEST
HUNTER C. CASTRO
STEPHANIE M. HOSMAN
RACHEL L. POMBO
NATHAN J. MARTIN
COLTEN D. BALLINGER

* Also admitted in Washington
** Also admitted in Idaho
† Of Counsel

265 E. RIVER PARK CIRCLE, SUITE 310
FRESNO, CALIFORNIA 93720

MAILING ADDRESS
POST OFFICE BOX 28340
FRESNO, CALIFORNIA 93729

TELEPHONE
(559) 233-4800

FAX
(559) 233-9330

CLOVIS OFFICE:
642 Pollasky Avenue
Suite 100
Clovis, California 93612

OFFICE ADMINISTRATOR
LYNN M. HOFFMAN

Writer's E-Mail Address:
jkinsey@wjhattorneys.com

Website:
www.wjhattorneys.com

August 21, 2023

VIA ELECTRONIC SUBMISSION AND UNITED STATES MAIL

Clerk's Office
CALIFORNIA AIR RESOURCES BOARD
1001 "I" Street
Sacramento, CA 95814

Re: Comments on Proposed Advanced Clean Fleets Regulation Second Notice of Public Availability of Modified Text and Availability of Additional Documents

Dear Clerk to the California Air Resources Board:

On behalf of Western States Trucking Association ("WSTA"), I am submitting the following comments on the Advanced Clean Fleets Regulation in response to the Second Notice of Public Availability of Modified Text and Availability of Additional Documents (the "Second 15-Day Notice").

A. By Including Additional Responses to Environmental Comments, CARB is Engaging in *Post Hoc* Environmental Review, in Violation of CEQA

As the Supreme Court explained in *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376 "[a] fundamental purpose of an EIR is to provide decision makers with information they can use in deciding whether to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved. If post-approval environmental review were allowed, EIR's would likely become nothing more than post hoc rationalizations to support action already taken." (*Id.* at 394; see *No*

Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 79; CEQA Guidelines, § 15004, subd. (a) ["Before granting any approval of a project subject to CEQA, every lead agency . . . shall consider a final EIR . . . ."] [emphasis added].) Moreover, the timing requirement set forth in Section 15004 of the CEQA Guidelines "applies to the environmental review documents prepared by [C]ARB . . . in lieu of an EIR." (*POET, LLC v. Calif. Air Res. Bd.* (2013) 218 Cal.App.4th 681, 716.)

WSTA recently filed a writ petition challenging the ACF Regulation, which among other things asserts that CARB violated CEQA by failing to perform a lifecycle analysis of GHG emissions associated with the ACF Regulation. CARB is now attempting to impermissibly bolster the record—after the approval of the ACF Regulation—by including supplemental responses to comments made by WSTA in its comment letters, which were filed in a timely manner during the rulemaking process. These responses to WSTA's comments were never presented to CARB 's governing board prior to their approval of the ACF Regulation.

As an initial matter, these responses are not properly part of the record for purposes of CEQA because they post-date CARB's approval of the project.

Moreover, while the Second 15-Day Notice asserts the lifecycle analysis was only generally alleged, this issue was a core issue in WSTA's October 17, 2022, comment letter; its second comment letter dated April 7, 2023; and the oral comments of its counsel to CARB's governing board on April 27, 2023. It is highly improper for CARB staff to backfill the record only after the governing board approved the project.

The new responses are also procedurally improper, and violate CEQA's prohibition of *post hoc* environmental review. Responses to environmental comments are a critical part of the CEQA process. The environmental review process must be complete before CARB approves a regulation. By failing to conclude the environmental review process before the final hearing on the ACF Regulation, CARB has violated CEQA. (See *POET*, *supra*, 218 Cal.App.4th at 716.)

In addition, the addition of responses to environmental comments cannot occur under CARB's certified regulatory program without conducting another hearing. Although CARB previously conducted a hearing and purportedly delegated the Executive Officer authority to respond to environmental comments, CARB's certified regulatory program makes plain that in such circumstances, there must be a subsequent hearing before the state board:

> (6) Hearings. . . . If a state board hearing is held, the state board may vote on a resolution that directs staff to make direct changes or prepare written responses to environmental comments, and in such case ***shall*** direct staff to ***schedule a subsequent hearing*** for the state board's consideration of the final proposal for approval.

(13 Cal. Code Regs., § 60004.2(b)(6) [emphasis added].) Because it appears CARB does not intend to schedule another state board hearing on the ACF Regulation, CARB has violated both CEQA and its CEQA regulations.

In short, CARB's attempt to bolster the CEQA record after the approval of the ACF Regulation violates the letter, the intent, and the spirit of CEQA, as well as CARB's own certified regulatory program.

B. CARB Staff Removed the Final Statement of Reasons (FSOR) from its Webpage During the Public Comment Period on the Second 15-Day Notice

WSTA notes that CARB has removed the FSOR (as well as the responses to comments on the EA) from the CARB website without explanation. This not only frustrates the ability of the public to provide full comment, but is an additional fact demonstrating the environmental review process has not been completed—notwithstanding the governing board's "approval" of the ACF Regulation at its April 27, 2023, meeting. This is also contrary to CARB's obligation to maintain a complete rulemaking file accessible to the public at all times. Even if CARB's governing board does not rehearing the ACF Regulation for approval, the removal of the FSOR from the CARB website is grounds to extend the comment period on the 15-day notice.

C. CARB Should Refile a Notice of Proposed Action on the Advanced Clean Fleets Regulation with the Office of Administrative Law (OAL) to Provide itself the Time Needed to Conduct Another Hearing on the Advanced Clean Fleets Regulation

Although CARB is attempting to re-open the record to provide a response to WSTA's lifecycle emissions concerns—an environmental issue CARB completely ignored during the rulemaking process—it is declining to conduct another hearing before the governing board as required under 13 Cal. Code Regs., § 60004.2(b)(6).

CARB is likely taking this position because its deadline to file the Advanced Clean Fleets regulation with OAL is September 1, 2023. Specifically, WSTA understands that CARB requested withdrawal of the Advanced Clean Fleets Regulation from OAL on July 26, 2023. (See **Exhibit "A."**) Unlike advance decisions from OAL, a voluntary withdrawal of a regulation does not afford an applicant an additional 120-days to refile with OAL. This is because an extra 120-days can only be provided when CARB receives a written opinion from OAL about the problems it sees with the regulation. (Govt. Code, §§ 11349.4, subd. (a).) Because that did not occur, CARB is required to file with OAL on or before September 1, 2023. (*Cf.* OAL Regulatory Notice Register, Notice File No. Z2022-0816-04.) Because this does not afford CARB sufficient time to conduct the public hearing required under Section 60004.2(b)(6) due to its response to WSTA's comments on lifecycle emissions, CARB must instead issue a new Notice of Proposed Action.

D. If CARB Reopens the Record to Accept Supplemental Information from Staff, it Should Likewise Accept Environmental Comments from the Public

CARB may not, on the one hand, reopen the record—after project approval—to respond to environmental comments it neglected to address during the public comment period, while at the same time asserting this "does not mean that CARB is opening a new CEQA comment period for this rulemaking action." (See 15-Day Notice at 23.) WSTA believes CARB's new responses to comments are inappropriate; however, to the extent CARB contends it has the opportunity to augment the record after project approval, the public should likewise be afforded the opportunity to add substantive environmental comments and evidence to the record. To this end, WSTA would like to provide further evidence to CARB and OAL that has recently arisen further demonstrating the fact that the Advanced Clean Fleets Regulation will have profound negative consequences to California residents and businesses. For instance, WSTA has expressed concern that CARB is seeking to undermine recent investment in proven clean technologies such as renewable natural gas (RNG) while favoring unproven technologies that will rely on California's already overtaxed electricity grid. Since the last public hearing in April 2023, there have been numerous additional widely publicized examples of electric truck batteries combusting, creating a safety hazard for truckers and the general public, additional emissions, and a massive financial burden on the first responders and the regulated community. (See **Exhibit "B."**) At the same time, California's electricity grid has remained unreliable. (See **Exhibit "C."**) CARB should not be adding further demand to the grid when Governor Newsom only recently asked California residents and businesses to "double down on conserving energy to reduce the unprecedented strain on the grid," proclaiming "[w]e need everyone—individuals, businesses, ***the state*** and energy producers—to do their part in the coming days and help California continue to meet this challenge." (*As Record Heat Wave Intensifies, Governor Newsom Extends Emergency Response to Increase Energy Supplies and Reduce Demand* (September 6, 2022).)[1]

Thank you for your consideration of these comments.

Respectfully submitted,

John P. Kinsey

cc: Kevin D. Hull (via email: kevin.hull@oal.ca.gov)
Eric Partington (via email: Eric.Partington@oal.ca.gov)

Enclosures

[1] Available at: https://www.gov.ca.gov/2022/09/06/as-record-heat-wave-intensifies-governor-newsom-extends-emergency-response-to-increase-energy-supplies-and-reduce-demand/#:~:text=We%20all%20have%20to%20double,continue%20to%20meet%20this%20challenge.%E2%80%9D

EXHIBIT “A”

From:	Hull, Kevin@OAL
To:	Bechtold, Bradley@ARB; Partington, Eric@OAL
Cc:	Cecere, Ian@ARB; Wang, Alex@ARB; Hults, David@ARB; Brasil, Tony@ARB
Subject:	RE: Advanced Clean Fleets - 2023-0613-02S S
Date:	Wednesday, July 26, 2023 10:28:06 AM
Attachments:	image002.png image003.jpg

Thank you for your email.

This will confirm that the above-referenced rulemaking submission has been formerly withdrawn from OAL review. A formal Notice of Withdrawal will be sent out shortly.

Thank you, and please do not hesitate to contact OAL if you have any questions.

Regards,

Kevin D. Hull, Attorney IV
Office of Administrative Law
Organization Title
300 Capitol Mall, Suite 1250, Sacramento, CA 95814
P 916.323.8916 **F** 916.323.6826 **E** kevin.hull@oal.ca.gov

---

From: Bechtold, Bradley@ARB <Bradley.Bechtold@arb.ca.gov>
Sent: Wednesday, July 26, 2023 10:21 AM
To: Hull, Kevin@OAL <Kevin.Hull@oal.ca.gov>; Partington, Eric@OAL <Eric.Partington@oal.ca.gov>
Cc: Cecere, Ian@ARB <Ian.Cecere@arb.ca.gov>; Wang, Alex@ARB <alex.wang@arb.ca.gov>; Hults, David@ARB <David.Hults@arb.ca.gov>; Brasil, Tony@ARB <Tony.brasil@arb.ca.gov>
Subject: RE: Advanced Clean Fleets - 2023-0613-02S S

Good morning,
CARB formally requests withdrawal of the Advanced Clean Fleets Regulation, OAL file number 2023-0613-02S S.

Bradley Bechtold
Regulations Coordinator - (279) 208-7266
Board Administration and Regulatory Coordination Unit
CARB_H_logo

Please note my new schedule: Monday – Friday, 7:30 a.m. – 4 p.m.

From: Bechtold, Bradley@ARB
Sent: Tuesday, July 25, 2023 4:56 PM
To: Hull, Kevin@OAL <Kevin.Hull@oal.ca.gov>; Partington, Eric@OAL <Eric.Partington@oal.ca.gov>
Cc: Cecere, Ian@ARB <Ian.Cecere@arb.ca.gov>; Wang, Alex@ARB <alex.wang@arb.ca.gov>; Hults, David@ARB <David.Hults@arb.ca.gov>; Brasil, Tony@ARB <Tony.brasil@arb.ca.gov>
Subject: RE: Advanced Clean Fleets - 2023-0613-02S S

Kevin, Eric,
Please disregard the withdrawal issued earlier. I will follow-up in the morning.

Bradley Bechtold
Regulations Coordinator - (279) 208-7266
Board Administration and Regulatory Coordination Unit
CARB_H_logo

Please note my new schedule: Monday – Friday, 7:30 a.m. – 4 p.m.

From: Bechtold, Bradley@ARB
Sent: Tuesday, July 25, 2023 4:30 PM
To: Hull, Kevin@OAL <Kevin.Hull@oal.ca.gov>; Partington, Eric@OAL <Eric.Partington@oal.ca.gov>
Cc: Cecere, Ian@ARB <Ian.Cecere@arb.ca.gov>; Wang, Alex@ARB <alex.wang@arb.ca.gov>; Hults, David@ARB <David.Hults@arb.ca.gov>; Brasil, Tony@ARB <Tony.brasil@arb.ca.gov>
Subject: RE: Advanced Clean Fleets - 2023-0613-02S S

Hey Kevin,
Would you mind processing the withdrawal tomorrow morning?

Bradley Bechtold
Regulations Coordinator - (279) 208-7266
Board Administration and Regulatory Coordination Unit
CARB_H_logo

Please note my new schedule: Monday – Friday, 7:30 a.m. – 4 p.m.

From: Hull, Kevin@OAL <Kevin.Hull@oal.ca.gov>
Sent: Tuesday, July 25, 2023 4:24 PM
To: Bechtold, Bradley@ARB <Bradley.Bechtold@arb.ca.gov>; Partington, Eric@OAL <Eric.Partington@oal.ca.gov>
Cc: Cecere, Ian@ARB <Ian.Cecere@arb.ca.gov>; Wang, Alex@ARB <alex.wang@arb.ca.gov>; Hults, David@ARB <David.Hults@arb.ca.gov>; Brasil, Tony@ARB <Tony.brasil@arb.ca.gov>
Subject: RE: Advanced Clean Fleets - 2023-0613-02S S

Thank you for your email.

This will confirm that the above-referenced rulemaking submission has been withdrawn from OAL review. A formal Notice of Withdrawal will be sent out shortly.

Thank you, and please do not hesitate to contact OAL if you have any questions.

Regards,

Kevin D. Hull, Attorney IV
Office of Administrative Law
Organization Title
300 Capitol Mall, Suite 1250, Sacramento, CA 95814
P 916.323.8916 **F** 916.323.6826 **E** kevin.hull@oal.ca.gov

---

From: Bechtold, Bradley@ARB <Bradley.Bechtold@arb.ca.gov>
Sent: Tuesday, July 25, 2023 4:13 PM
To: Partington, Eric@OAL <Eric.Partington@oal.ca.gov>; Hull, Kevin@OAL <Kevin.Hull@oal.ca.gov>
Cc: Cecere, Ian@ARB <Ian.Cecere@arb.ca.gov>; Wang, Alex@ARB <alex.wang@arb.ca.gov>; Hults, David@ARB <David.Hults@arb.ca.gov>; Brasil, Tony@ARB <Tony.brasil@arb.ca.gov>
Subject: Advanced Clean Fleets - 2023-0613-02S S

Good afternoon,
CARB requests to withdraw the Advanced Clean Fleets Regulation, 2023-0613-02S S, Regular Rulemaking file from OAL.

Thank you so much for your help.

Regards,
Bradley Bechtold
Regulations Coordinator - (279) 208-7266
Board Administration and Regulatory Coordination Unit
CARB_H_logo

Please note my new schedule: Monday – Friday, 7:30 a.m. – 4 p.m.

EXHIBIT “B”

CLEANFLEETS.NET

Air Resources Regulatory Experts

August 21, 2023

John P. Kinsey
Nicolas Cardella
Wanger Jones Helsley PC
265 E. River Park Cir., Suite 310
Fresno, CA 93720

Ref: Technical Exhibit B: Response to Environmental Assessment (EA) Comments for the Advanced Clean Fleets Regulation (Second 15-Day Notice, Posted on August 4, 2023)

Dear Mr. Kinsey and Mr. Cardella:

CleanFleets.net provides the attached comments in our capacity as an advisor to truck fleet owners affected by CARB regulations. As Director, I have served the trucking industry since the CARB Diesel Risk Reduction Plan adoption in Year 2000 and have participated in the CARB zero emission (ZE) truck process since 2016. Our firm currently serves more than 100 trucking fleets with consulting services relating to CARB regulatory compliance and routinely monitors the national and international technical reports and media coverage relating to vehicle fuels and propulsion systems.

The EA for this regulatory effort is incomplete for the reasons noted herein.

Sincerely,

Sean Edgar
Director
CleanFleets.net

cc: Lee Brown, Western States Trucking Association
Mike Lewis, Construction Industry Air Quality Coalition

Attachment: *"CLEAN FLEETS EXHIBIT RELATING TO ELECTRIC VEHICLE BATTERIES," August 21, 2023"*

CLEAN FLEETS EXHIBIT RELATING TO ELECTRIC VEHICLE BATTERIES
August 21, 2023

1. CARB's EA is incomplete and inadequate in its analysis of electric vehicle battery systems safety and environmental impacts. New information since the April 14, 2023 Final EA was published appears below and is not consistent with the conclusions of the EA and must be considered under CEQA.

As stated in the EA:

> "The likelihood to overheat or ignite is increased if the batteries are poorly packaged, damaged or exposed to a fire or a heat source. ***However, when packaged and handled properly, lithium batteries pose no environmental hazard (79 Fed. Reg. 46011, 46032), and therefore no increased demand on public services related to emergency responders is anticipated.*** [Emphasis, mine]. Further, these impacts are largely associated with the use and production of lithium-ion batteries used in consumer products as compared to lithium-ion storage batteries."[1]

This information is widely available in the public domain. [Note to the reader: ***Emphasis*** has been added in bold and italics to highlight statements that are not consistent with the EA.]

A. April 20, 2023, CNBC News: *Ford F-150 Lightning fire footage highlights a growing EV risk.*

- *"*Automakers are spending billions of dollars to electrify their lineups. ***However, there's been little to no discussion about first responder training for when the vehicles catch fire, whether due to a malfunction or, more commonly, a crash."***
- "Lithium-ion batteries, commonly used in EVs, can be volatile and extremely difficult to put out once on fire. "We're not putting this f---er out. Look at it," said one responding officer during the February F-150 Lightning fire. ***First responders can be heard on video expressing concern about how much water is needed to put out EV fires and whether a special foam would be required. They also questioned the viability and safety of electric vehicles.*** "They have to put like a whole f---ing lake on it to put them out," the same officer said…"

[1] Final Environmental Analysis, April 14, 2023, p. 69

- ”Firefighters increasingly are facing the challenges created by EV fires. ***This is made more complicated by what some experts say is a lack of regulations and standards, which allows automakers to do as they like regarding the design and rollout of EVs.”***[2]

B. June 6, 2023, Elektrek, Mill Valley, CA: Rivian electric pickup caught fire while charging at Electrify America station
   - But electric vehicle fires can still happen, and sometimes they are worth noting as they have at times been traced back to battery problems leading to recalls, like in the case of the Chevy Bolt EV or, more recently, the Jaguar I-Pace.
   - Now we have learned of a Rivian R1T electric pickup truck catching on fire while charging at an Electrify America station in Mill Valley, California, last night.
   - Interestingly, the battery pack doesn’t appear to be the problem here, but ***the damage indicates that the fire may have started around the charge port of the vehicle,*** which is located on the front driver side.[3]

C. July 24, 2023, ABC News, Phoenix, AZ: *An electric semi-truck reignited at a Phoenix Nikola facility Sunday afternoon,* ***one month after the original fire.***

- “According to the Phoenix Fire Department, the battery cells were burning at over 800 degrees. Crews applied hundreds of gallons of water per minute to "change the chemical reaction by cooling the battery compartment. Officials say the semi-truck involved in the fire experienced “"another thermal runaway and ignition of the battery cells located in the vehicle."
- Officials say crews arrived at the facility near 40th Street and Broadway Road around 2 p.m. ***and found one of the previously burned semi-trucks on fire.”***[4]

[2] https://www.cnbc.com/2023/04/20/f-150-lightning-fire-footage-growing-ev-risk.html
[3] https://electrek.co/2023/06/06/rivian-electric-pickup-caught-fire-while-charging-electrify-america-station/
[4] https://www.abc15.com/news/region-phoenix-metro/south-phoenix/electric-semi-truck-reignited-at-phoenix-nikola-property

D. August 3, 2023, Associated Press, The Netherlands: *A car-carrying ship that burned for a week on the North Sea is towed to a Dutch port for salvaging.*

- "The ***ship with 3,784 new vehicles, including 498 electric ones, on board caught fire on July 25*** while traveling from the German port city of Bremerhaven to Singapore."
- "The fire on the Fremantle Highway burned out of control for a week as it floated near busy North Sea shipping lanes and the shallow Wadden Sea, a UNESCO World Heritage-listed migratory bird habitat. ***Dutch authorities did not attempt to spray water onto the ship for fear of making it unstable.***"[5]

E. August 15, 2023, CBS News: *Lithium-ion battery fires from electric cars, bikes and scooters are on the rise.* ***Are firefighters ready?***

- "The rechargeable batteries that power common items like e-bikes, scooters and electric cars can pose a dangerous new threat to firefighters. They burn hotter and longer — **and many fire departments may be unprepared to tackle them**…."
- **Lithium-ion battery fires caused at least 20 deaths and more than 300 injuries in New York City and San Francisco since 2019**.""[6]
- Another danger to first responders comes when thermal runaway doesn't result in fire but instead ***causes a phenomenon known as "off-gassing."*** ""They didn't see any flames. The problem with this was a buildup of combustible gases inside the garage and started coming into the house," said Doug Saba, deputy fire marshal for Mountain View Fire Rescue. "That happens a lot with batteries, lithium-ion batteries that fail. ***And they fail because there's either a manufacturer defect or something damages those batteries causing that.*** It could be an electrical short."

[5] https://apnews.com/article/cargo-ship-cars-fire-towed-netherlands-port-93134c6e82af5cb8c3963ca85b9eace0
[6] https://www.cbsnews.com/news/lithium-ion-battery-fires-electric-cars-bikes-scooters-firefighters/

EXHIBIT “C”

CLEANFLEETS.NET

Air Resources Regulatory Experts

August 21, 2023

John P. Kinsey
Nicolas Cardella
Wanger Jones Helsley PC
265 E. River Park Cir., Suite 310
Fresno, CA 93720

Ref: Technical Exhibit C: Response to Environmental Assessment (EA) Comments for the Advanced Clean Fleets Regulation (Second 15-Day Notice, Posted on August 4, 2023)

Dear Mr. Kinsey and Mr. Cardella:

CleanFleets.net provides the attached comments in our capacity as an advisor to truck fleet owners affected by CARB regulations. As Director, I have served the trucking industry since the CARB Diesel Risk Reduction Plan adoption in Year 2000 and have participated in the CARB zero emission (ZE) truck process since 2016. Our firm currently serves more than 100 trucking fleets with consulting services relating to CARB regulatory compliance and routinely monitors the State's energy grid, needed upgrades and cost to consumers.

The EA for this regulatory effort is incomplete for the reasons noted herein.

Sincerely,

Sean Edgar
Director

cc: Lee Brown, Western States Trucking Association
Mike Lewis, Construction Industry Air Quality Coalition

Attachment: *"CLEAN FLEETS EXHIBIT RELATING TO THE CALIFORNIA ELECTRIC GRID," August 21, 2023"*

CLEAN FLEETS EXHIBIT RELATING TO THE CALIFORNIA ELECTRIC GRID
August 21, 2023

1. CARB's analysis of electricity supply and infrastructure to support light, medium and heavy-duty vehicles is woefully inadequate.

Three excerpts from the EA are provided below and each is addressed in the same order in "A", "B" and "C" below:

> "The electricity needed to power ZEV and PHEVs ***can be provided*** by California's electricity grid or a compliant distributed generation power source."[1] [Emphasis, mine].
>
> "Where there are situations with substantial electrical loads, distributed generation resources, ***or lithium-ion storage batteries could be relied on during periods when total demand is high*** and the energy grid is experiencing peak levels of demand. The potential ***stresses on the electric grid resulting from implementation of the Proposed Program could be avoided*** through asset management, system design practices, and managed charging to shift a significant amount of the load away from system peaks."[2] [Emphasis, mine].
>
> "Through the increased use of ***highly efficient ZEVs*** powered by an increasingly more renewable energy grid, ***implementation of the Proposed Program would improve the efficiency of energy usage*** across the State." [Emphasis, mine].[3]

This information is widely available in the public domain. [Note to the reader: ***Emphasis*** has been added in bold and italics to highlight statements that are not consistent with the EA.]

A. January 17, 2023, CalMatters.org: *Race to zero: Can California's power grid handle a 15-fold increase in electric cars?*[4]

- "Despite expecting 12.5 million electric cars by 2035, California officials insist that the grid can provide enough electricity. But ***that's based on multiple assumptions — including building solar and wind at almost five times the pace of the past decade — that may not be realistic***."

[1] Final Environmental Analysis, April 14, 2023, p. 39
[2] Ibid., p. 55
[3] Ibid., p. 57
[4] https://calmatters.org/environment/2023/01/california-electric-cars-grid/

- To support electricity demand, "***Increase electricity production by up to*** 42% in 2035 and, under a recent scenario, ***as much as 85% in 2045, according to California Energy Commission estimates.*** Generation capacity — the maximum that must be installed to meet demand throughout a given year — would need to triple by 2045."
- ""We're going to have to expand the grid at a radically much faster rate," said David Victor, a professor and co-director of the Deep Decarbonization Initiative at UC San Diego. "This is plausible if the right policies are in place, ***but it's not guaranteed. It's best-case***." Yet ***the Energy Commission has not yet developed such policies or plans,*** drawing intense criticism from energy experts and legislators. ***Failing to provide enough power quickly enough could jeopardize California's clean-car mandate*** — thwarting its efforts to combat climate change and clean up its smoggy air.
- Clean Fleets observations: The CARB EA position that electricity "can be provided" is not supported by evidence in the record, but is ***simply wishful thinking on which compliance certainty for truckers is not reasonable.***

B. March 30, 2023, Network World: *Data center fires raise concerns about lithium-ion batteries*

- "Fire is to blame for a small but significant number of data-center outages including a March 28 fire that caused severe damage to a data center in France, and ***an analysis of global incidents highlights ongoing concerns about the safety of lithium-ion batteries and their risk of combustion***."
- The use of lithium ion (Li-ion) batteries in data centers is growing. ***Now commonly used in uninterruptible power supplies, they are expected to account for 38.5% of the data-center battery market by 2025, up from 15% in 2020***, according to consulting firm Frost & Sullivan.
- Clean Fleets observations: The CARB EA position that "***lithium-ion storage batteries could be relied on during periods when total demand is high,"*** would seem to encourage the use of these storage batteries in fixed locations like data centers. The EA claims that, "***when packaged and handled properly, lithium batteries pose no environmental hazard (79 Fed. Reg. 46011, 46032),"*** yet the fire potential has not been fully analyzed by the EA. ***On the contrary the fire risk associated with storage batteries is downplayed by the EA and is grossly misrepresented***, "[f]urther, these impacts [i.e. environmental hazard] are largely associated with the use and production of lithium-ion batteries used in consumer products ***as***

compared to lithium-ion storage batteries."[5] As illustrated by the oxygenated fuels ("MTBE") catastrophe of the 1990's, ***CARB and CalEPA should never again underestimate the environmental damage that can be caused by a perhaps well-intentioned air pollution program endangering the public***.[6]

C. July 2023, Manhattan Institute, *"Electric Vehicles for Everyone? The Impossible Dream"*

- "Shifting the primary energy for mobility from liquids to electrons sounds efficient, but it constitutes a degradation in convenience and an increase in costs for delivering energy. Counterintuitively, at big energy levels, transporting a unit of electrical energy using wires and transformers is about 20-fold more expensive than transporting the same quantity of energy as oil in pipelines and tanks. That gap remains wide, even adjusted for the fact that one-half to one-third as much energy is transported to EVs because of the higher efficiency of electric motors over engines. And the math for convenient electric fueling economics makes it worse"[7]
- Clean Fleets observations:
    - The CARB EA position that, "***highly efficient ZEVs"*** meet the duty cycle requirements of High Priority Fleets is contravened by the written and oral testimony of the manufacturers of zero emission trucks themselves. For example, "The ISOR does not explain why only emergency vehicles, and not any other configurations, must be afforded an exemption. It also does not assess the potential unintended negative consequence of trucking fleets maintaining their existing vehicles longer if ZEVs cannot meet the needs of their specific operation."[8]
    - The CARB EA position that the ACF, "***would improve the efficiency of energy usage*** across the State," is without basis and a weak argument given the demonstrated failure of the existing grid to support all the ZEVs on the road today, let alone the massive generation and transmission that is not adequately described in the EA.

[5] Final Environmental Analysis, April 14, 2023, p. 69
[6] https://abc7news.com/archive/7286029/
[7] Manhattan Institute, p. 28 accessed at https://manhattan.institute/article/electric-vehicles-for-everyone-the-impossible-dream
[8] https://www.arb.ca.gov/lists/com-attach/277-acf2022-ADJWYFRnWDlRCAk4.pdf at p. 3

EXHIBIT “B”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

CLEANFLEETS.NET
Air Resources Regulatory Experts

September 11, 2025

John P. Kinsey
Wanger Jones Helsley PC
265 E. River Park Cir., Suite 310
Fresno, CA 93720

Ref: Technical Review of Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations Staff Report: Initial Statement of Reasons, Date of Release: August 1, 2025

Dear Mr. Kinsey:

CleanFleets.net provides the following comments in our capacity as an advisor to truck fleet owners affected by CARB regulations. I have served the trucking industry since the CARB Diesel Risk Reduction Plan adoption in Year 2000 and have participated in the CARB zero emission (ZE) truck process since the initial "Last Mile Delivery" vehicle workshop in 2016. Our firm currently serves more than 100 trucking and municipal services fleets with consulting services relating to CARB regulatory compliance and advanced technology options. As such, I have gained expertise in helping fleet owners evaluate the costs, benefits and risks associated with implementing regulatory changes. My qualifications appear as an attachment to this document.

The following is an assessment of the Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations (the "Amendments"), which are being considered by CARB on September 25, 2025. The Initial Statement of Reasons (ISOR) for the proposed Amendments fails to provide the public with adequate critical analysis of the economic impacts based on today's reality. As a result, the economic and environmental baseline used in the various sections of the ISOR is fundamentally flawed and not based on substantial evidence.

Specifically, the present ISOR relies heavily on the prior ISOR from the 2022-2023 ACF process rather than, at a minimum, confront the obvious changes in economic impacts brought about by: 1) the truck manufacturers that represent more than 90% of the heavy-duty truck market stated to the federal courts last month that both the Advanced Clean Fleets (ACF) and Clean Truck Partnership (CTP) are nullified so the required ZEV's may be scarce and sticker prices skyrocket; 2) the price increases and geopolitical instability in the market for rare earth minerals that are required for battery electric vehicles (BEVs) as well as the impact of recent tariffs on rare earths and battery pack prices; 3) the 2025 removal of the expected federal BEV and hydrogen fuel infrastructure funding under the Inflation Reduction Act, Infrastructure Investment and Jobs Act, and other Biden-era programs; and 4) the failure of the State of California to disclose the sources and funding mechanism to supply generation and critical infrastructure renewable electricity to High Speed Rail, Artificial Intelligence data centers and BEVs simultaneously and at a cost that demonstrates CARB's unproven theory that ZE truck fleets will experience "positive economics," with returns on investments in a matter of a few years. The bottom line here is that circumstances have changed drastically over the past three years since CARB released the ACF ISOR in September 2022 yet the present ISOR provides little discussion and no detailed analysis.

1. **The Economic Impacts Assessment in the ISOR provides contradictory cost impact information and fails to recognize multiple technical studies that dispute CARB's conclusions about ZE truck Total Cost of Ownership (TCO)**

The ISOR states, "[t]he Proposed Repeal is not expected to have a significant economic impact on businesses."[1] Yet the document further states that, "[t]o the extent public agency utility fleet costs are recouped through user rates, this may shift consumer and business spending patterns, affecting jobs in those impacted industries."[2] First, one can reasonably assume that "user rates" are what individuals and businesses are charged by their public agency utilities. When those rates go up, individuals and businesses pay more for services. Second, the ISOR states, "ZEVs are expected to have higher upfront costs due to increased vehicle prices and infrastructure, but these are expected to decline over time." With many California municipalities (and the State itself) in severe financial crisis, a reasonable person can conclude that increased "user rates" to cover "higher upfront costs" will flow to individuals and business consumers. In their own words CARB is expecting public fleets to pay more, expecting consumers to pay more yet painting the picture of cost savings to government fleets and the public they serve.

In May 2024, Ryder System released its Total Cost to Transport Study revealing Ryder's experience on costs and performance of a fleet of 50 BEVs of various weight classes and body types in both California and Georgia. None of the vehicles provided positive economics, on the contrary Ryder documented increased costs of up to 114%, the need for 1.7 BEV tractors to replace the use of one ICE tractor due to loss of efficiency and payload and negative costs and performance compared to ICE vehicles. This report appears as an attachment to this document.

The CARB Board did receive and take testimony on September 22, 2022 from U.S. Department of Energy's (DOE's) National Renewable Energy Laboratory (NREL) on a multi-year ZE bus evaluation that further demonstrates that the BEV cost per mile assumptions are not supported.[3] In the introduction to NREL's Final Report, NREL indicates that, "Foothill Transit is collaborating with the California Air Resources Board (CARB) and the to evaluate the buses in revenue service. The focus of the evaluation is to compare performance and cost of the BEBs [Battery-Electric Buses] to that of conventional technology in similar service and track progress over time."

A brief review of the Final Report shows the ISOR cost assumptions do not reflect real world experience such as Foothill Transit. For instance, in comparing a compressed natural gas (CNG) ICE fleet to a ZE bus fleet, the Foothill results do not support the ISOR's conclusions:

- More costly fuel: CNG fuel compared to diesel equivalent basis shows that *electricity is 5-6.5 times more expensive* than CNG fuel, depending on the time of year. The 2022 ISOR, in contrast, erroneously assumes that CNG and electricity are equally expensive.

[1] ACF Repeal ISOR, p. 117
[2] Ibid, p. 148
[3] Jeffers, Matthew and Leslie Eudy. 2021. Foothill Transit Battery Electric Bus Evaluation: Final Report. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5400- 80022. https://www.nrel.gov/docs/fy21osti/80022.pdf.

- Increased maintenance costs: After removing accident- and warranty-related items for both fleets, the average per-mile maintenance cost was $0.50/mi for the BEB 35FC fleet, $0.56/mi for the BEB 40FC fleet, and $0.32/mi for the CNG fleet, compared to the assumptions of maintenance cost savings for ZEVs in the ISOR. Note that Table 27 of the ISOR estimates $0.12/mi for a Class 8 BEV dump truck (nearly 80% less than the observed heavy duty bus cost). We did not find any justification for this significant drop in this parameter.

- More vehicle downtime: In the Arcadia Fleet, BEB 40E2 fleet was available 81.9% of time and CNG available 93.5% of time. Unfortunately, there is no mention of vehicle downtime in the ISOR, but it is common knowledge that the lack of vehicle reliability translates into more vehicles needed to accomplish the work. Stated another way, if nearly 20% of a battery electric fleet is down at any given time than additional vehicles are needed to maintain the same service level. As noted in the Ryder System study 1.7 BEV tractors were required to replace the work of one ICE tractor due to inefficiency and loss of payload.

None of these technical reports indicate to a reasonable person, much less provide evidence necessary to support the conclusion that heavy duty ZE vehicles are cheaper to own and operate.

2. It is likely that any ZE trucks that are produced will come with a higher upfront cost than estimated in the ISOR based on CARB's own analysis and the recent study by the International Council on Clean Transportation (ICCT)

The State and Local Government (SLG) portion of the ACF as adopted in 2023 represents roughly 30% of the total ZE trucks that were mandated by 2042. Manufacturers such as Ford Motor Company publicly disclosed that their cost to produce ZE vehicles exceeded the sales prices, thus they lost money on each unit sold and about $5 billion in 2024. In the present ISOR, CARB contemplates that, "[w]e expect manufacturers will continue to recoup their investments to certify more than 250 ZEV models and maintain competitiveness in the medium- and heavy-duty ZEV market."[4] We interpret "recoup their investments" to mean that the research and development (R&D) costs would be spread over ZE vehicles in future years. With only 30% of the total ZE vehicles that were planned in the 2022 ISOR now expected under the Amendments, and in particular the repeal of the ACF and drayage fleet requirements, the massive R&D costs associated with ZE development would be spread over fewer vehicles, resulting in higher retail prices than before the Amendments. CARB offers the opposite conclusion showing a $10,000 to $28,000 decline in prices for BEVs over the next three model years. The ISOR, however, contains no evidence to support the illogical assumption that a market with fewer vehicles for sale would drive the increase in R&D necessary to achieve the projected decline in prices. This forecast cannot be reconciled with R&D costs as noted and additionally the uncertainty on tariffs and the rare earth mineral global market.

Speaking of the global market, CARB's September 2024 *California Truck Availability Analysis*[5] concluded that,

- "California zero-emission trucks (ZET) have increased in price by an

[4] ACF Repeal ISOR, p. 147
[5] https://ww2.arb.ca.gov/sites/default/files/2024-09/240925_actmemo_ADA_0.pdf

average of $86,512 since 2021-22."

- "European ZETs have decreased in price by an average of $12,641 in that same period;" and

- "There appear to be no clear reasons for this disparity between regions."

In their September 2025 report, the ICCT concludes that, "the median purchase prices of Class 6 and larger battery-electric commercial vehicles have risen since 2020, despite declines in battery costs and declining prices in other vehicle categories and regions. Equivalent vehicles in the European Union became less expensive." [6]

3. The ISOR incorrectly concludes that, "the costs to businesses remains the as before the ACF was adopted."

The ACF was adopted in 2023. Businesses shouldered significant costs in several respects. First, infrastructure evaluation for fleet owners with multiple parked vehicle locations resulted in contracting costs for engineering firms to perform site planning, load calculations, permitting documents, etc. While the referenced ACF Enforcement Notice indicated a stay of enforcement pending a USEPA waiver decision it also referenced CARB reserving the right to apply ACF timeline retroactively once the expected Waiver of Preemption was received. Because the Infrastructure Delay provision required fleets to evaluate all properties at least one year in advance of a compliance date, fleets risked immediate fines so they spent funds that are not recoverable. This is an economic impact that is not discussed in the ISOR.

Second, as noted in the September 2024 *California Truck Availability Analysis* produced by CARB, many fleets experienced "ratioing" as a result of truck manufacturers and their dealers forcing fleet customers to buy ZE trucks regardless of their ACF status (e.g. small fleet) and regardless of the ACF waiver process. In order to buy ICE vehicles, many fleets were forced to buy ZE trucks as a condition of the ICE purchase. While CARB concluded that this practice was not endorsed or sanctioned by either the ACT or Omnibus Regulations, the fact of the matter is that it occurred and negatively impacted fleet owners.

Third, the ISOR contemplates that private fleets may become the targets of the forced purchase of ZEVs and "indirectly affected" as an outcome of the Proposed SLG Amendments:

> Some private fleet operators may be indirectly affected by the Proposed SLG Amendments. For example, if a public agency utility fleet receives an exemption due to the Proposed SLG amendments, ultimately manufacturers subject to the ACT regulation will need to shift sales from the public agency utility fleet to a private fleet. Both of these shifts, the public agency utility fleet procuring one less ZEV and the private fleet procuring one more ZEV, will result in costs.[7]

The ISOR statement about cost impacts before and after the September 2025 Board action completely contradicts this admitted indirect effect. The ISOR and the economic analysis should be augmented to analyze this admitted effect of the Amendments.

---

[6] https://theicct.org/publication/battery-electric-commercial-vehicle-pricing-in-the-us-sept25/

[7] ACF Repeal ISOR, p. 147

4. **The ISOR asserts that the Amendments would not measurably change the impacts analyzed in the Environmental Assessment (EA) for the ACF. However, the benefits of the Amendments are now a miniscule 1.69 tons of oxides of nitrogen and 0.015 tons of PM2.5 and health benefits calculated to be worth a little less than $9,000**

The ISOR states, "As shown in Table 7, the total statewide health benefits derived from criteria emissions reductions are estimated to be $8,797."[8] Table 8 summarizes the calculations of N0x and PM2.5 benefits which are and insignificant 1.69 and 0.015 tons, respectively, from 2026 through 2029. The prior EA and the present ISOR are not adequate in identifying the public health benefits versus the admittedly higher ZEV upfront costs.

5. **The ISOR fails to quantify the economic and emissions impact of the construction of chargepoints and electric substations associated with proposed project**

The ISOR lacks economic or environmental analysis of the construction of electrical infrastructure. The ISOR states, "Infrastructure upgrade costs represent costs on the customer side of the meter associated with setting up charging infrastructure at a facility and may include trenching, cabling, conduit, and panels as well as associated infrastructure costs. *Staff assumes that nearly all costs associated with utility-side upgrades are the responsibility of the utility* as per requirements of Assembly Bill 841 (Ting, Stats. of 2020, ch. 372)."[9] We reviewed that bill and do not see funding for "utility-side" upgrades to power plants, substations or construction "to the meter" of the affected fleet, who may have multiple sites requiring electrification. While some affected fleets may be served by investor owned utilities that may have access to infrastructure funding authorized by the California Public Utilities Commission, ACF fleet owners served by municipal electric utilities have no certainty of infrastructure funding by others to accomplish ZEV charging. The ISOR confirms this as it observes, "[t]here are several rebate and voucher programs in California that offset some or all the incremental costs for ZEVs *and supporting infrastructure*; however, none of these incentives are included in the cost analysis due to uncertainty as to which fleets may utilize funding and *uncertainty in ongoing funding*."[10] [italics, mine]. Decisionmakers and the general public are not provide an explanation for these contradictory statements relating to economic impacts.

Relating to environmental impacts, as noted in written comments during the 2022-23 ACF process, "[w]ith assistance from utilities, CARB could determine how many new substations would be required to meet the increased electrical demand from these chargers and estimate the level of construction that will be required across the state. CARB could use this data to quantify and evaluate the emissions impacts for charger and substation construction using their statewide land use emissions computer model CalEEMod®. This model includes default assumptions for construction and operation of a variety of projects and can be used to estimate criteria air pollutant and greenhouse gas emissions associated with the construction of EV charging stations and substations. As the lead agency, it is CARB's responsibility to perform such an analysis in order to determine the reasonably foreseeable impact of the proposed ACF

[8] ISOR, p. 90
[9] ISOR, p. 134
[10] ISOR, p. 118.

regulation for EV infrastructure development projects that will result from the regulation as a part of their CEQA analysis. Without the analyses discussed above, their impact analysis is incomplete and misleading."[11] By quantifying some environmental parameters but presenting incomplete qualitative discussion of others, the ISOR does not present an "apples to apples" comparison and is for that reason incomplete and inadequate in addition to being contradictory in the analysis that is provided.

In conclusion, the ISOR is incomplete as its statements and assumptions are misleading and contradictory. None of the four significant changes in circumstances listed on Page 1 of this document are analyzed in sufficient detail so as to equip the public or Board with solid information to make a public policy decision of this consequence. Individual citizens as residents and consumers, businesses as consumers and public agencies as essential public service providers should all be outraged by the lack of meaningful analysis in this ISOR and its reliance on mistaken assumptions from the 2022 ISOR. All of the factors herein indicate that the ISOR does not meet the requirements of the Administrative Procedures Act as it is incomplete, inaccurate and does not disclose the cost impact to individuals, businesses and fleet owners directly, or indirectly, affected by the proposed action.

I may be reached via electronic mail at Sean@CleanFleets.net.

Sincerely,

Sean R. Edgar
Director

Enclosures

[11] Ramboll Exhibit A in Wanger Jones Helsley comments to CARB, 10/17/2022 (unable to access on CARB website as of 9/9/2025).

Air Resources Regulatory Experts

Sean Edgar
Director

Sean R. Edgar has thirty years of public policy development and field experience in transportation, construction and air quality projects for clients in both the public and private sectors. Mr. Edgar gained experience in the public policy arena while serving in the Office of Governor Pete Wilson. There he participated in the formation of the California Environmental Protection Agency in 1991-1993.

In the 1990's Mr. Edgar joined International Technology (IT) Corporation where he managed 25 field personnel in the closure of Hamilton Army Airfield in Marin County, California. For two years, he coordinated waste storage, packaging, transportation, and disposal for the US Department of Energy at Lawrence Livermore National Laboratory. Mr. Edgar was the owner's representative for the closure of the West Contra Costa Sanitary Landfill involving earthwork over 40 acres of the landfill site.

For the past 25 years, Mr. Edgar's consulting practice has consisted of association management and regulatory advocacy relating to transportation and air quality issues. Mr. Edgar has an established presence at the California Air Resources Control Board (CARB) since the September 2000 adoption of the Diesel Risk Reduction Plan (DRRP) and has participated in every major on-road and off-road rulemaking for more than twenty years. Among his other accomplishments, he represented the private solid waste collectors (California Refuse & Recycling Council) in the development and implementation of the CARB Solid Waste Collection Vehicle Rule, the first private carrier rule enacted by CARB. In 2009 Mr. Edgar was appointed by CARB to their Truck Regulations Advisory Committee. In 2011 he was authorized by CARB through a competitive bid process to train business owners about CARB rules. In the past nine years he has educated more than 6,000 fleet owners in six western states through over 150 personal appearances. He is a recognized expert regarding on-road fleet rule implementation and technology options. In 2016 Mr. Edgar was appointed to the CARB Advanced Clean Local Trucks Committee that resulted in the Advanced Clean Trucks Regulation approved by CARB in June 2020. In 2019 he was named Technical Director for the CARB Diesel Filter Replacement Grant Program which resulted in the distribution of $3 million in grant funds to repair or replace recalled emission systems for public agencies and private fleet owners. As Director he supervises the firm's staff of six professionals servicing more than 200 public and private fleet owners with regulatory compliance services.

Mr. Edgar holds a Bachelor of Arts degree in Political Science from the University of California at Berkeley. Additionally, in 2006 he earned an Air Quality Management Certificate from California State University Fresno Extension and has completed substantial technical training and continuing education in the fields of environmental law and regulation, hazardous materials management, and occupational safety and health. He is fluent in Spanish and is a resident of Sacramento, California.

EXHIBIT “C”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

Electric Vehicle Total Cost to Transport Analysis

May 2024

CHARGED LOGISTICS:

The cost of electric vehicle conversion for U.S. commercial fleets

EXECUTIVE SUMMARY

With evolving state and federal legal requirements, and potential mandates, aimed at converting commercial diesel vehicles to zero-emission vehicles (ZEV), Ryder customers frequently ask about the costs and benefits of incorporating electric vehicles (EV) into their fleets. As a result, Ryder conducted this analysis to determine the cost of EV conversion in today's market. In the analysis:

- Ryder analyzed the total cost to transport (TCT), in one-to-one comparisons, for transitioning Class 4 (light-duty), Class 6 (medium-duty), and Class 8 (heavy-duty) vehicles operating in California and Georgia from internal combustion engines (ICE) to EVs in today's market.
- Then, because most companies have more than one commercial vehicle, Ryder examined the TCT for transitioning a mixed fleet (light, medium, and heavy) of 25 ICE vehicles to EVs. The mix was based on the overall mix of commercial vehicles in the U.S. according to Polk Data Services.
- The analysis is based on representative network loads and routes from Ryder's dedicated fleet operations, which includes more than 13,000 commercial vehicles and professional drivers, as well as the impact of EV charging time and maximum payload to achieve equivalent delivery times.
- Our quantitative results show a relatively modest increase of up to 5% for light-duty EVs, and increases from 94% to 114% to convert heavy-duty trucks and from 56% to 67% to convert mixed fleets.
- Assuming that the price of goods would increase due to higher transportation costs, based on the cost impact to convert a mixed fleet from ICE to EV, we estimate these increases could cumulatively add approximately 0.5% to 1% to overall inflation.

INTRODUCTION

Ryder is at the forefront of identifying new technology for operational advancements and acts as an extended research and development arm for our suppliers and customers. Moreover, we are at the table with regulators, vehicle manufacturers, technology innovators, and industry peers as we discuss ways the industry can implement potential solutions. While Ryder is actively involved in the testing and successful deployment of EVs and charging infrastructure – as well as other alternative fuels – Ryder views the rapidly evolving transportation landscape through the lens of one of the longest-running and largest fleet owners in North America, with over 90 years of experience in truck transportation and nearly 250,000 commercial vehicles under management. With more than 41,000 commercial customers in its portfolio today, Ryder utilizes its expertise to implement logistics and transportation solutions for businesses across most industries.

With this in mind, using extensive Ryder historical data and current market prices for electric and ICE vehicles and charging infrastructure, Ryder examined the potential economic impacts of implementing an all-EV fleet. Ryder analyzed the impact in California and Georgia, as electricity, fuel, and labor costs range from some of the highest in the country to more modest. Ultimately, the analysis set out to understand the cost of electrifying a fleet and the potential impacts on businesses and consumers.

[1]Economics and Industry Data, American Trucking Associations (2022), https://www.trucking.org/economics-and-industry-data

TCT ANALYSIS: Objective and Variables

To understand the economic impacts of utilizing EVs in place of ICE vehicles, Ryder first examined the TCT for Class 4 light-duty transit vans, Class 6 medium-duty straight trucks, and Class 8 heavy-duty tractors.

Using quantitative data from representative network loads and routes from Ryder's dedicated transportation operating models, which include approximately 13,000 vehicles and professional drivers, the analysis factored in the cost of the vehicle, maintenance, drivers, range, payload, diesel fuel versus electricity, and the required EV charging time. It is important to note that the analysis assumes the accessibility and use of the fastest applicable commercial vehicle chargers – though this network infrastructure is not yet built out.

First, Ryder conducted a one-to-one analysis of a single vehicle (ICE vs. EV) in each of the light-, medium-, and heavy-duty classes using cost assumptions from California, where fuel, electricity, and labor are typically the highest in the nation, and Georgia, where cost assumptions are more favorable.

Then, as most companies have more than one vehicle, Ryder applied the individual costs to a fleet of 25 vehicles of mixed classes and types, and compared the cost of owning and operating that fleet in California and Georgia. The fleet mix is based on the overall mix of commercial vehicles in the U.S., according to third-party data, and includes 11 light-duty vans, four medium-duty straight trucks, and 10 heavy-duty tractors.

The analysis factors in a number of variables and other assumptions, including the average labor costs for California and Georgia. It also assumes fixed monthly tractor costs based on actual freight management system equipment pricing and lower EV maintenance costs, compared to ICE maintenance costs, due to fewer moving parts and no need to change oil or diesel exhaust fluid. The analysis estimates EV energy costs using current assessment models and fuel costs of $6.13 per gallon in California and $4.19 per gallon in Georgia. The cost of hardware, installation, and maintenance of EV chargers reflects actual infrastructure projects at current Ryder locations amortized over the life of the charger and multiple power units. The analysis estimates insurance and other general and administrative expenses (G&A) to be equal for one ICE unit and one EV unit.

CLASS 4
One-to-One Comparison

The Class 4 comparison assumes short-haul deliveries of about 80 miles, two trips per day, about 40,000 miles annually, and one local Class C driver per vehicle. The average payload for each is 2,500 pounds.

The first chart shows the comparison results for a single ICE transit van versus an EV transit van in California. The annual cost to convert to an EV is estimated at just under $5,000 or a 3% increase. While the cost of the vehicle is 71% more and labor is 19% more due to additional hours of service for EV charging time, fuel vs. energy and maintenance costs decrease 71% and 22% respectively, resulting in a relatively modest increase in TCT.

CALIFORNIA

	1 Driver - 1 Van			1 Driver - 1 Van			
	ICE VANS			EV VANS		VARIANCE	
Category	Cost Detail	Amount		Cost Detail	Amount	Variance	% Change
Labor Cost	1 driver, $23/hr @ 48 hours weekly	$62,192		1 driver, $23/hr @ 55 hours weekly	$74,032	$11,840	19%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$30,441		PTO, Payroll Tax, Workers Comp	$33,115	$2,674	9%
Equipment Cost*	1 van, $1,030/month per unit	$12,360		1 van, $1,766/month per unit	$21,192	$8,832	71%
Equipment Maintenance Cost*	$0.09/mile	$3,805		$0.07/mile	$2,959	$(846)	(22%)
Fuel vs. Energy Cost	$0.67/mile fuel cost, 9.1 MPG	$28,479		$0.19/mile energy cost	$8,158	$(20,321)	(71%)
EV Charger Cost	N/A	$ –		$124k hardware, installation, maintenance	$2,756	$2,756	–
Other Operating Costs	1 van, insurance, G&A, CVCs, etc.	$34,046		1 van, insurance, G&A, CVCs, etc.	$34,046	$ –	0%
Total	**Annual TCT**	**$171,323**		**Annual TCT**	**$176,258**	**$4,935**	**3%**

3% TOTAL COST INCREASE

The second chart shows the comparison results in Georgia in which the TCT for an ICE vehicle and is estimated to have a variance of nearly $8,000 or an increase of approximately 5%. The variance in Georgia is greater than California due to the difference between gas and energy costs in each state.

GEORGIA

	1 Driver - 1 Van			1 Driver - 1 Van			
	ICE VANS			EV VANS		VARIANCE	
Category	Cost Detail	Amount		Cost Detail	Amount	Variance	% Change
Labor Cost	1 driver, $22/hr @ 48 hours weekly	$58,535		1 driver, $22/hr @ 55 hours weekly	$70,071	$11,536	20%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$29,616		PTO, Payroll Tax, Workers Comp	$32,220	$2,604	9%
Equipment Cost*	1 van, $1,030/month per unit	$12,360		1 van, $1,766/month per unit	$21,192	$8,832	71%
Equipment Maintenance Cost*	$0.09/mile	$3,805		$0.07/mile	$2,959	$(846)	(22%)
Fuel vs. Energy Cost	$0.44/mile fuel cost, 9.1 MPG	$18,649		$0.04/mile energy cost	$1,694	$(16,955)	(91%)
EV Charger Cost	N/A	$ –		$124k hardware, installation, maintenance	$2,756	$2,756	–
Other Operating Costs	1 van, insurance, G&A, CVCs, etc.	$33,075		1 van, Insurance, G&A, CVCs, etc.	$33,075	$ –	0%
Total	**Annual TCT**	**$156,040**		**Annual TCT**	**$163,967**	**$7,927**	**5%**

5% TOTAL COST INCREASE

* Equipment and maintenance costs are averages

CLASS 6
One-to-One Comparison

The Class 6 comparison assumes short to medium hauls from 100 to 230 miles, one to two trips per day, about 55,000 miles annually, and one local Class B driver per vehicle. The average payload is 11,000 pounds.

The first chart below shows the comparison results for a single ICE straight truck and an equivalent EV in California. The annual TCT to convert to an EV is approximately $48,000 or nearly 22% higher. The cost of the vehicle increases 216%, which is only partially offset by a 57% savings in fuel and energy costs and 22% savings on maintenance.

CALIFORNIA

	1 Driver - 1 Truck		1 Driver - 1 Truck			
	ICE TRUCKS		EV TRUCKS		VARIANCE	
Category	**Cost Detail**	**Amount**	**Cost Detail**	**Amount**	**Variance**	**% Change**
Labor Cost	1 driver, $27/hr @ 48 hours weekly	$73,008	1 driver, $27/hr @ 51 hours weekly	$78,589	$5,581	8%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$32,884	PTO, Payroll Tax, Workers Comp	$34,144	$1,260	4%
Equipment Cost*	1 truck, $2,364/month per unit	$28,366	1 truck, $7,466/month per unit	$89,592	$61,226	216%
Equipment Maintenance Cost*	$0.09/mile	$5,171	$0.07/mile	$4,022	$(1,149)	(22%)
Fuel vs. Energy Cost	$0.67/mile fuel cost, 9.1 MPG	$38,707	$0.29/mile energy cost	$16,700	$(22,007)	(57%)
EV Charger Cost	N/A	$ –	$186k hardware, installation, maintenance	$2,657	$2,657	–
Other Operating Costs	1 truck, insurance, G&A, CVCs, etc.	$42,411	1 truck, insurance, G&A, CVCs, etc.	$42,411	$ –	0%
Total	**Annual TCT**	**$220,547**	**Annual TCT**	**$268,115**	**$47,568**	**22%**

22% TOTAL COST INCREASE

The second chart shows the comparison results in Georgia, where the annual TCT convert to an EV is estimated to increase nearly $54,000 or almost 28%. As in the Class 4 comparison, the variance in Georgia is greater than California due to the difference between gas and energy costs in each state. Once again, the variance in Georgia is greater than California due to the difference between gas and energy costs in each state.

GEORGIA

	1 Driver - 1 Truck		1 Driver - 1 Truck			
	ICE TRUCKS		EV TRUCKS		VARIANCE	
Category	**Cost Detail**	**Amount**	**Cost Detail**	**Amount**	**Variance**	**% Change**
Labor Cost	1 driver, $24/hr @ 48 hours weekly	$63,625	1 driver, $24/hr @ 51 hours weekly	$68,349	$4,724	7%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$30,765	PTO, Payroll Tax, Workers Comp	$31,831	$1,066	3%
Equipment Cost*	1 truck, $2,364/month per unit	$28,366	1 truck, $7,466/month per unit	$89,592	$61,226	216%
Equipment Maintenance Cost*	$0.09/mile	$5,171	$0.07/mile	$4,022	$(1,149)	(22%)
Fuel vs. Energy Cost	$0.44/mile fuel cost, 9.1 MPG	$25,346	$0.18/mile energy cost	$10,236	$(15,110)	(60%)
EV Charger Cost	N/A	$ –	$186k hardware, installation, maintenance	$2,657	$2,657	–
Other Operating Costs	1 truck, insurance, G&A, CVCs, etc.	$40,494	1 truck, Insurance, G&A, CVCs, etc.	$40,494	$ –	0%
Total	**Annual TCT**	**$193,767**	**Annual TCT**	**$247,181**	**$53,414**	**28%**

28% TOTAL COST INCREASE

* Equipment and maintenance costs are averages

CLASS 8
One-to-One Comparison

The Class 8 comparison assumes hauls ranging from 100 to 500 miles, one to two trips per day, about 109,000 miles annually, and 1.2 local Class A drivers per diesel vehicle (typical for an ICE unit in Ryder's dedication transportation operations). The average payload in this scenario is 29,000 pounds for an ICE unit. At this time, the maximum payload for an EV is approximately 22,000 pounds. Given the payload differences between ICE and EV heavy-duty commercial vehicles, as well as accounting for EV charging time and equivalent delivery times, Ryder estimates that nearly two EVs and more than two drivers are needed to equal the output of one ICE vehicle.

The first chart shows the comparison results for a single ICE heavy-duty tractor and equivalent EV in California. Due to the increased number of tractors and drivers needed, the annual TCT to convert to EVs is nearly double, with a variance of $314,000 or 94%. The cost of the vehicles is the largest contributor at more than 500%, followed by operating costs at 87%, labor costs at 76%, and other personnel costs at 74%. Fuel and energy savings are 52%.

CALIFORNIA

1.2 Drivers - 1 Tractor | 2.07 Drivers - 1.87 Tractors

	ICE TRUCKS		EV TRUCKS		VARIANCE	
Category	**Cost Detail**	**Amount**	**Cost Detail**	**Amount**	**Variance**	**% Change**
Labor Cost	1.2 drivers, $29/hr, ~58 hours/week	$93,285	2.07 drivers, $30/hr, ~97 hours/week	$164,151	$70,866	76%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$40,742	PTO, Payroll Tax, Workers Comp	$70,955	$30,213	74%
Equipment Cost*	1 tractor, $3,444/month per unit	$41,328	1.87 tractors, $11,091/month per unit	$248,438	$207,110	501%
Equipment Maintenance Cost*	$0.065/mile	$7,097	$0.06/mile	$8,734	$1,637	23%
Fuel vs. Energy Cost	$0.89/mile fuel cost, 6.9 MPG	$96,997	$0.32/mile energy cost	$46,126	$(50,871)	(52%)
EV Charger Cost	N/A	$ –	$186k hardware, installation, maintenance	$8,267	$8,267	–
Other Operating Costs	1 tractor, insurance, G&A, CVCs, etc.	$54,665	1.87 tractors, insurance, G&A, CVCs, etc.	$102,041	$47,376	87%
Total	**Annual TCT**	**$334,114**	**Annual TCT**	**$648,712**	**$314,598**	**94%**

94% TOTAL COST INCREASE

The second chart shows the comparison results in Georgia in which the TCT for an ICE vehicle versus an EV shows a variance of more than $330,000 or just under 114%. Here again, the variance in Georgia is greater than California due to the difference between gas and energy costs in each state.

GEORGIA

1.2 Drivers - 1 Tractor | 2.07 Drivers - 1.87 Tractors

	ICE TRUCKS		EV TRUCKS		VARIANCE	
Category	**Cost Detail**	**Amount**	**Cost Detail**	**Amount**	**Variance**	**% Change**
Labor Cost	1.2 drivers, $27/hr, ~58 hours/week	$87,090	2.07 drivers, $30/hr, ~97 hours/week	$156,179	$69,089	79%
Other Personnel Costs	PTO, Payroll Tax, Workers Comp	$39,343	PTO, Payroll Tax, Workers Comp	$69,155	$29,812	76%
Equipment Cost*	1 tractor, $3,444/month per unit	$41,328	1.87 tractors, $11,091/month per unit	$248,438	$207,110	501%
Equipment Maintenance Cost*	$0.065/mile	$7,097	$0.06/mile	$8,734	$1,637	23%
Fuel vs. Energy Cost	$0.58/mile fuel cost, 6.9 MPG	$63,515	$0.23/mile energy cost	$33,091	$(30,424)	(48%)
EV Charger Cost	N/A	$ –	$186k hardware, installation, maintenance	$8,267	$8,267	–
Other Operating Costs	1 tractor, insurance, G&A, CVCs, etc.	$52,808	1.87 tractors, insurance, G&A, CVCs, etc.	$98,574	$45,766	87%
Total	**Annual TCT**	**$291,181**	**Annual TCT**	**$622,438**	**$331,257**	**114%**

* Equipment and maintenance costs are averages

114% TOTAL COST INCREASE

Mixed Fleet Comparison

Ryder applied the TCT for individual vehicles (as outlined previously) to a fleet of 25 commercial vehicles of mixed classes and types in California and Georgia. The mix of the 25 units is a representative sample of the fleet mix in the U.S. today according to Polk Data, which is approximately 43% Class 3-4 (light-duty) vehicles, 17% Class 5-6 (medium-duty) vehicles, and 40% Class 7-8 (heavy-duty) vehicles.

For light- and medium-duty vehicles, the analysis estimates one driver per vehicle for both ICE and EV. For heavy-duty vehicles, as found in the one-to-one comparisons, it is estimated that a company would need nearly two EV tractors and more than two drivers to haul the same load on the same route as one ICE vehicle. In this scenario, a company converting 10 ICE tractors, is estimated to need almost 19 EV tractors and 21 total drivers for the same level of service. This is estimated to increase the number of vehicles from 25 to 34.

Therefore, to convert a mixed fleet of vehicles in California from ICE to EV, the annual TCT is estimated to be nearly $3.4 million or a 56% increase. To convert that same size fleet in Georgia, the TCT is estimated to be more than $3.7 million or a 67% increase.

CALIFORNIA

	ICE TRUCKS			EV TRUCKS			TOTAL COST IMPACT	
TRUCK TYPE	TOTAL ICE UNITS REQURIED	TOTAL DRIVERS REQUIRED	ICE TCT	TOTAL EV UNITS REQUIRED	TOTAL DRIVERS REQUIRED	EV TCT	COST IMPACT	% IMPACT
Transit Van*	11	11	$1,884,560	11	11	$1,938,845	$(54,284)	3
Straight Truck*	4	4	$882,286	4	4	$1,072,459	$(190,173)	22
Tractor**	10	12	$3,341,132	18.7	20.7	$6,487,119	$(3,145,987)	94
Total	**25**	**27**	**$6,107,878**	**33.7**	**35.7**	**$9,498,423**	**$(3,390,545)**	**56**

56% TOTAL COST INCREASE

* Assumes 1 truck and 1 driver for ICE and EV transit van and straight truck

** Assumes 1.2 drivers and 1 tractor for ICE and 2.07 drivers and 1.87 tractors for EV

GEORGIA

	ICE TRUCKS			EV TRUCKS			TOTAL COST IMPACT	
TRUCK TYPE	TOTAL ICE UNITS REQURIED	TOTAL DRIVERS REQUIRED	ICE TCT	TOTAL EV UNITS REQUIRED	TOTAL DRIVERS REQUIRED	EV TCT	COST IMPACT	% IMPACT
Transit Van*	11	11	$1,716,434	11	11	$1,803,643	$(87,208)	5
Straight Truck*	4	4	$775,070	4	4	$988,724	$(213,654)	28
Tractor**	10	12	$2,911,808	18.7	20.7	$6,224,393	$(3,312,585)	114
Total	**25**	**27**	**$5,403,312**	**33.7**	**35.7**	**$9,016,760**	**$(3,613,447)**	**67**

67% TOTAL COST INCREASE

* Assumes 1 truck and 1 driver for ICE and EV transit van and straight truck

** Assumes 1.2 drivers and 1 tractor for ICE and 2.07 drivers and 1.87 tractors for EV

TCT IMPACT ON BUSINESSES AND CONSUMERS

According to the American Trucking Associations, approximately 72% of goods are transported by trucks in the U.S. today. Ryder's analysis estimates cost increases of 94% to 114% to convert heavy-duty trucks to EVs and 56% to 67% to convert mixed fleets of 25 vehicles, depending on the geographic region. If businesses pass the increased cost of transportation onto consumers through higher prices, based on the average cost impact to convert mixed fleets, Ryder estimates that such increased costs could cumulatively add approximately 0.5% to 1% to overall inflation.[2]

INDUSTRY VARIABLES TO CONSIDER

There has been an increased focus on the development of commercial EVs over the past decade. That said, the commercial EV market is still nascent, and there are ongoing challenges such as infrastructure development, battery technology improvements, and cost considerations that continue to hinder adoption.

While this analysis centers on the TCT to convert a fleet in today's landscape, Ryder and the entire industry are considering additional major variables in the adoption of commercial EVs. Two of those variables are EV availability and charging infrastructure.

EV Vehicle Availability

Today, there are 16.4 million Class 3-8 commercial vehicles in operation in the U.S.; of this number only an estimated 18,000 EVs are currently deployed[3]. Additionally, production estimates continue to be volatile in part due to the changing regulatory landscape. Therefore, if companies are required to convert to EVs in the near future, availability and production of EVs may be far less than the vehicles needed to run America's supply chains.

Charging Infrastructure

The Clean Freight Coalition (CFC), an alliance of truck transportation stakeholders, has stated that there is no network in the U.S. where over-the-road professional truck drivers can stop for legally mandated rest breaks and charge a vehicle battery at the same time. According to a report released by the CFC, preparing today's commercial vehicle fleet for electrification would require an investment of nearly $1 trillion in charging infrastructure and electric service upgrades[4].

Additionally, the International Council on Clean Transportation estimates that nearly 700,000 chargers will be needed nationwide to accommodate the one million Class 4, 6, and 8 EVs anticipated to be deployed by 2030, which will consume 140,000 megawatts of electricity every day, equivalent to the daily energy needs of nearly 5 million American homes[5]. Along with these above findings, the Joint Office of Energy and Transportation recently released a zero-emission freight corridor strategy that would not achieve a national charging network in the U.S. until between 2035 and 2040.

[2]Estimated impact on inflation based on Consumer Price Index (CPI) data for all urban consumers from the U.S. Bureau of Labor Statistics assuming transportation costs are 2-4% of certain CPI expenditure categories. See Consumer Price Index data, U.S. Bureau of Labor Statistics (as of February 2024), available at https://www.bls.gov/cpi/. See also F. Curtis Barry & Company, https://www.fcbco.com/articles-and-whitepapers/articles/bid/129441/rising-transportation-costs-and-what-to-do-about-them ("Inbound freight costs for domestically sourced product typically range from 2%-4% of gross sales")., [3]CALSTART report Zeroing in on Zero-Emission Trucks January 2024, [4]CFC Whitepaper: Forecasting a Realistic Electricity Infrastructure Buildout for Medium- & Heavy-Duty Battery Electric Vehicles, [5]The International Council on Clean Transportation – theicct.org

It must be noted, the American Trucking Associations opposes the recently announced EPA emission standard for heavy-duty trucks, saying it's entirely unachievable given the lack of charging infrastructure and restrictions on the power grid.

With more than 80% of U.S. communities relying exclusively on trucking for goods[6], charging infrastructure would need to be in place for the successful conversion of fleets from ICE to EV.

CONCLUSION

Ryder's analysis underscores the reasons EV adoption for commercial vehicles remains in its infancy. In addition to the limited support infrastructure and EV availability, the business case for converting to EV for most payload and mileage applications, is extremely challenging.

While Ryder's analysis estimated the one-to-one conversion to EV for light-duty vehicles to be a relatively modest up to 5% increase in cost – and a good introduction to EV adoption – the one-to-one conversion for medium- and heavy-duty vehicles is estimated to be up to nearly 114% more costly. When expanding the analysis to a mixed fleet, Ryder estimated it can cost 56% more to convert a fleet to EV in California, where fuel and energy costs are typically higher than other states. The cost to convert a fleet is up to 67% more in Georgia, which shows lower fuel and energy costs do not provide the same offsets to the substantially higher EV equipment, operating, and labor costs.

Furthermore, mandating an EV transition at this time may lead to disruptions in our nation's supply chains as well as crippling inflationary pressures on all products moved by trucks. Ryder's analysis shows that if EVs are mandated by law, or encouraged by implementing a tax or fee on ICE vehicles to tilt the economics in favor of EVs, the resulting transportation cost increases could cumulatively add approximately 0.5% to 1% to overall inflation.

Today, Ryder helps customers successfully introduce EVs into their fleets in cases in which the customers' transportation needs align with the technology's current capabilities and available infrastructure. Ryder stands ready to help lead our customers through any energy transition in the commercial transportation industry. However, the technology needed to implement a transition must be available, reliable, and cost competitive with current vehicle technology alternatives.

Now is the time for all stakeholders to come together to examine the big picture. It will take regulators, vehicle manufacturers, technology innovators, and other transportation companies working together to affect real change. This includes a focus on expanding EV payload and range to match ICE vehicles, while keeping the cost of EVs comparable to provide an economic advantage. We must also pursue other alternative fuel technologies—natural gas, hydrogen, hybrids, and carbon capture.

The key to successfully transitioning to a zero-emission future is to find a balance between encouraging innovation and safeguarding the interests of businesses, consumers, and the environment.

[6]ATRI

ABOUT RYDER

Ryder System, Inc. (NYSE: R) is a fully integrated port-to-door logistics and transportation company. It provides supply chain, dedicated transportation, and fleet management solutions, including warehousing and distribution, contract manufacturing and packaging, e-commerce fulfillment, last-mile delivery, managed transportation, professional drivers, freight brokerage, nearshoring solutions, full-service leasing, maintenance, commercial truck rental, and used vehicle sales to some of the world's most-recognized brands. Ryder provides services throughout the United States, Mexico, and Canada. In addition, Ryder manages nearly 250,000 commercial vehicles, services fleets at 760 maintenance locations, and operates nearly 300 warehouses encompassing more than 100 million square feet. Ryder is regularly recognized for its industry-leading practices; technology-driven innovations; corporate responsibility; environmental management; safety, health and security programs; military veteran recruitment initiatives; and the hiring of a diverse workforce. www.ryder.com

Note Regarding Forward-Looking Statements: Certain statements and information included in this news release are "forward-looking statements" within the meaning of the Federal Private Securities Litigation Reform Act of 1995. These forward-looking statements, including our expectations with respect costs of EVs, including related costs of maintenance, charging infrastructure, labor, and insurance, as well as our expectations related to the impact of converting fleets to EVs on supply chains and inflation, are based on our current plans and expectations and are subject to risks, uncertainties and assumptions. Accordingly, these forward-looking statements should be evaluated with consideration given to the many risks and uncertainties that could cause actual results and events to differ materially from those in the forward-looking statements including those risks set forth in our periodic filings with the Securities and Exchange Commission. New risks emerge from time to time. It is not possible for management to predict all such risk factors or to assess the impact of such risks on our business. Accordingly, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Ryder Ever better.™

EXHIBIT “D”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

WORKING PAPER

SEPTEMBER 2025

Battery electric commercial vehicle pricing in the United States

Yihao Xie and Ray Minjares

SUMMARY

This working paper analyzes real-world pricing data for commercial vehicles sold in the United States and other markets. The analysis found that prices for battery electric Class 5 vehicles and smaller are decreasing in the United States. The median price of battery electric Class 8 tractor trucks increased 27% since model year 2020 in the United States, with the largest price increase of 40% occurring between 2020 and 2021. Despite this trend, median prices since model year 2020 have fallen in 2 out of the past 5 years.

At the same time, battery electric commercial vehicle prices have generally decreased in the European Union. The median price of battery electric N3 (Class 7–8 equivalent) tractor trucks and straight trucks decreased by 32% and 23% respectively since model year 2020.

The median price of battery electric Class 8 transit buses in the United States increased by 13% from model year 2020 to 2025. Battery electric transit buses also have high price variability, with some vehicles costing two times more than others in the same model year. Between model year 2020 and 2024, the median prices of battery electric Type A and Type D school buses increased by 13% and 3%, and prices for battery electric Type C school buses decreased by 5%.

Commercial vehicle prices are often not publicly available. In the United States, incentive programs at the state level can improve price transparency in the market. A sustained effort to make such data public can put downward pressure on battery electric commercial vehicle prices and accelerate technology adoption.

www.theicct.org

communications@theicct.org

@theicct.org

icct
THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION

INTRODUCTION

Zero-emission commercial vehicles have a price premium compared with internal combustion engine vehicles in many regions (Sharpe & Basma, 2022). However, the cost of batteries, which represent a substantial part of the upfront cost of battery electric vehicles (BEVs), is declining. Lithium-ion battery pack prices decreased by 20% to $115 per kilowatt-hour from 2023 to 2024 (Catsaros, 2024). The sustained decrease in battery cost is reflected in an ICCT cost analysis which projects across-the-board reductions in upfront vehicle prices for medium- and heavy-duty trucks in the United States over the next decade (Xie et al., 2023).

Cheaper upfront prices will make zero-emission products more accessible to fleet customers. Importantly, lower purchase costs amplify the total cost of ownership advantages of zero-emission commercial vehicles compared with internal combustion engine options. Analysis by Energy Innovation and the ICCT found that battery electric technologies can bring cost savings in major heavy-duty vehicle (HDV) segments by 2030 in most U.S. states (Busch et al., 2025).

Yet information shared by fleet purchasers and government regulators in the United States indicates the prices of some zero-emission commercial vehicles are not declining. In a 2024 memo, a California Air Resources Board (CARB) official wrote that prices of Class 8 battery electric tractors in California increased by $86,000 since 2021–22 and are close to $90,000 more expensive than equivalent trucks in Europe (Cliff, 2024). A subsequent comparison of Class 8 truck prices published by CARB found that the incremental zero-emission vehicle price in the United States is about $57,000 more than in the European Union (EU; CARB, 2024). During this time, ICCT staff learned independently about rising battery electric truck prices in the United States from charging-as-a-service providers and fleets.

Validating these price trends is challenging. While some manufacturers publish the manufacturer suggested retail price (MSRP) of their light-duty commercial vans and pick-up trucks, prices of most new heavier trucks and buses are not advertised (Ford Pro, n.d.). In addition, no publicly accessible repository of historical prices exists.

Prices that customers pay consist of both direct manufacturing costs of the vehicle powertrain and chassis and indirect costs. While manufacturing costs can be somewhat straightforward, indirect costs such as depreciation and amortization, research and development, and general and administrative expenses can be hard to ascertain and quantify (Slowik et al., 2022).

Real-world pricing information is necessary to support vehicle fleets and financing institutions with purchasing decisions. Policymakers also need to understand forces that affect real-world commercial vehicle prices to shape policies like greenhouse gas emission standards or purchase incentives. To this end, the ICCT developed an international database of electric Class 2B–8 commercial vehicle prices and analyzed the trends across markets, vehicle segments, and powertrain types. In doing so, we serve multiple goals:

- bringing transparency to the market to support vehicle fleets and financing institutions with purchasing decisions.
- identifying new research areas that can better inform the design of policies intended to drive down the price and drive up the sales of zero-emission commercial vehicles.

Our analysis presents commercial vehicle prices and identifies key trends based on empirical evidence. Determining the causes for price increases is outside the scope of this study, but we offer theories that industry and government stakeholders have shared with us. The objective of this paper is to inform the public about trends in the pricing of battery electric trucks to support the growth of a healthy and self-sustaining zero-emission vehicle market.

METHODS

DATA SOURCES

This analysis relies on diverse sources of data to cover the zero-emission commercial vehicle market and pricing information from different geographies: commercial databases; government data from incentive program records, public procurement records, or other aggregated pricing information; data from industry consultants with expertise in commercial vehicle pricing; and data from fleet customers. The data sources used for this paper are listed in Table 1.

Our data collection revealed the opaque nature of commercial vehicle pricing information in many regions. Much of the data used in this study are not publicly available. Private fleets, dealers, and manufacturers are reluctant to openly share pricing data. Because vehicle pricing data are treated as a commercially sensitive subject, granular data from private sources was difficult to obtain. We also obtained little data from private fleet customers who financed zero-emission commercial vehicle purchases without government subsidies.

Table 1
Data sources for this study

Region	Private commercial database	Official government data	Independent research organizations	Fleet customers
Canada		British Columbia GoElectric Rebates Program Aggregated data from Transport Canada		
United States	Price Digest - Truck Blue Book[a]	California Department of General Services California Hybrid and zero-emission truck and bus Voucher Incentive Project (HVIP) Colorado Department of Public Health and Environment Massachusetts Offers Rebates for Electric Vehicles (MOR-EV) New Jersey Zero Emission Incentive Program Oregon Department of Environmental Quality New York Truck Voucher Incentive Program North Central Texas Council of Governments	World Resources Institute Electric School Bus Initiative[b]	Charging-as-a-Service providers and private fleets
European Union		Aggregated data from government agencies in France, Germany, and the Netherlands	Interact Analysis	Member of European Clean Trucking Association
China	360che.com[c]	China Center of Government Procurement[d]		Fleets from previous ICCT research[e]
India		Aggregated data from Ministry of Heavy Industry		

a Price Digests by Fusable (n.d.)
b Wang et al. (2024)
c 卡车之家 [Home of Trucks] (n.d.)
d 中国政府采购网 [China Government Procurement Website] (n.d.)
e Mao et al. (2023); Niu & Zhu (2024)

Data from European governments, Transport Canada, Interact Analysis, and Ministry of Heavy Industry of India are aggregated and do not contain information about vehicle makes, models, or other detailed specifications. We contracted Interact Analysis, which, through a combination of primary and secondary methods, collected representative internal combustion engine vehicle (ICEV) and zero-emission medium- and heavy-duty vehicle (MHDV) prices in the EU. Data from state and provincial incentive programs and commercial databases are more detailed, with most providing vehicle weight class, make, model, and some battery capacity specifications. Finally, data from private fleets are anonymized to protect the identity of fleets.

Depending on the region and sources of data, pricing information included in this analysis refers to MSRP, delivery price, prices in purchase orders and contracts, or average prices in cases where aggregated data was shared. Taxes and fees were excluded from the prices. Unless otherwise specified, all price and incentive amounts are in 2022 U.S. dollars, adjusted for local inflation rates using consumer price index data from December of each year, and then converted to 2022 U.S. dollars using exchange rates on December 31, 2021. The price level and exchange rate data are summarized in Table 2.

Table 2
Values of inflation and foreign exchange rate data in this study

Inflation data, year-on-year consumer price index percentage changes					
	EU[a]	Canada[b]	China[c]	India[d]	United States[e]
2019	1.6	2.3	4.5	7.35	2.52
2020	0.3	1.6	0.2	4.59	1.40
2021	5.3	3.2	1.5	5.66	4.86
2022	10.4	6.1	1.8	5.72	6.55
2023	3.4	3.8	-0.3	5.69	4.16
2024	2.7	2.0	0.1	5.22	3.64
Local currency to U.S. dollar exchange rate[f]					
2022	1.18318	0.797833	0.157011	0.013527	1

[a] Eurostat (2025)
[b] Statistics Canada (2025)
[c] Trading Economics (n.d.-a)
[d] Trading Economics (n.d.-b)
[e] Federal Reserve Bank of St. Louis (2025)
[f] For Chinese Yuan: Xe (n.d.). For all other currencies, OFX (n.d.)

VEHICLE CLASSIFICATION

China, the European Union, India, and North America have different vehicle classification systems based on a combination of weight class (measured in tonnes or pounds), axle configuration, and vehicle application. To make international comparison possible, this analysis follows the simplified vehicle classification scheme summarized in Table 3. China and India follow the EU classification system. For comparison within the North American market, this analysis refers to the numerical weight class system. To align the mismatches between U.S. and EU weight class systems, U.S. Class 2B to Class 6 are considered N2-equivalent (medium-duty) and both U.S. Class 7 and 8 are considered N3-equivalent (heavy-duty).

Table 3

Vehicle weight classification system

Gross vehicle weight rating in pounds	U.S. system weight class	EU system weight class	Classification
6,000	1	N1	Not included
6,001–8,500	2		
8,501–10,000	2B	N2	Medium-duty
10,001–14,000	3		
14,001–16,000	4		
16,001–19,500	5		
19,501–26,000	6		
26,001–33,000	7	N3	Heavy-duty
> 33,000	8		

DATA COVERAGE AND QUALITY

In total, this analysis includes 4,160 price data points from all markets: 2,699 battery electric, 134 hydrogen fuel cell electric, 1,295 diesel, 30 gasoline, and 2 plug-in hybrid electric vehicle prices. The model year distribution is shown in Figure 1. The earliest year with available pricing data was 2020, and the dataset also included 22 entries for model year 2026 vehicles.

Figure 1

Distribution of price data by model year

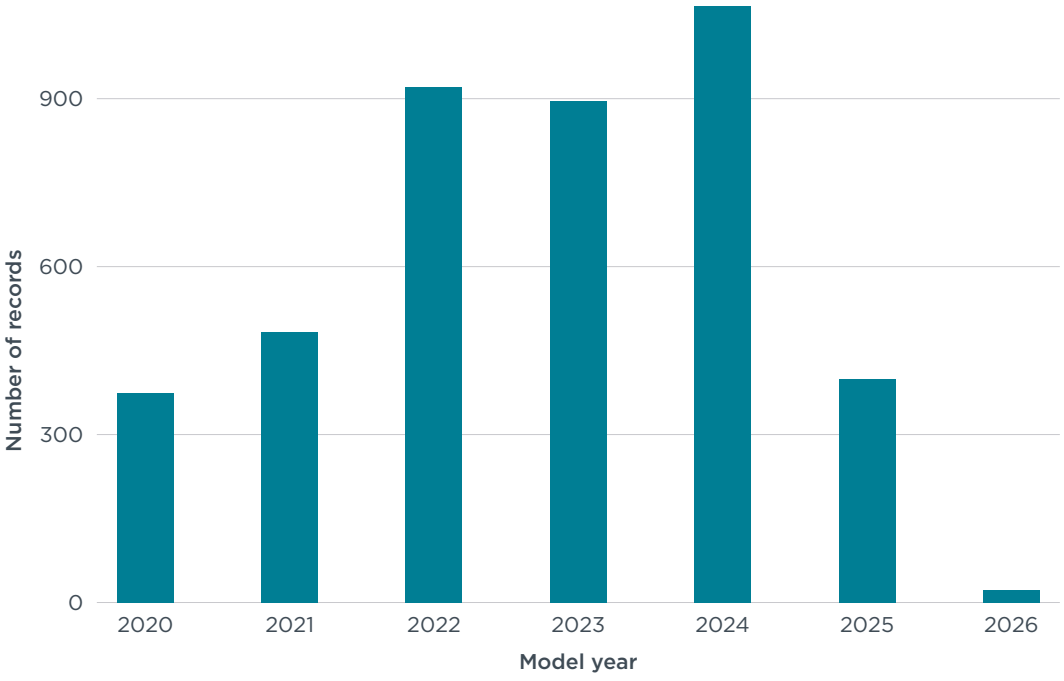


Table 4 shows the distribution of data points by country and state or province. Of the total price data, 86.5% comes from the United States, 6.1% from Canada, 3.7% from China, 3.6% from the European Union, and 0.1% from India. Specific transaction data of a vehicle with known manufacturer and model information make up 93.6% of the data points, and the remaining 6.4%, mostly from the EU and Indian markets, are aggregated averages by segment because individual data points were not available.

Table 4
Distribution of price data points by country and state/province

Region	Subregion	Number of data points	Share in dataset
United States	California	814	19.6%
	New York	794	19.1%
	West Virginia	303	7.3%
	Others	1683	40.5%
Canada	British Columbia	234	5.6%
	Federal	21	0.5%
China	Shandong	11	0.3%
	Fujian	6	0.1%
	Jiangxi	6	0.1%
	Others	134	3.2%
European Union	Germany	24	0.6%
	France	7	0.2%
	Netherlands	4	0.1%
	Others	113	2.7%
India	National	6	0.1%

There were more data points for buses than trucks in our database (Table 5). Type A, C, and D school bus prices, provided by the World Resources Institute's Electric School Bus initiative, accounted for more than 1,800 records of bus prices in the United States and 68.3% of all bus price data (Wang et al., 2024). For trucks, most price points are Class 2B–6 medium-duty straight trucks, followed by Class 7–8 tractor trucks. "Other trucks" includes niche use cases like yard tractors and refuse trucks and account for slightly more than 10% of all truck price datapoints.

Table 5

Distribution of price data points by segment

Bus (2,414 data points)		Truck (1,746 data points)	
Segment	**Share in dataset**	**Segment**	**Share in dataset**
Type C school bus	41.9%	**MD straight truck**	34.8%
Type D school bus	21.4%	**HD tractor truck**	21.2%
HD transit bus	20.4%	**MD van**	20.2%
HD school bus	5.7%	**HD straight truck**	12.1%
Type A school bus	5.0%	**HD other truck**	8.9%
MD school bus	4.3%	**MD other truck**	2.8%
HD coach bus	0.9%	**–**	N/A
MD transit bus	0.5%	**–**	N/A

Table 6 lists the total number of original equipment manufacturers (OEMs), the 10 largest OEMs for trucks and buses with the greatest number of data points, and their percentage in the data set. There are more truck OEMs than bus OEMs in the dataset, meaning the truck price data came from a wider group of manufacturers. As a result, the top 10 truck OEMs account for slightly less than 53% of all data points.

Table 6

Bus and truck OEMs in the study

Buses (45 unique OEMs)		Trucks (69 unique OEMs)	
OEM	**Share in dataset**	**OEM**	**Share in dataset**
Thomas Built Bus	24.6%	**Lion Electric**	8.7%
Blue Bird	23.4%	**Freightliner**	7.0%
IC Bus	15.7%	**Volvo**	6.7%
New Flyer	9.1%	**BrightDrop**	6.5%
BYD	5.5%	**Xos**	5.4%
Micro Bird	2.8%	**Battle Motors**	4.4%
Lion Electric	2.0%	**SEA Electric**	4.0%
Proterra	2.0%	**Cenntro**	3.5%
GreenPower	1.8%	**Peterbilt**	3.3%
Collins Bus	1.5%	**BYD**	3.3%
Others	11.6%	**Others**	47.1%

Figure 2 shows the data coverage by model year, market, and four vehicle segments. We collected the most amount of data from the United States, primarily through state incentive programs. The best represented segments are medium-duty straight trucks, heavy-duty transit buses, and heavy-duty tractor trucks, which have more than 10 distinct data points throughout model years 2020–2025. While Europe has fewer data points compared with the United States, they are aggregated from different sources and reflect industry averages broadly without offering much detail. School buses were not recorded outside of the United States or Canada and are, therefore, not shown in the figure. There were also vehicle segments for which we have no data, such as historical prices of heavy-duty tractor trucks in India and heavy-duty straight truck prices in China.

Figure 2

Price data coverage across model year, market, and vehicle segment

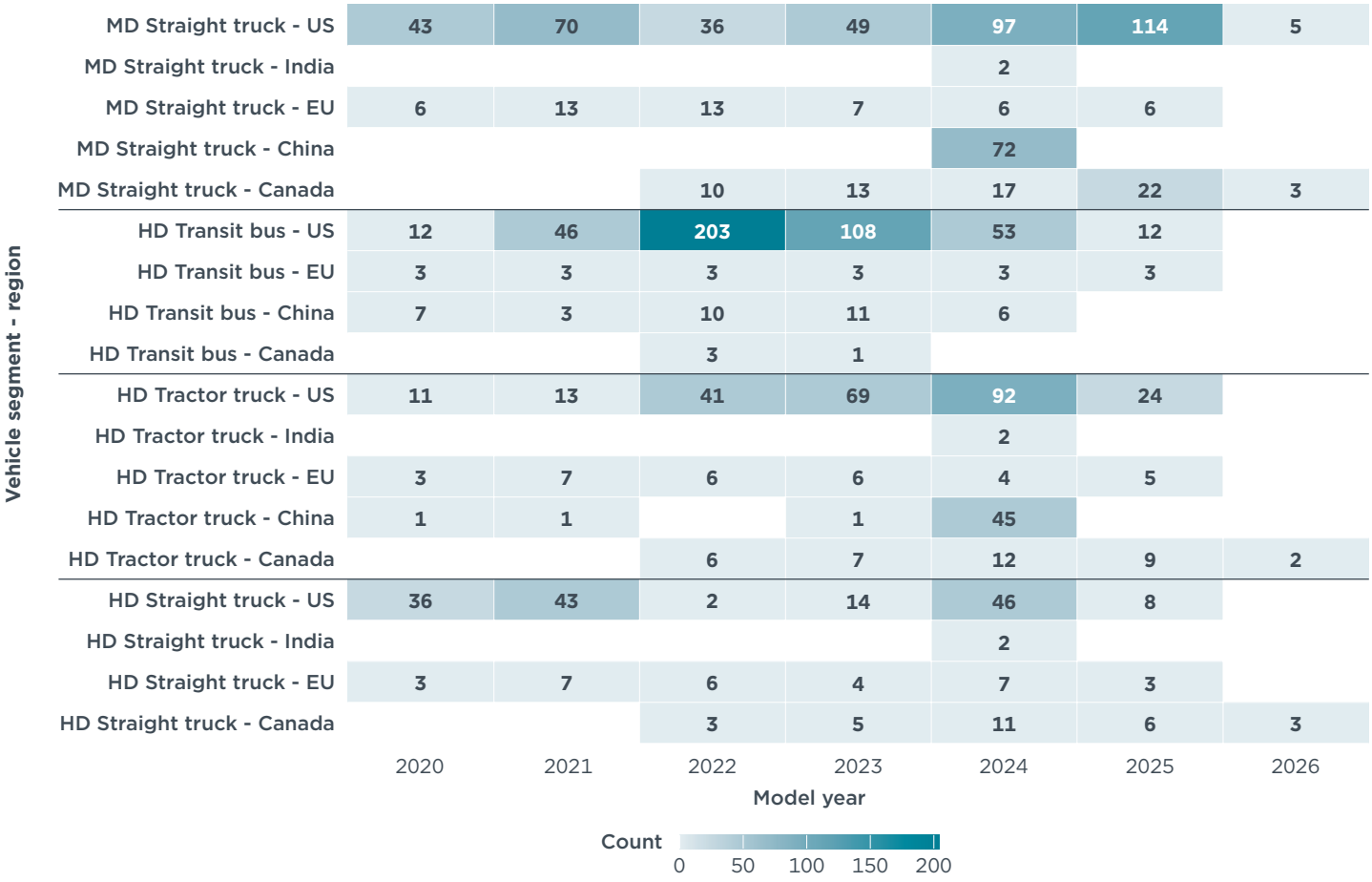
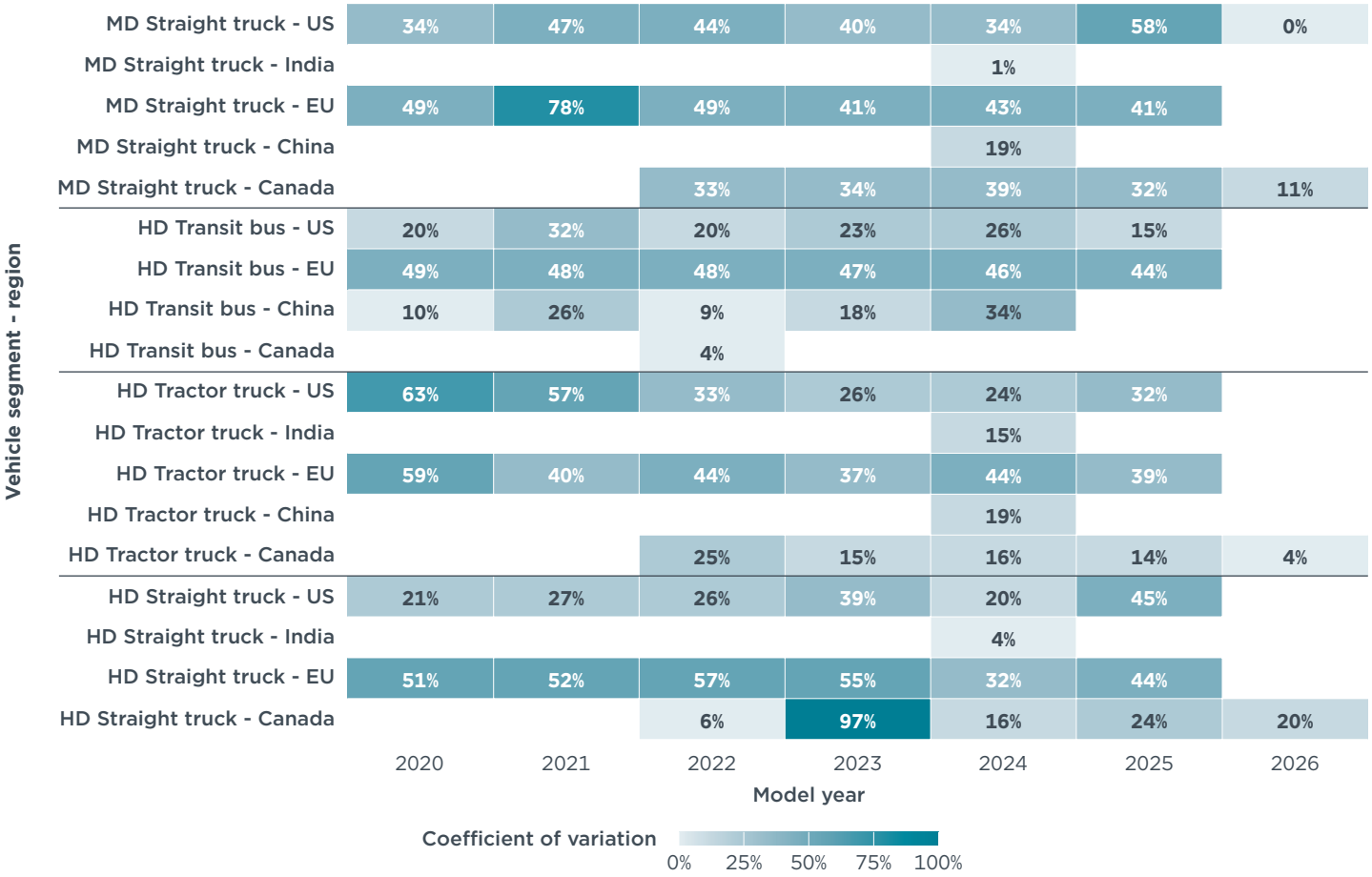


Figure 3 shows the relative variability of price data measured as the coefficient of variation. It is derived by dividing the standard deviation of prices by the mean price, expressed as a percentage. The higher the coefficient of variation, the darker the color and the greater the variability of prices. Segments and markets with only one observation in one model year have been excluded. Medium-duty straight trucks in the EU in model year 2021 and heavy-duty straight trucks in Canada in model year 2023 have the highest relative variability of greater than 75%, possibly due to outlier price points. Price variability was lowest among heavy-duty transit buses in China and the United States and heavy-duty tractor trucks in Canada. Price variability also does not always decrease over time; while the relative variability of heavy-duty tractor trucks in the United States decreased from 63% in model year 2020 to 32% in model year 2026, relative price variability of medium-duty and heavy-duty straight trucks increased in the United States during the same period.

Figure 3

Price data variation across model year, market, and vehicle segment



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Batteries contribute substantially to the upfront cost of BEVs. Therefore, battery capacity information is an important metric in understanding cost changes. Unfortunately, of the approximately 2,700 BEV price records, only 36% have battery capacity information. As we discuss later, missing battery capacity information meant we were unable to control battery sizing in subsequent analysis.

RESULTS

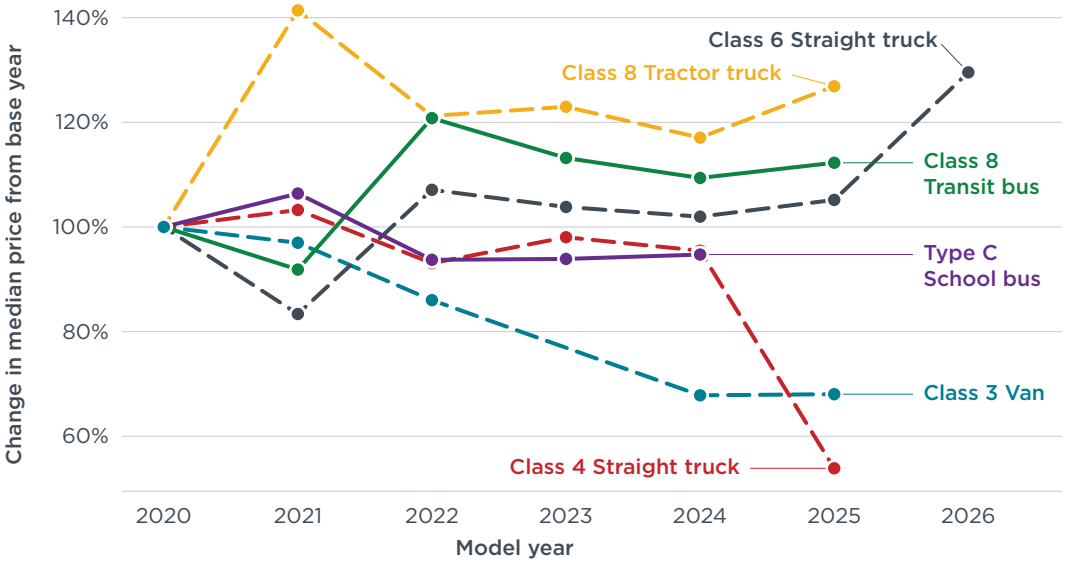
This section presents trends in battery electric commercial vehicle pricing from a variety of perspectives. First, it presents a comparison of relative price changes over time across vehicle segments in the United States and international markets. Next, it compares the vehicle type and weight class between OEMs and U.S. states. It then illustrates changes to state incentive program funding and their relationship to prices.

COMPARING PRICE CHANGES IN THE UNITED STATES AND OTHER MARKETS

This section shows relative price changes in major MHDV segments in the United States. Figure 4 shows the relative changes in median vehicle price in each model year for six segments compared with model year 2020, the earliest year for which all vehicle segments are first captured in the dataset. These segments were chosen to reflect the diverse vehicle weight classes and types that are well represented in the database. Price data points in 2022 U.S. dollars are normalized to their median to minimize potential effects of extreme outliers and because the dataset lacks sales volume to calculate sales-weighted average prices.

Figure 4

Battery electric commercial vehicle price trends in the United States



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Compared with model year 2020, Class 6 straight trucks, Class 8 tractor trucks, and Class 8 transit buses have higher median prices in model years 2025/26. The largest increase was in Class 6 straight trucks, due to a price jump of more than 20% from model years 2025 to 2026. Three segments have lower median prices today than in model year 2020: Type C school buses, Class 3 vans, and Class 4 straight trucks. The

median price of battery electric Class 4 straight trucks in 2025 is 60% of the price in model year 2020, showing the greatest level of reduction. The median price of Class 3 vans has fallen consistently, unlike other segments.

Changes in price over time may reflect changes in battery sizes offered. To test this, we first assessed if vehicle retail prices have a positive, linear correlation with battery sizes within each model year. Figure 5 shows the correlation coefficient and R-squared value between retail price (in 2022 U.S. dollars) and battery capacity (in kWh) for five commercial vehicle segments in the United States between model years 2020 and 2025. A correlation coefficient close to 1 indicates a strong and positive linear relationship between price and battery capacity, whereas a R-squared value close to 1 indicates that a large proportion of price variability within each model year can be explained by battery size.

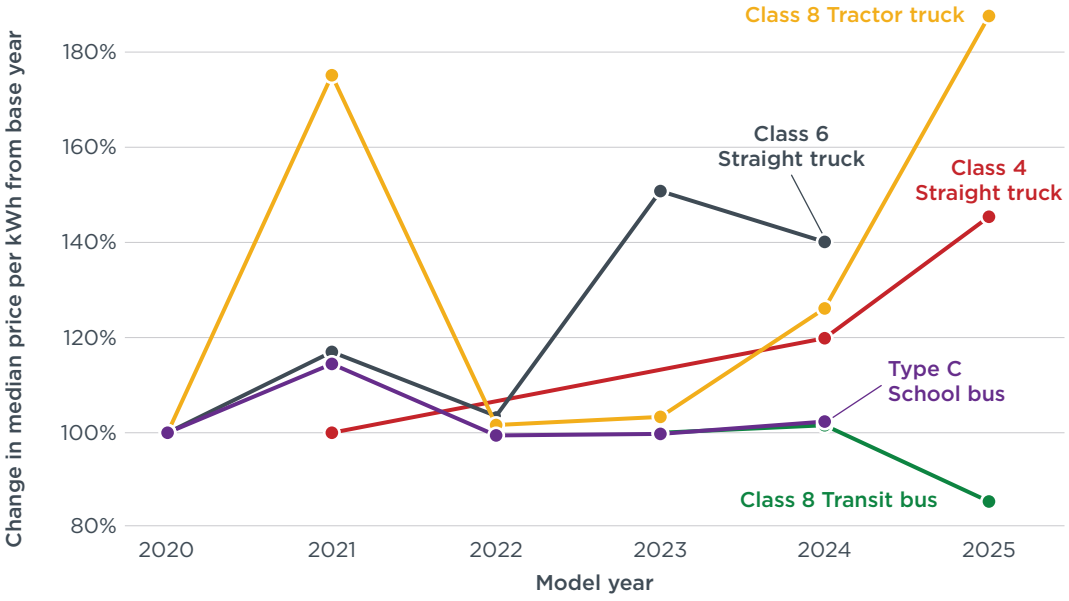
Figure 5

Correlation between price and battery capacity for battery electric commercial vehicle segments in the United States

Based on the correlation coefficient and R-squared values shown in Figure 5, Class 8 tractor truck prices in our dataset do not have a strong and consistent correlation with battery capacity. Neither do Type C school buses and Class 4 straight trucks. A linear, positive correlation between vehicle retail price and battery capacity is observed for Class 6 straight trucks and Class 8 transit buses. This means that prices in our dataset rise with battery capacity, and price variations each year can be partially explained by battery size differences for these two segments.

With this information in mind, Figure 6 shows the normalized median price of vehicle segments in Figure 4 on a per kWh of battery capacity basis. The data points shown reflect vehicle categories with at least three observations. Normalizing for battery size leads to different trends in relative median price. Class 4 straight trucks, Class 6 straight trucks, and Class 8 tractor trucks rose in median price per kWh. In particular, the per kWh median price of Class 4 straight trucks increased when the retail prices declined. The battery sizes of Class 4 straight trucks in our database did not change much between model year 2021 and model year 2025; therefore, it is likely that despite rising battery costs, manufacturers priced their vehicles more competitively over time to secure market share. In contrast, Class 8 transit buses prices fell. This could suggest that battery costs are falling, and that rising median prices reflect larger batteries being sold. Type C school bus prices were relatively constant before and after normalizing for battery size, which likely suggests that retail prices changed in tandem with battery costs.

Figure 6
Battery electric commercial vehicle prices per kWh in the United States



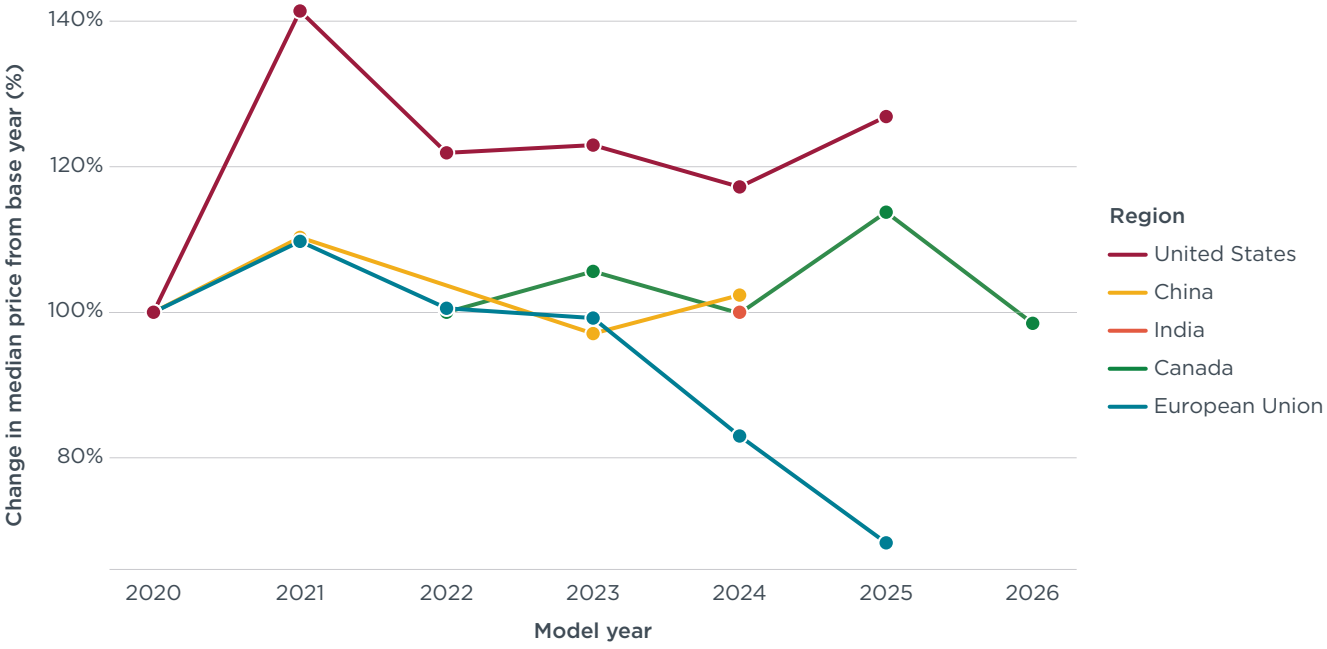
THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Next, we compare price trends in the United States with other markets. The absolute prices of vehicles in different markets can differ significantly; in our database, the median price of a model year 2024 battery electric heavy-duty tractor truck in the United States is $379,800, and in China, the median price of the same class and type of vehicle is $119,600. Since manufacturers are not producing these vehicles for export, we choose to compare the relative price changes between markets.

Figure 7 shows the relative changes in median prices of battery electric heavy-duty (i.e. Class 7–8) tractor trucks in Canada, China, the EU, India, and the United States. Like Figure 4, values on the y-axis show the percentage change in median price in subsequent model years relative to model year 2020. Median prices grew in all markets from model years 2020 to 2021. Divergence between the EU and the United States began to emerge in model years 2023–2024, when the median price in the EU decreased precipitously through model year 2025, while the median price in the United States slightly increased. Median price in Canada (a market like the United States in terms of OEM makeup and product offerings) did not rise as much as it did in the United States in the same period. The contrast between Class 8 tractor truck price changes in the EU and the United States reinforces the findings of CARB's 2024 pricing memo, that battery electric Class 8 tractor truck prices were moving in opposite directions in the United States and Europe.

Figure 7

Battery electric heavy-duty (Class 7–8) tractor truck price trends across regions



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Figure 8 shows the relative changes in median prices of battery electric heavy-duty (Class 7–8/N3) straight trucks in Canada, the EU, and the United States. Median prices fell in all three regions by model years 2025 and 2026 compared with the base year. Price fluctuations in the United States and Canada were less volatile compared with the EU, which had year-on-year changes to median prices of more than 60% between model years 2020 and 2022. Because most EU data had no battery capacity information, we are unable to determine if the sudden changes were due to changes in battery capacities.

Figure 8
Battery electric heavy-duty (Class 7–8) straight truck price trends across regions

Figure 9 shows the relative changes in median prices of battery electric medium-duty (Class 2B–6) straight trucks in Canada, the EU and the United States. In Canada and the EU, prices were relatively stable, with the last model year's median price within 20% of the first model year's median price, and year-on-year changes of less than 30%. In the United States, the median price decreased sharply from model years 2024 to 2025 and then increased sharply in model year 2026. The volatile decrease and increase are caused by changes in the weight class constitution of medium-duty straight truck prices in those two years; there were more Class 2B, 3, and 4 data points in model year 2025, and in model year 2026 the only vehicle prices were of the more expensive Class 6 straight trucks. The trendlines are strongly influenced by the vehicle classes represented by the data points.

Figure 9

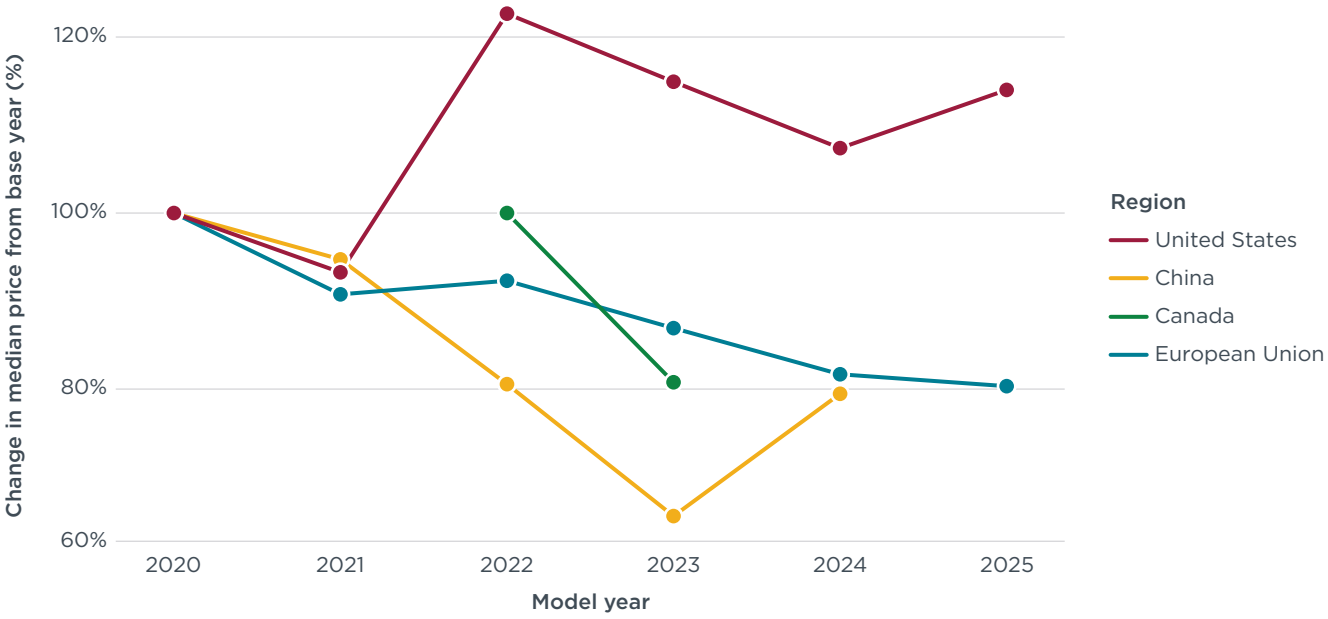
Battery electric medium-duty (Class 2B–6) straight truck price trends across regions

THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Figure 10 shows the relative changes in median prices of battery electric heavy-duty transit buses. Compared with trucks shown in earlier figures, buses have less drastic changes in median prices. Price movements in the EU and the United States mirror the trends seen in heavy-duty tractor trucks: between model years 2020 and 2025, EU prices decreased, and U.S. prices increased. The latest available median price in China also decreased to about 80% of model year 2020 levels.

Figure 10

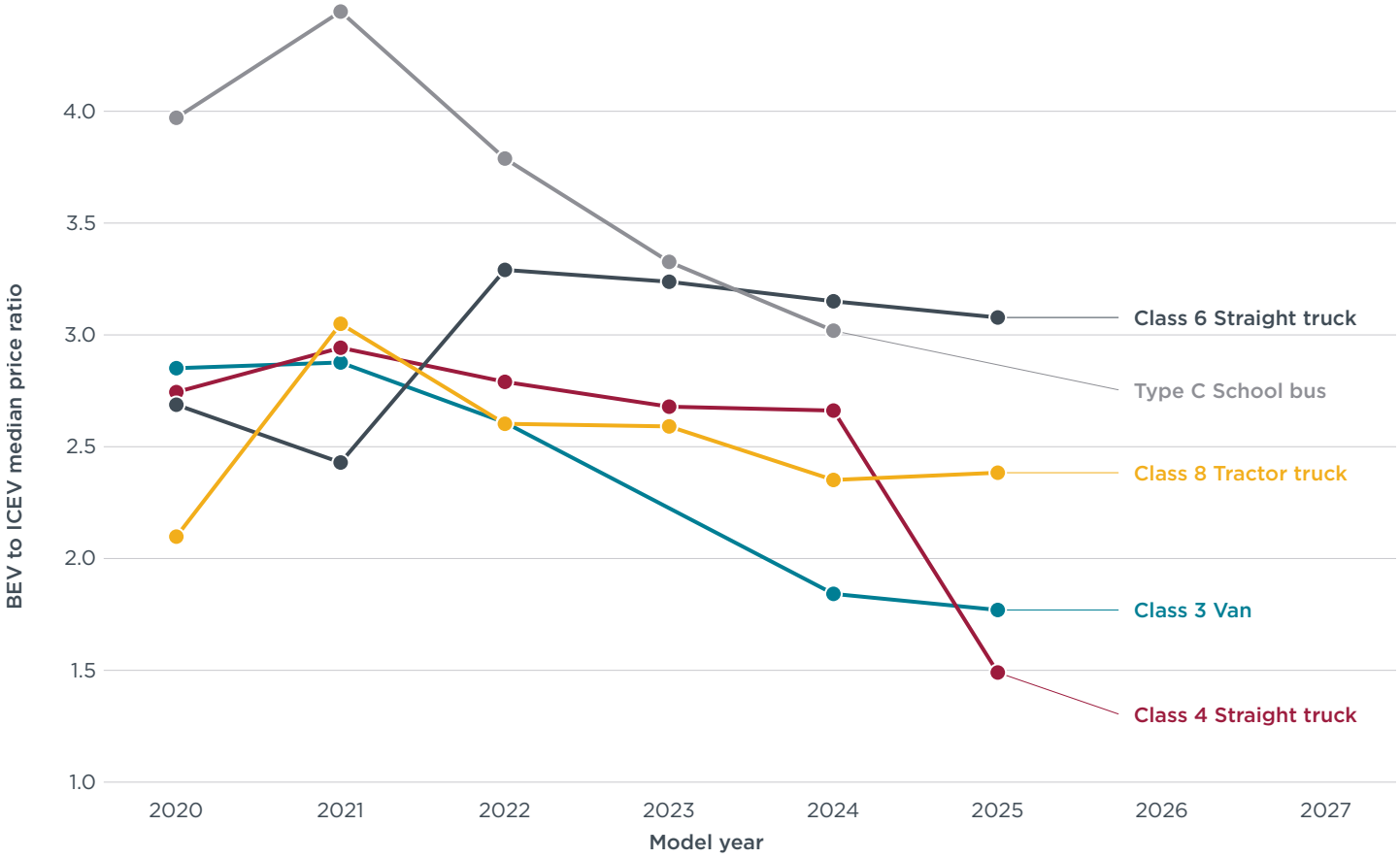
Battery electric heavy-duty (Class 7–8) transit bus price trends across regions



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

To compare relative prices, we divided the median price of BEVs by the median price of ICEVs. This metric reveals the price premium of battery electric powertrains (including batteries) and is an alternative to analyzing incremental pricing between BEVs and ICEVs (CARB, 2024). A ratio closer to 1 signals BEVs approaching purchase price parity. Figure 11 shows the ratios of median BEV to ICEV prices in the United States for five commercial vehicle segments in our database for which both BEV and ICEV prices were available.

Figure 11
Ratio of median BEV to ICEV prices in the United States

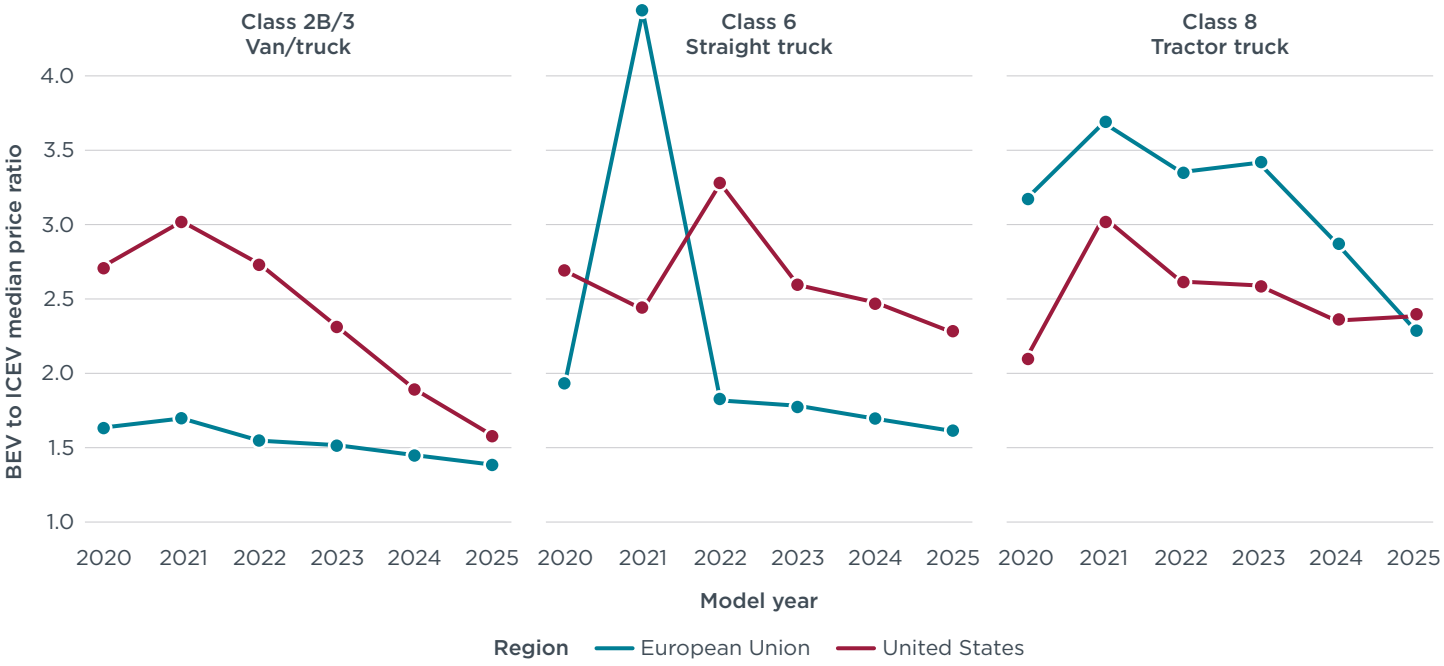


THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Three out of five segments have a lower BEV-to-ICEV median price ratio in model year 2025 than in model year 2020: Type C school buses, Class 3 vans, and Class 4 straight trucks. The other two segments, Class 6 straight trucks and Class 8 tractor trucks, have higher BEV-to-ICEV median price ratios today than in 2020. For Class 8 tractor trucks, the ratio in model year 2020 was the lowest at around 2.0 due to low BEV prices recorded that year, before a large increase in model year 2021. Overall, there seems to be a bifurcation of the ratios based on available data. Commercial vehicle segments above Class 6 (Type C school buses also often fall into this weight category) have ratios higher than 2, and those below Class 6 have ratios below 2.

In Figure 12, we compare the BEV-to-ICEV median price ratios in the United States with those in the EU. Because the EU data lack Class 4 straight truck and school bus prices, we only focus on U.S. Class 2B/3 and Class 6 equivalent straight trucks and Class 8 equivalent tractor trucks.

Figure 12
Ratio of median BEV-to-ICEV prices in the European Union and the United States



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

In model year 2020, the median price ratio between BEVs and ICEVs for Class 2B/3 vans and trucks in the United States was higher than in the EU. The ratios in both markets have converged to around 1.5 in model year 2025. For Class 8 tractor trucks, the ratio in the EU market was higher than in the U.S. market in model year 2020, and the ratios again converged over time to about 2.5 in model year 2025. Class 6 straight trucks do not follow this pattern; ratios in the United States were generally higher than in the EU, except for model year 2022 when the European data contained abnormally high prices. The convergence of ratios in both regions may suggest that manufacturers in both markets have settled on a price for their battery electric Class 2B/3 vans and trucks and Class 8 tractor trucks of 1.5 times and 2.5 times, respectively, the price of internal combustion engine products.

PRICE DISTRIBUTION OF COMMERCIAL VEHICLES IN THE UNITED STATES

Class 8 tractor trucks

U.S. price data for battery electric Class 8 tractor trucks are shown by state in Figure 13. The equivalent median price of diesel Class 8 tractor trucks is drawn as the grey curve.[1] The median price of a battery electric vehicle in the most recent model year, 2025, is $411,200, while the median price of a diesel equivalent is $172,500. All price data in this section are inflation-adjusted to 2022 price levels.

Figure 13

Class 8 battery electric tractor truck prices in the United States by state

THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

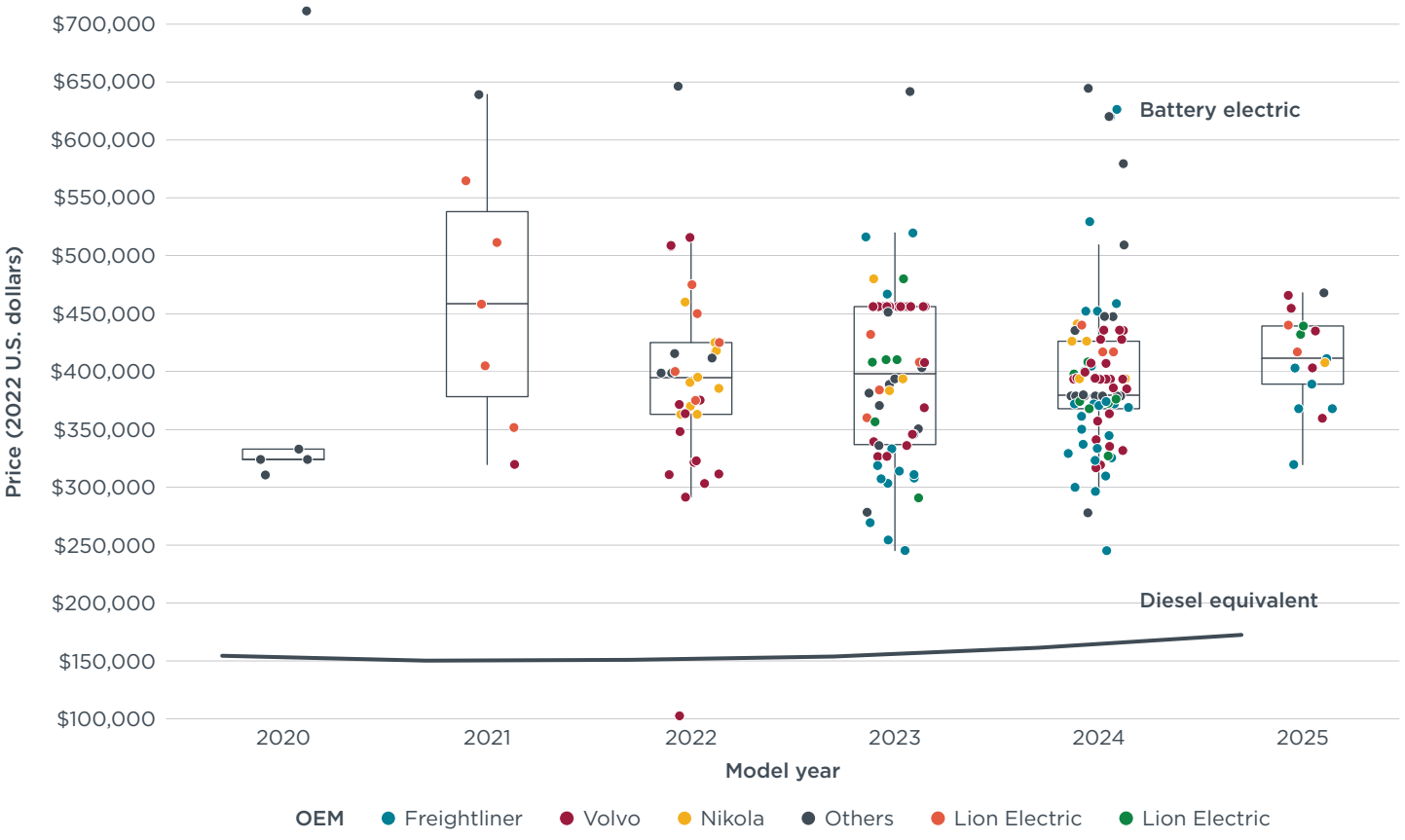
1 Prices for ICEVs are from Truck Blue Book. Equivalent diesel trucks are day-cab tractor models from major OEMs with similar specifications as the battery electric ones.

All battery electric heavy-duty tractors in the database were Class 8. The median price of battery electric Class 8 tractor trucks increased by 27%, or $87,100, between model years 2020 and 2025. In model year 2020, four out of five data points for battery electric heavy-duty tractor trucks were BYD trucks from California, which may explain the lower median price in that model year and the low BEV-to-ICEV price ratio seen in Figure 11. Overall, battery electric prices rose more sharply compared with comparable diesel trucks, whose median prices increased by 12%, or $18,000. We are unable to account for the effect of potential changes in battery sizes over time because most transactions in our database do not contain battery capacity information.

The prices of battery electric Class 8 tractor trucks in the United States are highly variable in our dataset. The standard deviation of battery electric prices was more than 50% the median price in model year 2020 and gradually decreased over time as the number of data points increased to about 10% of median price in model year 2025. Prices that were more than double the median price value were recorded in New York, California, and New Jersey in model years 2022, 2023, and 2024. The lack of separation of data points in each model year in suggests that fleets are not consistently paying more or less for the trucks in any U.S. state. Similarly, in Figure 14, there is no strong pattern with regards to certain OEMs having higher prices than others.

Figure 14

Class 8 battery electric tractor truck prices in the United States by OEM

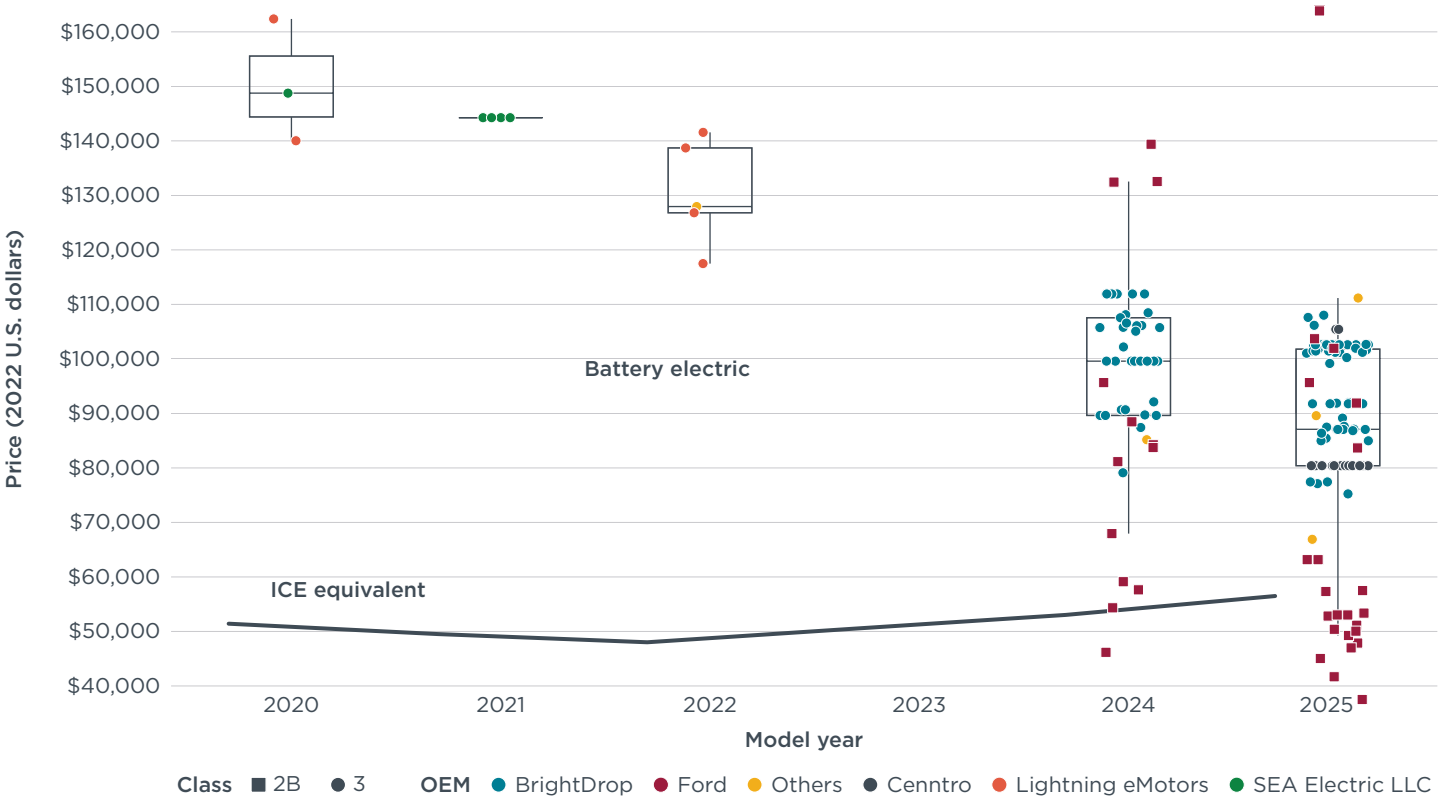


Class 2B/3 trucks and vans

On the opposite end of the weight class spectrum, Figure 15 shows the distribution of prices of Class 2B and 3 trucks and vans in the United States. In 2025, the median price of a Class 2B/3 van/truck in the dataset is $87,100 for a battery electric model and $57,900 for an internal combustion engine model (shown as the separate grey curve). The median price for BEVs decreased by 42% to $87,100 from model year 2020 to 2025, while the median price for internal combustion engine equivalent vehicles increased by 10% to around $56,500. In the first few years, price data represented Class 3 products from OEMs that only manufacture zero-emission vehicles, such as Lightning eMotors, SEA Electric, and Cenntro. Battery electric models from Ford and Chevrolet BrightDrop became available in model year 2024 and dominate the data points in subsequent years. Some battery electric Class 2B price data points were lower than the internal combustion engine counterparts. The dataset did not contain any Rivian vans, which were sold exclusively to Amazon and did not participate in state incentive programs until February 2025 when orders opened to other fleet customers (Hawkins, 2025). According to data from CALSTART, there were more than 44,000 cargo Class 2B vans deployed in the United States between December 2022 and December 2024; the large volume of these vehicles may explain the reduction in prices we observed from our dataset (Richard, 2025).

Figure 15

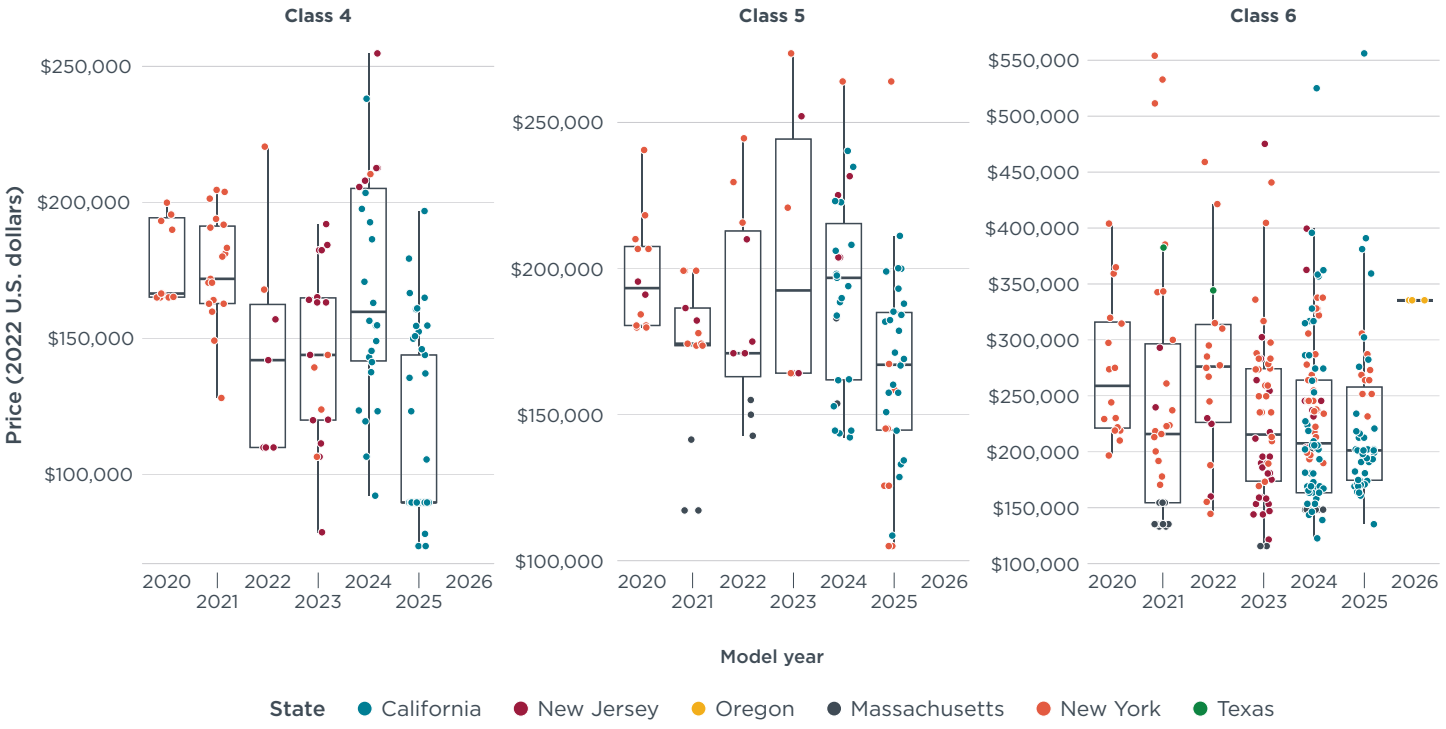
Class 2B/3 battery electric van and truck prices in the United States



Class 4–6 straight trucks

For battery electric straight trucks in the Class 4–6 weight class range, price changes show a mixed picture (Figure 16). The median prices for Class 4 and Class 5 decreased by 46% ($76,800) and 14% ($26,200) respectively between model years 2020 and 2025, to $89,700 and $167,100, respectively. Class 6 median prices increased by 30% ($76,500) between model years 2020 and 2026, to $335,400. Data prior to model year 2024 mostly came from New Jersey and New York, while California data is concentrated in model years 2024 and later. This change in data composition may have contributed to price reductions in later years (i.e., lower prices in California were driving the national trend). There is also a high degree of price variability within each model year, with some high prices double or almost triple the lower prices in the same segment of the same year. This may be because Class 4–6 straight trucks are often used for vocational purposes and have diverse bodies and specifications that contribute to varying costs. For this reason, we did not pick diesel equivalent models to compare against these vehicles.

Figure 16
Class 4–6 battery electric straight truck prices in the United States

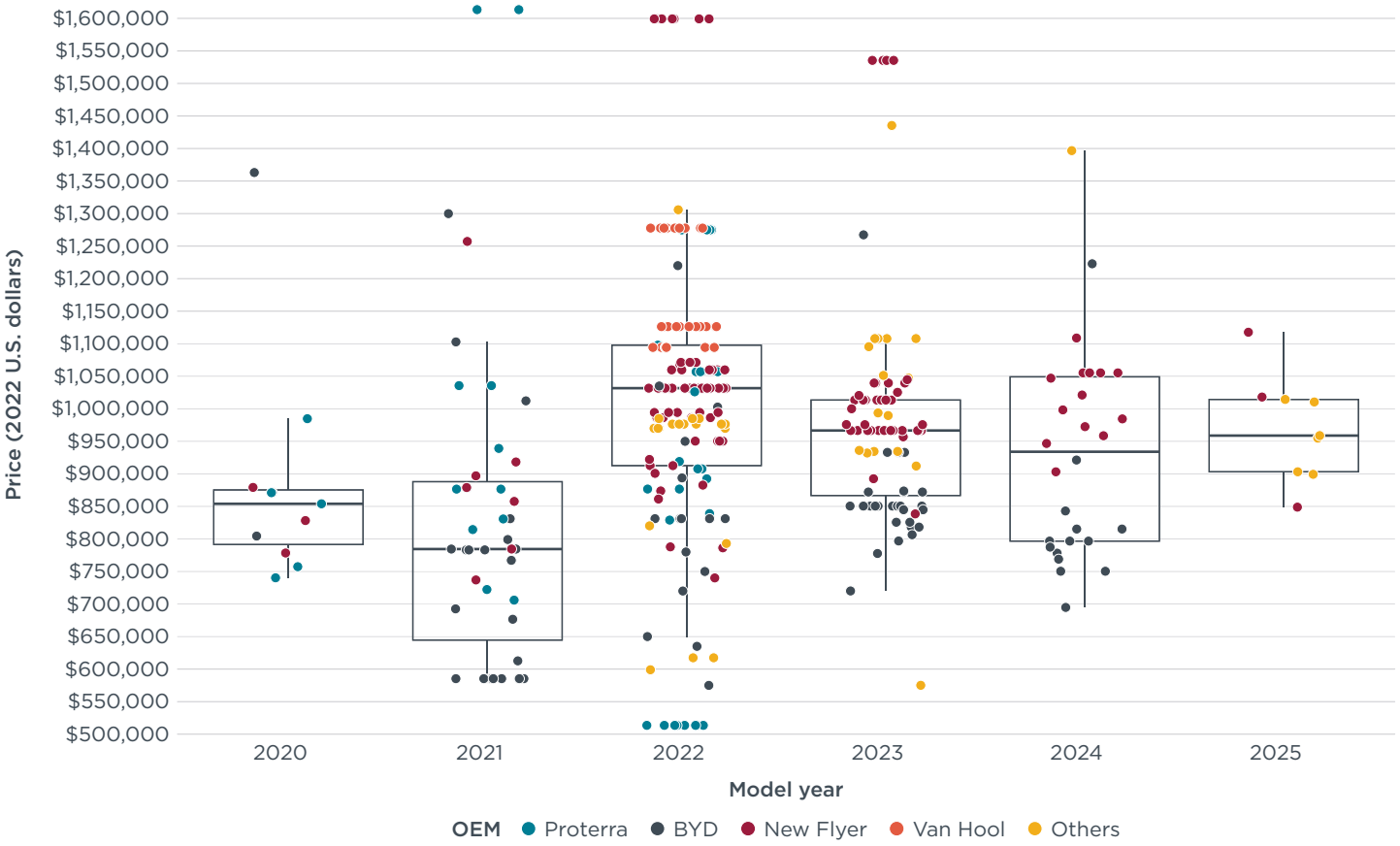


Class 8 transit buses

The median price of battery electric Class 8 transit buses increased by $105,000, or 12%, from model years 2020 to 2025 (Figure 17). In model year 2025, the median price of a battery electric Class 8 transit bus in the United States is $958,800. In 2022, Van Hool and New Flyer had the highest priced vehicles, with median price above $1 million, while BYD's prices were on the lower end of the spectrum at $831,200. The most expensive vehicles can cost three times more than the least expensive vehicles, showing a great degree of variability in pricing. A high degree of customization exists in the transit bus market, a likely explanation for this high pricing variability.

Figure 17

Class 8 battery electric transit bus prices in the United States



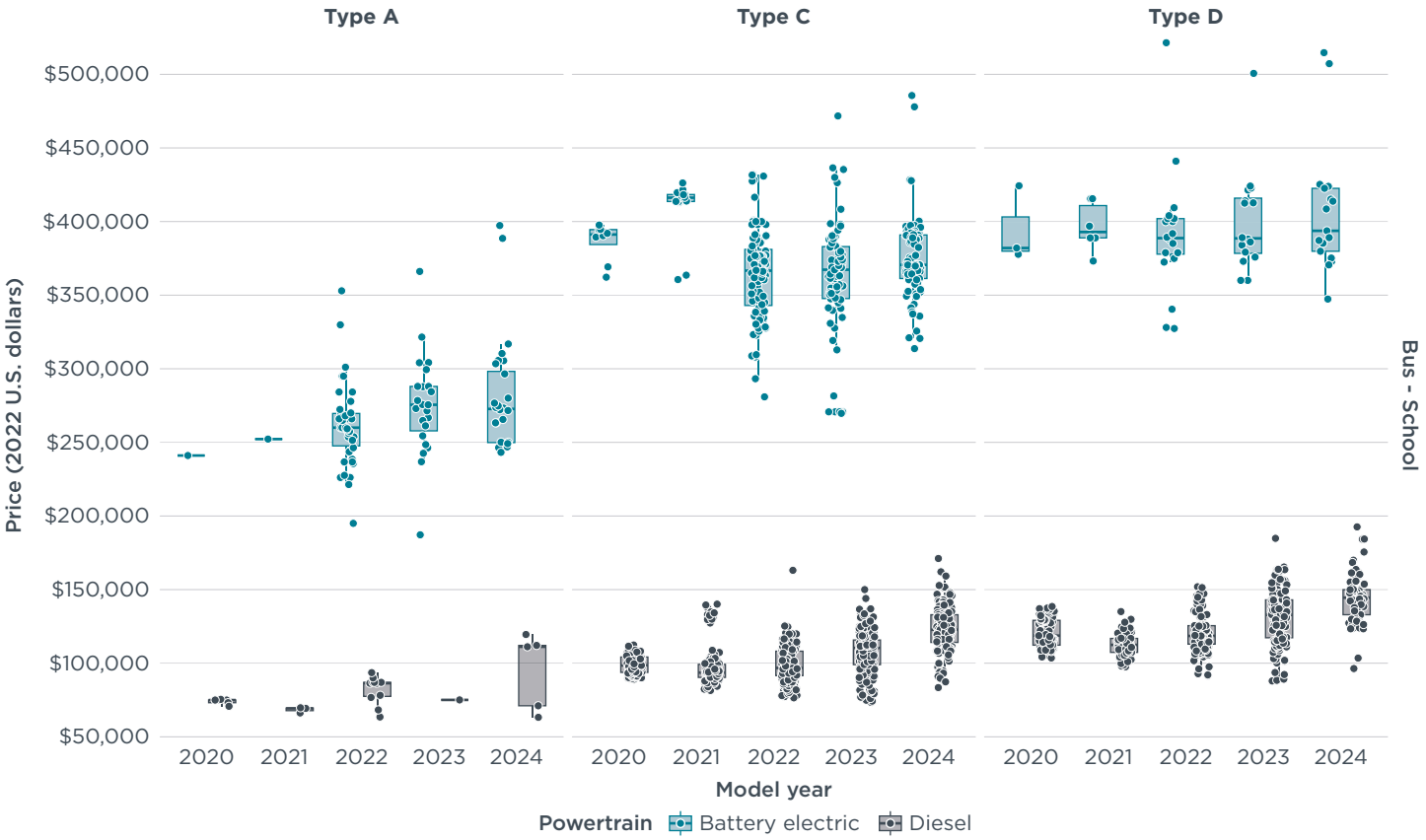
THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Type A, C, D school buses

For school buses, this analysis uses data collected and shared by the World Resources Institute's Electric School Bus Initiative. Prices of Type A, Type C, and Type D school buses, both diesel and battery electric, are illustrated in Figure 18. Unlike in other segments, price increases for diesel vehicles were greater than battery electric models: between model year 2020 and 2024, the median price of diesel Type A school buses increased by 48%, Type C by 25%, and Type D by 22%. The median prices of battery electric Type A and Type D school buses increased by 13% and 3%, respectively, and prices for battery electric Type C school buses dropped by 5%. Prices within each model year show a wide range, likely because of the different safety, accessibility, and other equipment required by different states and school districts.

Figure 18

Type A, C, and D school bus prices in the United States



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

Daimler-affiliated battery electric vehicle prices

In Figure 19, we compare the prices of four types of BEVs manufactured by a Daimler-affiliated brand contained in the dataset. Daimler is one of the largest commercial vehicle manufacturer groups in the United States and has products in many segments and weight classes. We were interested to see if battery electric commercial vehicle prices from the same manufacturer group would follow the same pattern. They are the Class 6 utility/delivery van chassis eM50; the Class 7 straight truck eM2; the Class 8 tractor truck eCascadia, and the Thomas Built Saf-T-Liner Type C school bus. As the figure shows, not all types of vehicles experienced the same price changes in the past 5 years. The median prices of the Class 6 eM50 and Type C Thomas Built decreased over time, while median prices of Class 7 eM2 and Class 8 eCascadia increased. The inconsistency within the same parent OEM suggests that different subsidiaries and segments may rely on separate supply chains, and price changes in one segment do not necessarily mean similar changes in others.

Figure 19
Daimler-affiliated battery electric commercial vehicle prices in the United States

THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION **THEICCT.ORG**

U.S. STATE INCENTIVE PROGRAMS AND PRICES

Out of the more than 2,200 U.S. battery electric vehicle price entries in the database, 78% represented a vehicle purchased with the assistance of a state incentive program. Of these transactions, 84% include information about the incentive amount, which enables the analysis of incentive changes over time and correlation with incentive amounts. Figure 20 shows the median incentive value for BEVs. Incentive

amounts generally did not increase across all vehicle categories, except for Class 8 tractor trucks in California where the median incentive value increased 48% from model year 2024 to model year 2025. California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project provides larger amounts above a base value for applicants who meet targeted criteria. For example, public and nonprofit fleets with 20 or fewer vehicles and private fleets with 20 or fewer vehicles and less than $15 million annual revenue can receive a 100% increase (California HVIP, n.d.). Vouchers in model year 2025 could have gone to a greater number of targeted fleets, which would have increased median incentive amounts.

Figure 20

State incentive amount for battery electric vehicles by model year

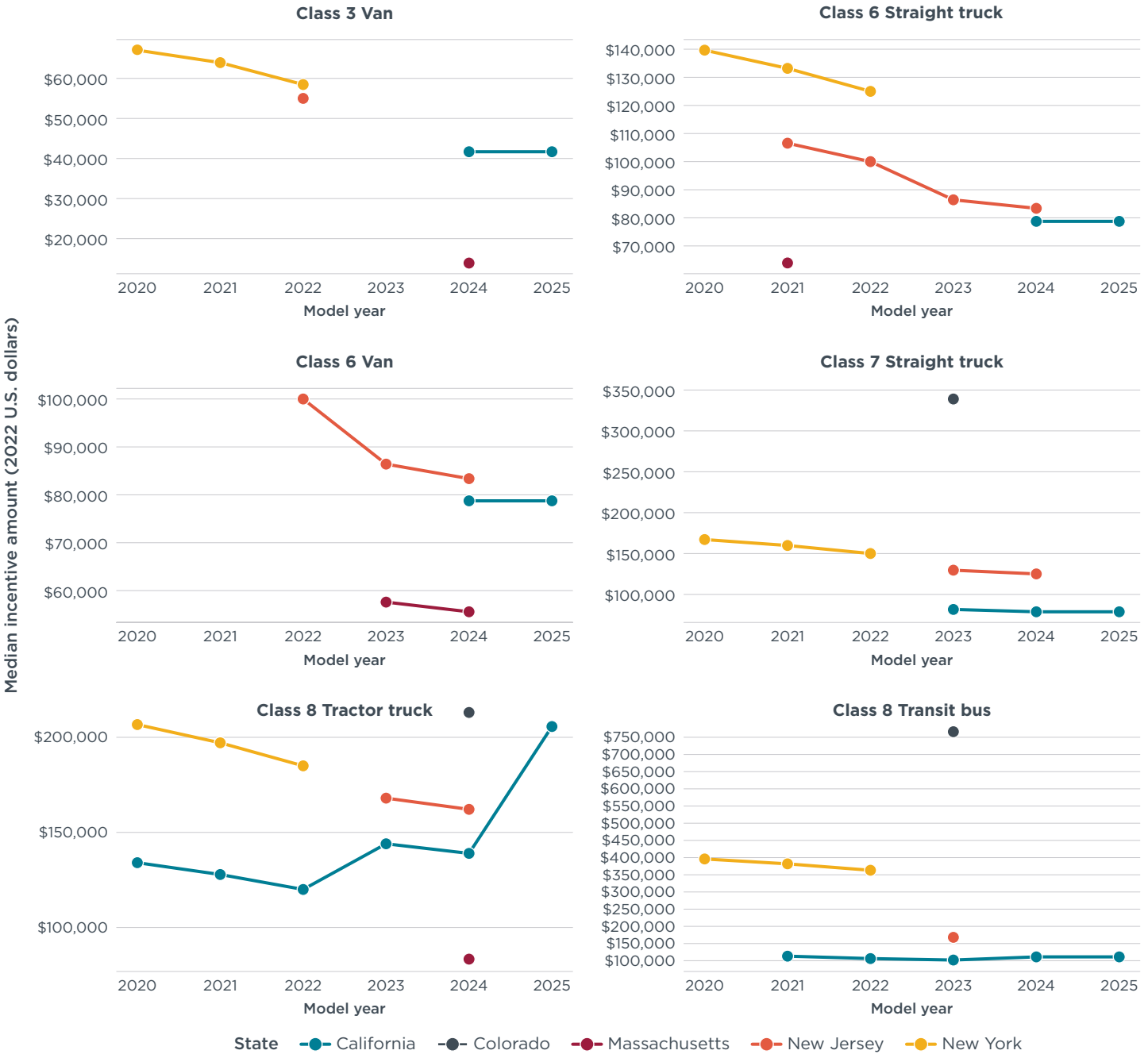
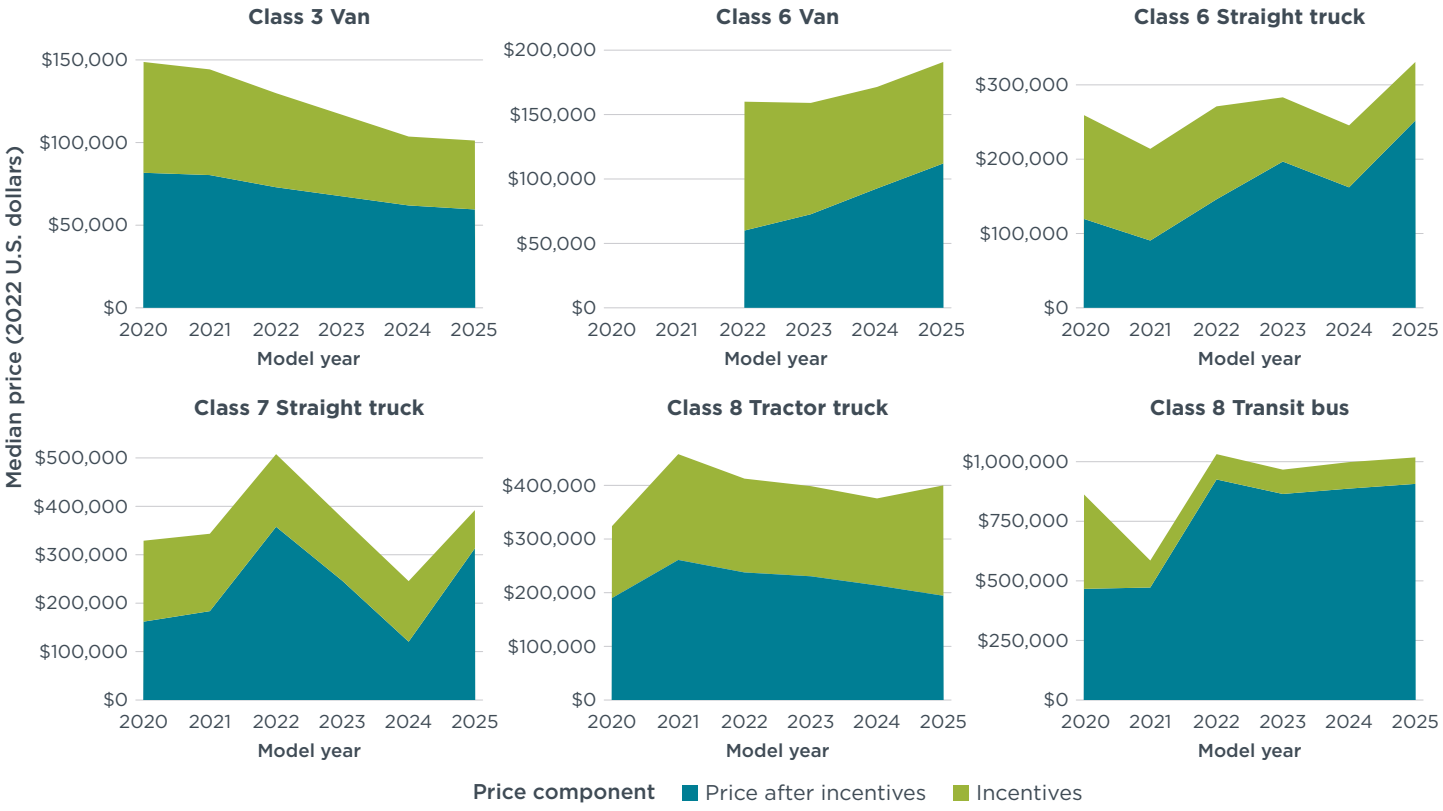


Figure 21 shows median vehicle prices for six segments in the United States and the median incentive levels each segment receives. For most segments, state incentives were responsible for a smaller proportion of the vehicle cost over time. By model year 2025, state incentive funding covers as little as 10% of the vehicle's median price (for Class 8 transit buses) and as much as 53.4% (for Class 8 tractor trucks). Fleet customers facing stagnant incentive amounts in the face of higher vehicle prices may either be paying more out-of-pocket or be able to utilize funding support from other incentive programs. These data do not provide clarity on whether incentive recipients are in fact paying higher amounts without more information.

Figure 21

Battery electric commercial vehicle state incentives and prices in the United States



DISCUSSION

STAKEHOLDER REACTIONS

We presented preliminary findings to industry experts, including vehicle manufacturer representatives, fleet operators, independent research organizations, and state incentive program staff who provided data. Their feedback provided some theories to explain the pricing patterns we have shown.

Manufacturers offered a variety of suggestions. Some cited changes in raw material costs and higher demand for vehicle warranties as the cause for rising prices. Some pointed to differences in U.S. and European supply chains as the cause for differences in pricing patterns between the two markets. Differences in the timing of

the introduction of next-generation products in the United States and Europe further explain to them the comparative differences across markets, since faster deployment of the latest generation of technology in Europe may deliver performance and cost advantages over the U.S. market. A manufacturer also explained that going forward, U.S. trucks will be consistently more expensive than European trucks because their longer driving ranges will require larger batteries.

We also received a few thoughts about pricing behavior. Within a single vehicle segment, one manufacturer explained that price variation in a single model year from a single manufacturer can reflect the nature of the customers served. From their perspective, a large fleet customer will be less price sensitive than a smaller one, leading to higher prices for larger customers. One manufacturer stated they only see the wholesale price of the vehicle and do not control the final price.

Trucking fleet representatives offered alternative perspectives. One did not agree with the view that dealers control the final price, as dealers operate on slim margins and are vulnerable to the allocations and pricing that manufacturers give them. In early years when the market was dominated by non-traditional manufacturers, the fleet representative viewed lower prices as reflecting an attempt to gain market share. Moreover, the entrance of legacy manufacturers into the market explains price increases, because these manufacturers have dominant market positions and loyal customers. One fleet representative explained they prefer to stick with a legacy manufacturer over a start-up company to avoid risks associated with access to service and parts. Fleet representatives also theorized that some pricing changes could reflect larger batteries designed to deliver greater range. Other purchasers declined to share the price they paid for their vehicles because they signed non-disclosure agreements with sellers.

Independent research organizations shared other suggestions. We heard that truck manufacturers have invested in new natural gas engine products at the request of trucking fleets, diverting research and development resources away from electrification and requiring higher prices on electric trucks to recover these development costs. We also heard that manufacturers in the Class 2B/3 segment behave differently from those in the Class 6–8 segment. Those in the smaller weight categories are selling products with a smaller cost differential compared with ICE vehicles, resulting in a stronger opportunity to sell these into the market. It was expressed that manufacturers of larger vehicles lack motivation to lower the price of Class 8 tractors. We also heard that large variability in prices can be due to upfitting, which is the practice of installing a custom body on the chassis and is common for transit buses and straight trucks in the United Stats. Regarding different sized fleet customers, independent research organizations shared that larger ones with more negotiating power can secure products with 10% to 30% lower prices, especially through large volume orders. Moreover, they shared that minimum zero-emission vehicle purchase requirements some manufacturers are placing on fleets may have an inflationary effect on the electric vehicle price.

Independent research organizations further shared perspectives that may help explain regional differences in price trends. We heard that Europeans are doing a better job standardizing transit buses than Americans, leading to lower transit bus prices in Europe. We also heard that vehicle customization can cause a difference of 30% above or below the median price of a vehicle. Additionally, it was stated that EU manufacturers priced their zero-emission products more competitively to sell more of them to meet the CO_2 emission standards, which require manufacturers to reduce emissions by 15% by 2025.

RECOMMENDATIONS TO IMPROVE PRICING DATA REPORTING

Private sources of commercial vehicle pricing data in the United States are plentiful, but they have several key constraints. For example, Truck Blue Book contains a robust database of new diesel truck prices but offers limited new zero-emission commercial vehicle prices and lacks bus prices. In addition, price data are not differentiated by state. Widely different practices exist between manufacturers in sharing vehicle pricing information. In the United States, manufacturers for lighter weight class vehicles like General Motors and Ford list MSRP values for their electric vehicles on their website. Manufacturers of larger vehicles like Kenworth, Daimler, and Volvo do not. Used commercial vehicle pricing is widely available on the websites of truck and bus dealers and other resellers, reflecting that a competitive market exists for used vehicles. However, a similar approach to new commercial vehicle pricing does not exist.

The absence of regular data reporting and standardization creates several limitations for the study. This work does not fully account for the difference in vehicle specifications and use cases in its comparison of prices across markets. Historical price data were not available in India and for some segments in China, so comparisons with these regions were limited. A future version of this analysis would benefit from more complete vehicle specification data that enables comparison of battery size normalized costs across markets.

To ensure a robust, fair, and competitive market for zero-emission commercial vehicles, policy efforts are necessary to bring greater access to new electric commercial vehicle pricing data. In the United States where many zero-emission commercial vehicles are purchased with public support, state incentive program managers are in a unique position to collect and report vehicle pricing information. Such a move could benefit consumers by improving the quality and amount of information available to them to negotiate lower prices. Several actions by state program managers could support this outcome. They include:

- Collecting vehicle specifications from the funding applicant, including gross vehicle weight rating, vehicle identification number, battery capacity, and motor power;
- Requiring applicants to report vehicle pricing information during and after procurement processes;
- Standardizing and coordinating the collection of these data with other states; and
- Making these data available to the public on a regular reporting schedule.

CONCLUSION

This study analyzed real-world pricing data for commercial vehicles sold in Canada, China, the EU, India, and the United States. We identified several pricing trends in our dataset.

In the United States, prices for battery electric Class 5 vehicles and smaller are decreasing. Meanwhile, the prices of battery electric trucks of Class 6 and larger are increasing more often than they are decreasing.

The median price of battery electric Class 8 tractor trucks increased 27% since model year 2020 in the United States, with the largest price increase of 40% occurring between 2020 and 2021. Despite this trend, median prices since model year 2020 have

fallen in 2 out of the past 5 years. The median price of Class 2B/3 vans and Class 4 straight trucks fell 40% since MY2020, possibly due to high sales volumes.

In the EU, battery electric commercial vehicle prices have generally decreased. The median price of battery electric N3 (Class 7–8 equivalent) tractor trucks and straight trucks decreased by 32% and 23%, respectively, since model year 2020.

The median price of battery electric Class 8 transit bus prices in the United States increased by 13% from model year 2020 to 2025. Battery electric transit buses also have high price variability, with some vehicles costing 2 times more than others in the same model year. Between model year 2020 and 2024, the median prices of battery electric Type A and Type D school buses increased by 13% and 3%, and prices for battery electric Type C school buses decreased by 5%.

Almost 80% of U.S. price data in the study came from state purchase incentive programs. Improved pricing data collection could benefit consumers by improving the quality and amount of information available to them to negotiate lower prices. For example, states could collect key vehicle specifications from incentive program participants and report final vehicle transaction prices.

REFERENCES

Basma, H., Buysse, C., Zhou, Y., & Rodríguez, F. (2023). *Total cost of ownership of alternative powertrain technologies for Class 8 long-haul trucks in the United States*. International Council on Clean Transportation. https://theicct.org/publication/tco-alt-powertrain-long-haul-trucks-us-apr23/

Busch, C., Basma, H., Swift, M. F., & Sinha, A. (2025). *Delivering affordability: The emerging cost advantage of battery electric heavy-duty trucks and U.S. policy strategies to unlock their full economic potential*. Energy Innovation and International Council on Clean Transportation. https://energyinnovation.org/wp-content/uploads/Delivering-Affordability-Emerging-Cost-Advantages-of-Battery-Electric-Heavy-Duty-Trucks.pdf

California Air Resources Board. (2024, October). *Zero-emission Class 8 truck pricing comparisons – EU & US*. https://ww2.arb.ca.gov/sites/default/files/2024-12/Zero%20Emission%20Class%208%20Tractor%20Pricing%20Comparisons_ADA.pdf

California HVIP. (n.d.). *Funding updates.* Retrieved June 27, 2025, from https://californiahvip.org/funding/

Catsaros, O. (2024, December 10). Lithium-ion battery pack prices see largest drop since 2017, falling to $115 per kilowatt-hour. *BloombergNEF*. https://about.bnef.com/insights/commodities/lithium-ion-battery-pack-prices-see-largest-drop-since-2017-falling-to-115-per-kilowatt-hour-bloombergnef/

Cliff, S. S. (2024, September 25). *California truck availability analysis*. https://ww2.arb.ca.gov/sites/default/files/2024-09/240925_actmemo_ADA_0.pdf

Eurostat. (2025). *HICP - monthly data (annual rate of change)* [Dataset]. Eurostat. https://doi.org/10.2908/PRC_HICP_MANR

Ford Pro. (n.d.). *2025 E-Transit ™*. Retrieved June 2, 2025, from https://www.ford.com/commercial-trucks/e-transit/

Hawkins, A. J. (2025, February 10). Rivian is now selling electric vans to anyone who wants one. *The Verge*. https://www.theverge.com/news/608421/rivian-electric-commercial-van-sale-customer-amazon

Mao, S., Niu, T., Rodríguez, F., Hao, C., Wang, S., & Zhang, Z. (2023). *Real-world use cases for zero-emission trucks: A comparison of electric and diesel tractors in Tangshan, China.* International Council on Clean Transportation. *https://theicct.org/publication/real-world-zero-emission-trucks-tangshan-sept23/*

Federal Reserve Bank of St. Louis. (2025, May 13). *Median consumer price index.* https://fred.stlouisfed.org/series/MEDCPIM158SFRBCLE

Niu, T., & Zhu, G. (2024). *Real-world use cases for zero-emission trucks: Coal freight trucks in Yulin city, Shaanxi province*. International Council on Clean Transportation. https://theicct.org/publication/real-world-zet-coal-freight-trucks-yulin-city-shaanxi-province-may24/

OFX. (n.d.). *Historical exchange rates.* Retrieved June 1, 2025, from https://www.ofx.com/en-us/forex-news/historical-exchange-rates/

Price Digests by Fusable. (n.d.). *The Truck Blue Book.* Retrieved August 14, 2025, from https://app.pricedigests.com/?classification=Commercial%20Trucks

Richard, J. (2025, June). *Zeroing in on zero-emission trucks*. CALSTART. https://calstart.org/zio-zets/

Sharpe, B., & Basma, H. (2022). *A meta-study of purchase costs for zero-emission trucks*. International Council on Clean Transportation. https://theicct.org/publication/purchase-cost-ze-trucks-feb22/

Slowik, P., Isenstadt, A., Pierce, L., & Searle, S. (2022). *Assessment of light-duty electric vehicle costs and consumer benefits in the United States in the 2022–2035 time frame*. International Council on Clean Transportation. https://theicct.org/publication/ev-cost-benefits-2035-oct22/

Statistics Canada. (2025, May 20). *Consumer Price Index (CPI) statistics, measures of core inflation and other related statistics—Bank of Canada definitions*. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810025601

Trading Economics. (n.d.-a). *China inflation rate.* Retrieved June 1, 2025, from https://tradingeconomics.com/china/inflation-cpi

Trading Economics. (n.d.-b). *India inflation rate.* Retrieved June 1, 2025, from https://tradingeconomics.com/india/inflation-cpi

Wang, J., Kothari, V., Werthmann, E., Jackson, E., Henderson, L., & Huntington, A. (2024, August). *Electric school bus US market study*. World Resources Institute. https://doi.org/10.46830/wriib.21.00135.v3

Xe. (n.d.). *Xe currency charts–historical currency rates.* Retrieved June 1, 2025, from https://www.xe.com/currencycharts/?from=CNY&to=USD

Xie, Y., Basma, H., & Rodríguez, F. (2023). *Purchase costs of zero-emission trucks in the United States to meet future Phase 3 GHG standards*. International Council on Clean Transportation. https://theicct.org/publication/cost-zero-emission-trucks-us-phase-3-mar23/

卡车之家. (n.d.). *360che.* Retrieved August 14, 2025, from https://www.360che.com/

中国政府采购网. (n.d.). *China Government Procurement Information Platform*. Retrieved August 14, 2025, from https://www.ccgp.gov.cn/

www.theicct.org

communications@theicct.org

@theicct.org

BEIJING | BERLIN | NEW DELHI | SAN FRANCISCO | SÃO PAULO | WASHINGTON DC

EXHIBIT “E”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

To: **Liane M. Randolph**, Chair, California Air Resources Board
Honorable Board Members, California Air Resources Board

From: Steven S. Cliff, Ph.D., Executive Officer, California Air Resources Board

Date: September 25, 2024

Subject: California Truck Availability Analysis

I am writing to provide an update on the availability of medium- and heavy-duty vehicles in California for the 2024 model year (MY) and to respond to concerns raised at the May Board hearing. I am also including responses to ongoing questions regarding potential differences between zero-emission truck (ZET) pricing in the United States and in Europe.

On May 23, 2024, staff presented to the California Air Resources Board (CARB or Board) proposed amendments to the Advanced Clean Trucks (ACT) regulation. At the hearing, numerous upfitters and dealers spoke about their current inability to receive combustion products from manufacturers in California. They primarily attributed the issue of limited chassis availability to the ACT regulation. In response to these comments, the Board deferred its vote on the proposed ACT amendments to a future hearing and directed staff to work with industry to assess the situation further. This memo provides an update on the situation and staff's findings based on conversations with the affected parties.

Background

In California, the transportation sector alone accounts for 41% of total greenhouse gas emissions (50% when upstream emissions from fuel is included) and is a major contributor to oxides of nitrogen (NOx) and toxic diesel particulate matter (PM) emissions. Medium- and heavy-duty vehicles contribute a quarter of the transportation sector's greenhouse gas emissions and a third of the transportation sector's NOx emissions, a disproportionately high share considering these vehicles represent only about 1.8 million trucks of the 30 million registered vehicles in the state.

CARB has adopted several programs aimed at achieving California's criteria pollutant and greenhouse gas reduction goals, including regulating manufacturers under the ACT and HD Omnibus regulations and setting requirements for fleets in the Advanced Clean Fleets (ACF) and Clean Truck Check regulations. Actions toward reducing emissions have been taken at the federal level as well, most recently with the adoption of the Clean Trucks Plan and Phase 3 greenhouse gas emissions standards for heavy-duty (HD) vehicles.

The ACT regulation, adopted by CARB in June 2020, and approved by the Office of Administrative Law (OAL) in March 2021, reduces emissions beyond what can be achieved with internal combustion engines (ICE) and assists California in attaining the State's air quality and climate mitigation targets. The ACT regulation requires manufacturers of

Class 2b-8 vehicles to produce and deliver for sale an increasing percentage of zero-emission vehicles (ZEV) over time starting with the 2024 MY. The ACT regulation will ensure ZEVs are available for purchase and includes flexibility for manufacturers to strategically focus on vehicle models that are most suitable for electrification, but it does not require any specific fleets, dealers, or others to purchase these vehicles. The amendments proposed at the May hearing consist of generally minor, administrative changes that would address minor issues that have arisen through the rule's implementation, would ensure alignment with the original intent of the rule, and fulfill some of CARB's commitments in the Clean Truck Partnership (CTP) agreement.[1]

Announced in July 2023, the CTP is an agreement between CARB and the nation's leading truck manufacturers that advances the development of ZEVs for the trucking industry and provides flexibility for manufacturers to meet emissions requirements while reaching the state's climate and emission reduction goals. The agreement marks a commitment from the manufacturers to meet California's vehicle standards, including standards that will require manufacturers to only produce and sell ZEVs starting with the 2036 MY. As part of the CTP agreement, CARB agreed to initiate a rulemaking action in 2024 to include specific changes to the ACT regulation that are part of the amendments proposed to the Board in May.

The HD Omnibus regulation was adopted by CARB in September 2021 and approved by OAL in December 2021. The regulation primarily establishes more stringent exhaust emission standards for NOx and PM emissions for new on-road medium- and heavy-duty ICEs for sale in California starting with the 2024 MY. The regulation additionally revamped the HD in-use testing program, established powertrain certification test procedures for HD hybrid vehicles, implemented a new low-load test cycle, and increased the useful life and warranty periods for HD engines. The HD Omnibus regulation is expected to result in significant emission reductions from 2024 MY and newer engines sold in California.

One of the compliance flexibilities in the HD Omnibus regulation is the legacy engine provision that allows limited production of HD engines that meet the 2010 MY NOx and PM emissions standards, referred to as legacy engines. Legacy engine sales in California are only allowed if the manufacturer offsets any excess NOx and PM emissions deficits with HD combustion credits, performing emission reduction projects in disadvantaged communities in California, or with HD zero-emission (ZE) powertrain credits. The mechanism for generation and use of HD combustion credits and HD ZE powertrain credits is further described in the California Averaging, Banking and Trading provisions of the Omnibus regulation. Each manufacturer is limited on the number of legacy engines they can sell

---

[1] California Air Resources Board, Clean Truck Partnership, 2023 (web link: *https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023_06_27.pdf*, last accessed September 2024).

based on their total HD diesel engine production, also known as the legacy engine sales caps.

In February 2023, CARB staff became aware that while the technology for diesel-fueled HD Omnibus-compliant engines was available, some manufacturers did not intend to produce compliant engines for several categories of trucks for the 2024-2026 MY period. Given the impacts to fleets, additional flexibility was desired to enable a smoother transition to the HD Omnibus standards. Accordingly, in December 2023, CARB amended the legacy engine provisions in the HD Omnibus regulation to allow engine manufacturers to sell an increased number of legacy engines i.e., increased the legacy sales caps in the 2024 and 2025 MYs, as well as extend the provision to the 2026 MY so long as all excess emissions deficits are offset. This change to the legacy engine provisions was also part of the CTP agreement. The intent of the 2023 HD Omnibus amendments was to minimize HD product availability issues in California for the 2024-2026 MY transition period. The new legacy engine sales caps were developed in a collaborative manner with the Truck and Engine Manufacturers Association, its members, and the Ford Motor Company.

The ACF regulation, adopted by CARB in April 2022 and approved by OAL in October 2023, aims to accelerate the widespread adoption and usage of ZEVs in the medium- and heavy-duty truck sector, and light-duty vehicles used in mail and package delivery, to reduce harmful emissions generated from on-road mobile sources. The regulation requires drayage trucks, government fleets, and well capitalized businesses to phase-in increasing number of ZEVs and establishes a clear end date of new medium- and heavy-duty ICE vehicle sales in 2036 which creates a catalyst to accelerate development of a HD public infrastructure network.

Summary of Findings

Since the May hearing, staff met with representatives from all major HD truck and engine manufacturers, including Cummins, Daimler, Ford, GM, Hino, Isuzu, Navistar, Paccar, Stellantis, and Volvo/Mack. Each original equipment manufacturer (OEM) was presented with a consistent set of questions regarding the current availability status of the tractors and medium- and heavy-duty vehicles that they offer. Staff additionally met with several dealer, upfitter, and fleet representatives, some of which spoke at the May hearing, to hear their issues and insights from their perspectives.

This section compiles the information gathered from discussions with the affected parties regarding the current product shortage issues.

Which vehicles and engines are affected?

The shortage varies by vehicle type, but generally affects Class 4-8 diesel HD vehicles, with a prevalent impact on Class 6 and 7 vehicles (which typically use medium heavy-duty (MHD) engines). Each manufacturer is dealing with a unique situation, but the factors driving the

availability issues, outlined in the following sections, appear to be broadly consistent amongst the manufacturers.

What is the impact of the Advanced Clean Trucks regulation?

The OEMs indicated that the product availability issues for the 2024 MY are not driven by the ACT regulation, as evidenced by the excess of ZEV credits available based on the ACT credit summary through the 2023 MY.[2] All of the regulated OEMs have ZEV products available for the market in the 2024 MY, and many have already sold ZEVs in previous years to build up an early credit bank. Most manufacturers have also indicated that they are open to purchasing ACT credits from other OEMs if the economics make sense but would ultimately prefer to sell ZEVs themselves. In addition, the lower-than-expected overall sales of 2024 MY engines are effectively decreasing each manufacturer's ZEV sales requirement under the ACT regulation as ZEV sales requirements are based on a percentage of total sales volumes.

Why are manufacturers requiring ZEV sales ratios?

Through discussions with manufacturers, dealers, and fleets, it appears numerous manufacturers have begun to inform their customers they will be applying future requirements to purchase ZEVs before they can acquire combustion vehicles to each of their dealer or upfitters regardless of the types of vehicles they sell as ZEVs. Some have expressed plans to begin implementing a rigid policy to require each dealer or upfitter to purchase a certain number of ZEVs from the manufacturer before they can get any ICEs whether or not the manufacturer offers ZEVs in the market segment the dealer specializes. For example, one dealer may focus on selling school buses which are already being electrified today while another may focus on specialized municipal equipment. In contrast to these manufacturer ratios, the ACT regulation includes flexibility for manufacturers to strategically focus on vehicle models that are most suitable for electrification, but it does not require any specific fleets, dealers, or others to purchase these vehicles.

The purpose for these ratios varies depends based on the manufacturer. Some are using these ratios in order to meet their percentage sales requirement under the ACT regulation and as a result are requiring a ratio of roughly 1 ZEV to 10 to 15 ICE vehicles, which essentially pushes the ACT regulation's requirement onto the dealership or fleet. In other cases, manufacturers are requiring ZEV sales in order to generate NOx credits as they did not plan to have an HD Omnibus-compliant engine and are instead setting ratios of 1 ZEV to 1 to 3 ICE vehicles in order to achieve compliance. These policies do not appear to be

---

[2] California Air Resources Board, Advanced Clean Trucks Credit Summary Through the 2023 Model Year, 2024 (web link: *https://ww2.arb.ca.gov/resources/fact-sheets/ACT-Credits-Summary%202023*, last accessed September 2024).

causing acute product shortages today but will have an increasing impact in 2025 MY and beyond as more manufacturers implement ZEV ratios across their product portfolio.

Further, it appears that there is a discrepancy between what manufacturers are communicating as the main cause of the current product shortages to CARB staff versus to the dealers and fleets. Dealers and fleets conveyed that they recently heard from sales representatives from a number of manufacturers that the product shortage issues are primarily driven by the ACT regulation while referring to these ZEV ratios while other representatives from the same manufacturers have been specifically communicating to CARB staff that this is not the case for the 2024 MY. Staff believes that attributing the driving factor to the ACT regulation could be a sales strategy to continue ramping up ZEV sales and towards building a credit bank for the ACT requirements in the 2025 and 2026 MYs despite the current surplus of ACT credits. Nevertheless, the inconsistencies in communication have lead dealers and fleets to believe that the ACT regulation's requirements are leading to the product shortages in the medium- and heavy-duty space which, upon discussions with all affected parties, is not backed by the data available.

In summary, the manufacturers are well-situated to comply with the ACT regulation's requirements for the 2024 MY and there are more than enough available ACT credits that manufacturers could purchase, if necessary, to sell dealers what is needed. In anticipation of requirements in the upcoming MYs, some manufacturers are requiring dealers to sell ZEVs in order to receive combustion vehicles which affects the current acquisition issue to a small degree, but this is also a strategy that aligns with the ACT regulation’s requirements. Lastly, while OEMs are largely informing dealers and fleets that the ACT regulation is placing limits on the number of ICE vehicles which can be delivered, they have alternatively confirmed with CARB staff that this is not the case for the 2024 MY, which is consistent with the current ACT credit surplus. This apparent contradiction appears to be the result of manufacturers needing to ensure their sales representatives and customers are continuing to make progress on increasing ZEV uptake to meet their upcoming ACT requirements in future years even if their current requirement for 2024 MY has been met.

What is the impact of the Heavy-Duty Engine and Vehicle Omnibus regulation?

Heavy-duty engine manufacturers are currently offering a mix of Omnibus-compliant and legacy engines for sale in California. CARB staff anticipates that the engine manufacturers would continue the same sales strategy for 2024-2026 MY period while they gradually phase-out their legacy engine sales due to Omnibus legacy engine sales caps. Several manufacturers have recently announced the introduction of new Omnibus-compliant

engines. These include new HD engines by Volvo[3], Paccar[4] and Cummins[5] which can be used in class 8 vocational and tractor vehicles. CARB staff believes that manufacturers will continue to introduce additional Omnibus-compliant engines for various truck configurations in 2025 and 2026 MYs, thereby helping alleviate future product availability issues.

Based on conversations with the stakeholders, CARB staff believes that product availability issues in 2024 may be caused by limited supply of MHD engines made by a specific engine manufacturer, which is the dominant manufacturer in the MHD sector. The shortage concerns have been voiced primarily by the tow truck and municipal vehicle industries.

CARB staff has also discovered that while some engine manufacturers have limited their MHD legacy engine sales because of the legacy engine sales caps, there are at least two other engine manufacturers who have surplus legacy engines and have the capacity to sell additional MHD engines in California dealerships. At this stage, it is unclear if upfitters and secondary manufacturers have fully explored whether they can quickly switch to other engine platforms to produce tow trucks and municipal vehicles.

As indicated above, the 2023 HD Omnibus amendments were specifically designed last year to address product availability issues for the 2024-2026 MY period. It should also be emphasized that the CTP agreement explicitly specifies the legacy engine sales caps for various HD engine service classes for the 2024-2026 MY period. These sales caps were developed in a collaborative fashion between CARB and the CTP signatories. At the time, OEMs informed CARB that, to the best of their knowledge, the legacy engine sales caps would alleviate product availability issues for MHD engines.

Based on the information collected by CARB staff, the following factors appear to be contributing to the current product availability issues:

- The sales projections used by some OEMs at the time of CTP signing were inaccurate, underestimating the number of compliant engines they would sell. This has led to significantly fewer legacy engines being available.
- Several California-based companies have historically procured vehicles from out-of-state dealerships. Given the new California emissions requirements under the HD Omnibus regulation, out-of-state dealers have very limited or no allocations of

---

[3] Volvo Trucks, Volvo Trucks North America Announces Availability of CARB 2024 Omnibus Compliant Heavy-Duty Engine, 2024 (web link: *https://www.volvotrucks.us/news-and-stories/press-releases/2024/july/volvo-trucks-north-america-announces-availability-of-carb-2024-omnibus-compliant-heavy-duty-engine/* , last accessed September 2024)

[4] PACCAR, CARB MX 13, 2024 (web link: *https://paccarpowertrain.com/products/carb-mx-13/*, last accessed September 2024)

[5] Cummins, X15 N (2024), 2024 (web link: *https://www.cummins.com/engines/x15n-2024*, last accessed September 2024)

HD Omnibus-compliant engines. These California-based companies are now reaching out to California dealerships for Omnibus-compliant engines. However, California dealers may be prioritizing their existing and well-established customers and are only providing a limited number of engines to their new customers. Dealers ultimately determine how to distribute their allocation, which further affects the ability for some fleets to obtain HD engines

- Product offering by OEMs are based on internal business decisions. Given the legacy engine sales caps, companies have focused production efforts on platforms with the highest profit margins while eliminating low-margin products. It should be noted that even if additional MHD engines become available, they may or may not end up being used for tow truck or municipal applications

Given that CARB is a signatory to the CTP agreement, there is no mechanism for CARB to unilaterally change the legacy engine sales caps without breaching the partnership agreement. A collaborative solution between CARB and the CTP signatories would be needed to address any adjustments to legacy engine sales caps.

What is the impact of the Advanced Clean Fleets regulation?

At the May hearing, several representatives of tow truck fleets expressed concerns over the current infeasibility in acquiring and deploying ZEVs pursuant to the ACF regulation in their respective industry due to high costs and operational restrictions. However, the ACF regulation does not require tow trucks to be purchased as ZEVs until 2027 in addition to providing numerous safeguards if a ZEV is not available or does not meet a fleet's needs.

Larger tow truck fleets may be affected by the ACF regulation if they have either $50 million or more in gross annual revenue, or that own, operate, or direct the operation of a total of 50 or more vehicles. Based on conversations with industry, only a handful of tow truck fleets are large enough to meet these thresholds, so the remainder of these smaller tow truck fleets are exempt from the ACF regulation. Under this regulation, larger fleets following the ZEV Milestones pathway have no requirement to purchase ZE tow trucks until 2027. This puts work trucks, including tow trucks, on a later schedule; however, some advanced ZEV purchases in this category would be appropriate as fleets progress towards the 2027 requirement. The ACF regulation also offers several exemptions and flexibilities to assist in the challenges that come with ZEV acquisition, including cases in which available ZEVs do not meet a fleet's daily operational needs, and delays in infrastructure construction.

In summary, only a portion of tow truck fleets are affected by the ACF regulation, and the requirements on these vehicles acknowledge and reflect the challenges that could be applicable with electrifying tow trucks. In light of these facts, staff determined the ACF regulation is not having an impact on the availability of tow trucks currently.

What other factors are impacting the California market?

With the upcoming implementation of U.S. Environmental Protection Agency's HD emissions standards in the 2027 MY, almost all existing HD engine families will be phased out within the next two years at the national level. Given that California is ahead of the nation in terms of HD emissions requirements, we are seeing this phase-out happen sooner in California than elsewhere. Customers will eventually have to reevaluate their options for HD engines and choose new replacement products.

Other factors contributing to the overall product shortage situation, per the OEMs, include a nationwide downturn in the market, supply chain issues carrying over from previous years not caused by CARB regulations that are limiting the OEMs' ability to produce trucks, and manufacturers not being sufficiently prepared to comply with the HD Omnibus regulation. Additionally, some vehicle upfitters producing specialty vehicles, including tow trucks, have reached maximum production capacity thresholds nationwide and cannot increase production levels, which affects the manufacturers' ability to accept new orders. Finally, with the introduction of the federal Clean Trucks Plan,[6] the phase-out of all legacy engine productions will be implemented nationwide within the next two MYs. These additional factors have significant cumulative impacts on the current unavailability issues, and all vary by manufacturer.

Truck Price Comparison between California and Europe

At the May Board hearing, questions were raised regarding the growing differences between ZET pricing in the U.S. and in Europe as well as the reasons for it. To better understand the situation, Clean Truck and Bus Voucher Incentive Project (HVIP) staff undertook a preliminary assessment of pricing levels for a key category: ZE Class 8 tractors in the U.S./California and for the equivalent models (Class 5 Long Haul (LH)) in Europe.

Broadly, the same manufacturers operate in both the U.S. and Europe under a variety of brands:

- Daimler Truck is the parent company of Mercedes-Benz Trucks in Europe and Freightliner among other brands in the U.S.
- Traton is the parent company of MAN and Scania trucks in Europe and Navistar in the U.S.
- PACCAR is the parent company of DAF in Europe and Peterbilt and Kenworth in the U.S.
- Volvo Trucks operates in both Europe and the U.S., and owns Mack Trucks in the U.S.

---

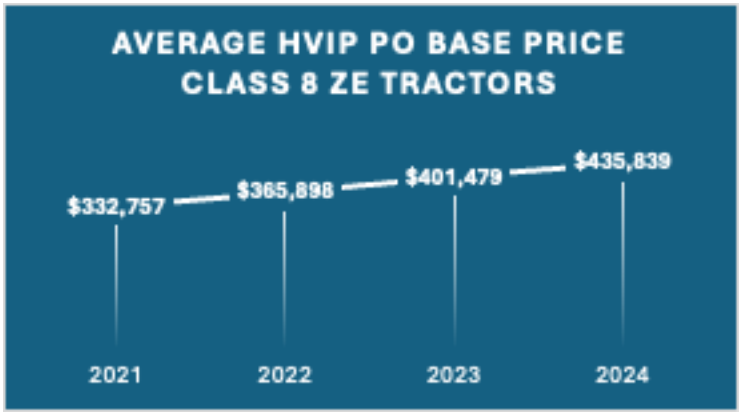
[6] U.S. EPA, Clean Trucks Plan, 2022 (web link: *https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-and-related-materials-control-air-pollution*, last accessed September 2024)

Pricing data in California have been pulled directly from purchase orders submitted as part of the HVIP voucher request process. Pricing in Europe has come from industry sources in the European Union (EU) and was compared for the period from 2021-22 against pricing seen in 2024.

Europe Zero-Emission Trucks have Lower Whole Vehicle Prices Compared to Equivalent California Zero-Emission Trucks

The preliminary findings from this research are revealing and are summarized as follows:

- The average California ZE Class 8 tractor in 2024 was priced at $435,839.
- The average European ZE tractor of similar capability to California. tractors (Class 5 LH in Europe) in 2024 were priced at $347,001.
- U.S. ZE tractors averaged $88,828 more to purchase than in Europe.



Europe Zero-Emission Trucks Have Lower Zero-Emission Powertrain Incremental Pricing Than in United States/California

There are differences between European and American tractor designs. To separate any price offset of the base tractor (known as a "glider") price from the powertrain (including batteries) price, HVIP examined the incremental pricing: the difference between the base diesel price in each region and the ZET price. While the equivalent trucks have detailed base tractor differences, the powertrains for ZETs are essentially the same in both regions and allow a direct "apples-to-apples" comparison. The findings were stark, as follows:

The incremental ZE powertrain price for California Class 8 ZETs in 2024 averages $279,937.

The incremental ZE powertrain price for European Class 5 LH ZETs averages $228,153.

EU incremental ZE powertrain price averages $51,784 lower than equivalent California incremental price even when accounting for lower base truck pricing in the EU. (European diesel trucks costing less than U.S. diesel trucks).

European Zero-Emission Truck Pricing is Going Down; U.S. Zero-Emission Truck Pricing is Going Up

- California zero-emission trucks (ZET) have increased in price by an average of $86,512 since 2021-22.
- European ZETs have decreased in price by an average of $12,641 in that same period.

There appear to be no clear reasons for this disparity between regions. Total ZET sales volumes are comparable between each region. Some European industry observers have noted that as battery prices are edging lower, generally vehicle makers in Europe have increased capability (increased battery size, range) while holding prices steady or lower. This is not the observed trend in California. There also appears to be some OEM price competition in Europe in advance of the Vehicle Energy Consumption Calculation Tool CO_2 model reporting deadline in 2025.

Next Steps

Staff intends to return to the Board at the upcoming October hearing to present their findings in addition to providing a final recommendation on the proposed amendments to the Advanced Clean Truck (ACT) regulation. While the proposed amendments are relatively minor and predominantly apply to compliance in the upcoming years, the changes are expected to provide manufacturers with more flexibility in complying with the ACT regulation as the market adjusts and potentially mitigate pressure on truck purchasers in future years, as explicitly expressed by many of the manufacturers.

The adoption of the ACT and Heavy-Duty Engine and Vehicle regulations are two of the largest actions taken by the Board in the pursuit of reducing criteria pollutant and greenhouse gas emissions in California and are critical in achieving the State's air quality and climate change goals. Subsequently, these regulations are significantly changing the current dynamics of the truck market in California and increasing the penetration of the first wave of ZE HD technology is expected to be difficult. However, measures have been taken through the Heavy-Duty Engine and Vehicle amendments, the proposed amendments to the ACT regulation, and other future actions to remedy unanticipated challenges that come with the changing market.

EXHIBIT “F”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

GIBSON, DUNN & CRUTCHER LLP
BENJAMIN WAGNER, State Bar No. 163581
310 University Avenue
Palo Alto, CA 94301-1744
Telephone: 650.849.5395
Facsimile: 640.849.5095
BWagner@gibsondunn.com

RACHEL S. BRASS, State Bar No. 219301
One Embarcadero Center, Suite 2600
San Francisco, CA 94111-3715
Telephone: 415.393.8293
Facsimile: 415.393.8306
RBrass@gibsondunn.com

STACIE B. FLETCHER *(pro hac vice* forthcoming)
MIGUEL A. ESTRADA (*pro hac vice* forthcoming)
VERONICA J.T. GOODSON, State Bar No. 314367
1700 M Street N.W.
Washington, D.C. 20036-4504
Telephone: 202.955.8500
Facsimile: 202.467.0539
SFletcher@gibsondunn.com
MEstrada@gibsondunn.com
VGoodson@gibsondunn.com

Attorneys for Plaintiff Daimler Truck North America LLC
(additional counsel on signature pages)

IN THE UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF CALIFORNIA

DAIMLER TRUCK NORTH AMERICA LLC, INTERNATIONAL MOTORS, LLC, PACCAR INC, and VOLVO GROUP NORTH AMERICA LLC,

Plaintiffs,

v.

CALIFORNIA AIR RESOURCES BOARD; STEVEN S. CLIFF, in his official capacity as the Executive Officer of the California Air Resources Board; and GAVIN NEWSOM, in his official capacity as the Governor of California,

Defendants.

Civil Action No.

COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

NATURE OF THE ACTION

1. This case arises from the State of California's violation of a prohibition in the Clean Air Act that expressly bars any State from adopting or attempting to enforce any standards relating to the control of emissions from new heavy-duty vehicles and engines without a waiver of federal preemption. In June, pursuant to the Congressional Review Act, the federal government statutorily preempted California's emissions standards governing heavy-duty vehicles and engines. Notwithstanding that new legislation, California continues to demand compliance with its heavy-duty emissions standards, and it has threatened Original Equipment Manufacturers ("OEMs") that design, develop, manufacture and sell heavy-duty vehicles and engines—four of whom are Plaintiffs here—with civil sanctions and unfavorable regulatory treatment if the OEMs refuse to comply with the State's unlawful standards, while also taking measures to insulate itself from lawful challenges to those standards. The federal government has responded in turn through the U.S. Department of Justice, which issued Cease & Desist letters to Plaintiff OEMs stating that California's enforcement of its standards is contrary to federal law, and directing Plaintiff OEMs to immediately cease and desist compliance with California's preempted and unlawful mandates. Plaintiffs are caught in the crossfire: California demands that OEMs follow preempted laws; the United States maintains such laws are illegal and orders OEMs to disregard them. This situation is not tenable. Accordingly, Plaintiff OEMs file this lawsuit to clarify their legal obligations under federal and state law and to enjoin California from enforcing standards preempted by federal law.

2. Recognizing the harms that would result from a patchwork of environmental regulations, Congress in 1970 enacted Title II of the Clean Air Act, which authorizes the Environmental Protection Agency ("EPA") to establish a comprehensive program for regulating emissions from new motor vehicles. 42 U.S.C. § 7522(a)(1). To that end, the Clean Air Act explicitly preempts state laws that regulate motor vehicle emissions with one exception—EPA may waive the application of federal preemption for California emissions standards under certain defined circumstances. 42 U.S.C. § 7543. Once EPA has issued a waiver, other states are permitted to opt-in to California's standards under section 177 of the Clean Air Act. 42 U.S.C. § 7507.

3. As a result, there have historically been two distinct sets of emissions standards applicable to vehicle manufacturers, including manufacturers of heavy-duty vehicles and engines: (1) standards promulgated by the California Air Resources Board ("CARB"), and then approved by EPA, that apply in California and any other state that has adopted California's standards; and (2) standards promulgated by EPA.

4. From 2021 to 2023, CARB promulgated a series of emissions standards significantly more stringent than their federal counterparts on heavy-duty trucks, including those manufactured by Plaintiff OEMs, and sought preemption waivers from the Biden Administration EPA.[1] As part of its program, CARB requires that sellers of heavy-duty trucks in California certify that their vehicles comply with CARB standards.

5. The inconsistent regulatory requirements resulting from those standards created an unstable and untenable landscape for manufacturers of heavy-duty trucks and engines, including Plaintiff OEMs and their customers. Among other things, the misaligned federal and California emissions standards provided Plaintiff OEMs with barely two years of lead time to comply with California's aggressive emissions standards, a woefully inadequate compliance window given that the Clean Air Act itself mandates a minimum of *four* years of lead time for any new pollutant standards for heavy-duty vehicles. 42 U.S.C. § 7521(a)(3)(C). California's most recent tailpipe emissions rules for trucks also did not align with corresponding federal standards, creating significant development and technical feasibility issues for industry. *See* Complaint, *Engine Mfrs. Ass'n v. Cal. Air Res. Bd.*, No. 2:22-cv-03663-JFW-PVC (C.D. Cal. May 27, 2022).

6. To address these concerns, heavy-duty truck and engine manufacturers and their trade

[1] California regulations for emissions from new motor vehicles and engines are divided into categories based on vehicle weight, with the largest vehicles and engines categorized as "heavy-duty," moderately sized vehicles often used in commercial applications falling into the "medium-duty" category, and most cars and pickup trucks referred to as "light-duty." *See, e.g.*, Cal. Code Regs. tit. 13, §§ 1900 (b)(5), (b)(6). Federal law also categorizes certain types of vehicles as "heavy duty" vehicles or engines. *See, e.g.,* 42 U.S.C. § 7521(a)(3)(B) (directing EPA to set emissions standards applicable to "heavy-duty vehicles or engines"). This complaint refers to "heavy-duty trucks" or "heavy-duty vehicles" as shorthand for the vehicles and engines, including medium-duty vehicles and engines, covered by the California regulations described herein and which are manufactured by the plaintiffs.

association petitioned CARB for relief from these infeasible regulatory requirements. The result, in July 2023, was the "Clean Truck Partnership," in which CARB outlined a plan to undertake regulatory changes sought by industry—specifically, that CARB would harmonize federal and California tailpipe emissions standards with agreed-upon regulatory amendments and provide sufficient lead time for future regulations. As conditions for this relief, CARB extracted new concessions from the manufacturers, including that the manufacturers would comply with CARB's emissions standards "irrespective of the outcome of any *litigation* challenging" them or CARB's authority to implement those standards. *See* Clean Truck Partnership ("CTP"), Ex. A, ¶ 2 & App'x B (emphasis added).

7. Under the Biden Administration, EPA had issued preemption waivers relating to CARB's emissions standards governing certifications of heavy-duty trucks. But earlier this year, Congress acted through a bicameral legislative process under the Congressional Review Act to pass joint resolutions disapproving the EPA's earlier preemption waivers for California. On June 12, 2025, the President signed those Congressional resolutions, creating new federal laws that expressly preempt California's heavy-duty vehicle emissions standards under the Clean Air Act. As a result, California (and other states) are prohibited by federal law from adopting and attempting to enforce emissions-related standards. EPA's emissions standards now apply exclusively on a nationwide basis, including in California. And DOJ has issued a letter to Plaintiff OEMs stating that "Federal law thus prohibits CARB from adopting or attempting to enforce those regulations" governing heavy-duty trucks, and ordering Plaintiff OEMs to cease compliance with the preempted rules. *See, e.g.*, Ex. B (U.S. Dep't of Just., Env't & Nat. Res. Div., Cease & Desist Letter (Aug. 7, 2025) [hereinafter Aug. 7, 2025, DOJ Letter]), at 1. EPA's emissions standards now apply exclusively on a nationwide basis, including in California.

8. California nevertheless sued the United States in the U.S. District Court for the Northern District of California, alleging that the Congressional resolutions disapproving California's preemption waivers are unlawful and unconstitutional. *California v. EPA*, No. 3:25-cv-04966-HSG (N.D. Cal. filed June 12, 2025). California has not moved for preliminary relief. As of the filing of this Complaint, the United States has not made any responsive filing. That case is ongoing and will continue without

a resolution for months or longer.

9. At the same time, notwithstanding the Congressional Review Act legislation, California has asserted that heavy-duty vehicle and engine manufacturers must continue to follow California's preempted standards to lawfully sell vehicles in the State—including by pointing to the Clean Truck Partnership as a source of its continuing authority. California has taken additional affirmative steps to enforce its preempted and unlawful standards:

a. First, California seeks to use the Clean Truck Partnership, which was intended to harmonize compliance with state and federal law, to compel an entire industry to follow California emissions standards that are now in conflict with federal law, and which have been expressly preempted by federal law. *See* Ex. B (Aug. 7, 2025, DOJ Letter) at 1-2. In effect, California is seeking to enforce the Clean Truck Partnership as an industry-wide mandate to follow regulations abrogated by federal legislation and prohibited by federal law. This approach disregards the Clean Air Act's preemption clause, which prohibits not just the adoption by any State of emissions standards reserved to the federal government, but any State's "*attempt* to enforce" preempted standards. 42 U.S.C. § 7543(a) (emphasis added). California also disregards the plain language of the Clean Truck Partnership, which states that manufacturers are obligated to follow CARB's emissions regulations "regardless of the outcome of any litigation challenging … those regulations, or CARB's overall authority to implement those regulations," not federal legislative action taken to invalidate them. Ex. A (CTP), ¶ 2 & App'x B. In sum, notwithstanding Congress' removal of California's authority to regulate heavy-duty trucks and engines, CARB is attempting to use the Clean Truck Partnership—which was intended to achieve alignment with federal standards—to compel compliance with misaligned and now-preempted state emission standards. That attempt is both inconsistent with the Clean Truck Partnership and violative of federal law. CARB cannot attempt to enforce through a misapplied Clean Truck Partnership what federal law prohibits it from doing as a regulator, nor can California contract around the

Supremacy Clause.

b. Second, on May 23, 2025, CARB issued an industry directive (in the form of a Manufacturers Advisory Correspondence or "MAC") stating that manufacturers must continue to follow CARB's preempted standards, including the certification requirement, to ensure "lawful" sales of vehicles and engines in California. Manufacturers Advisory Correspondence ECCD-2025-3, CARB (May 23, 2025) [hereinafter May 23, 2025 MAC].

c. Third, on June 13, 2025, California Governor Gavin Newsom issued Executive Order N-27-25 directing CARB to continue implementing the Clean Truck Partnership and threatening unfavorable regulatory treatment, as well as exclusion from government purchase and incentive programs, for vehicle and engine manufacturers who dispute the validity of the Clean Truck Partnership or do not comply with the preempted standards.

10. California also has continued to make public statements reinforcing its position that industry is obligated to disregard what CARB considers "unconstitutional and illegal resolutions purporting to overturn three of U.S. EPA's decisions to grant California waivers" regarding its emissions standards. Thus, in a July 24, 2025 press release CARB again reinforced its view that compliance with the Clean Truck Partnership was still necessary to enable "lawful vehicle sales in California." *See* Press Release, CARB, CARB approves amendments to clean truck standards to provide flexibility while maintaining emissions benefits (July 24, 2025), https://perma.cc/8D4R-A26K.

11. Meanwhile, in response to CARB's actions, the federal government has reiterated that CARB's vehicle emissions standards are preempted and California is now prohibited from attempting to enforce the state emissions standards at issue. On August 7, 2025, the U.S. Department of Justice sent a letter to Plaintiff OEMs reinforcing that the disapproval of California's waivers by the federal legislative action has rendered California's standards preempted, and further explaining that the Clean Truck Partnership itself is preempted under federal law as "the regulatory mechanism by which CARB attempts to enforce preempted California emissions standards." *See, e.g.*, Ex. B (Aug. 7, 2025 DOJ

Letter), at 2.

12. The OEMs are in an impossible position. On the one hand, California insists that Plaintiff OEMs must follow CARB's standards, including CARB's truck and engine certification requirements, or be excluded from the California market, subjected to significant civil penalties, shut out of special considerations and flexibilities in future regulatory considerations, and excluded from state purchasing and incentive programs. On the other hand, the United States Department of Justice has issued cease-and-desist letters to Plaintiff OEMs stating that those same standards are invalid and unlawful, such that only the EPA regulations apply, and that the cornerstone of CARB's new enforcement efforts, the Clean Truck Partnership, is itself preempted by federal law. As a result, the OEMs are subject to two sovereigns whose regulatory requirements are irreconcilable and who are openly hostile to one another. Each wields a hammer to enforce its will on industry, leaving OEMs—who simply seek to sell heavy-duty trucks in compliance with the law—unable to plan with the necessary certainty and clarity where their products need to be certified for sale and by which regulatory authority.

13. Plaintiff OEMs have been irreparably harmed by this uncertainty. To adequately plan product production and allocation, OEMs must know which vehicles they are authorized to sell, and *where*, well in advance of the start of a model year on January 1. Applying for and receiving CARB certifications takes months—by CARB's own account, the process takes at *least* sixty days but there is no deadline by which CARB must complete its certification process.[2] OEMs must also incur significant costs and expend significant resources to engage in the certification process. To allow sufficient time for planning and running its business, Plaintiff OEMs need to know within a matter of weeks whether they must obtain a model year 2026 certification from CARB in order to lawfully sell their products in California and other opt-in states, which together represent approximately 25% of the national market for new vehicle registrations for heavy-duty vehicles.[3] Citing the Clean Truck Partnership, California contends that OEMs must obtain this certification to have lawful vehicle sales in California. The federal government contends that the regulatory bases for such a California certification

[2] CARB, On-Road Heavy-Duty and Off-Road Compression Ignition Certification Programs: Certification Steps Overview, https://perma.cc/UUT3-HWG5.

[3] CARB, States That Have Adopted California's Vehicle Regulations, https://perma.cc/PA6F-UCF4.

are fully preempted by federal law and invalid.

14. Prior to filing this lawsuit, Plaintiff OEMs and their trade association sought clarification from CARB regarding OEMs' legal obligations under the Clean Truck Partnership and CARB's underlying emissions standards, noting that the Clean Truck Partnership's requirements were invalid for several reasons, including that they were preempted under the Clean Air Act. To date, CARB has declined to address the concerns raised by regulated parties, despite requests by the Plaintiff OEMs and their trade association, and instead issued the May 23, 2025 MAC and Executive Order N-27-25 without any dialogue with industry.

15. Furthermore, Plaintiff OEMs have a constitutional right to challenge unlawful standards and petition both the judiciary and the political branches for redress. But California has attempted to unconstitutionally constrain those rights in its efforts to insulate itself from lawful challenges to its actions. In that regard, the Clean Truck Partnership prohibits Plaintiff OEMs—as well as other manufacturer signatories—from challenging CARB's standards or from filing amicus briefs in support of such challenges, and California officials have stated that OEMs that do so will face repercussions. Plaintiff OEMs thus have been irreparably harmed as California officials infringe their constitutional free speech rights.

16. Plaintiff OEMs bring this civil action for declaratory and injunctive relief with the goal of clarifying and establishing the regulatory obligations that they must follow to lawfully offer products for sale in California and the various opt-in states, and to prevent California officials from violating their constitutional rights. An expeditious decision is essential for the OEMs.

JURISDICTION AND VENUE

17. This is an action for declaratory and injunctive relief brought under the Supremacy Clause of the United States Constitution (including in reliance on this Court's equitable powers under *Ex parte Young*, 209 U.S. 123 (1908)), and under 42 U.S.C. § 1983. Defendants California Air Resources Board and Steven S. Cliff, in his official capacity as the Executive Officer of the California Air Resources Board (collectively, "CARB"), are charged with implementing and enforcing the standards

and regulations at issue. Defendant Gavin Newsom, in his official capacity as the Governor of California, is charged with enforcing state law and has directed CARB to take actions related to enforcement of the state standards and regulations discussed herein. This Court has jurisdiction to grant the relief sought in this action under 28 U.S.C. §§ 1331, 1343(a)(3), 1367, 2201, and 2202.

18. Pursuant to this Court's supplemental jurisdiction under 28 U.S.C. § 1367, this action further seeks a declaration that CARB's recent actions to force OEMs into complying with its preempted standards and regulations and to restrict the speech of Plaintiff OEMs and other companies impacted by its actions violate the California Constitution and constitute underground regulations in violation of the California Administrative Procedure Act, Cal. Gov. Code §§ 11340–11361; *see* Cal. Civ. Code § 52.1 ("[a]ny individual whose exercise or enjoyment of rights secured by the Constitution or laws of the United States, or of rights secured by the Constitution or laws of [California]" may sue the persons who violated their rights for declaratory, injunctive, and monetary relief).

19. Venue is proper in this District under 28 U.S.C. § 1391(b) because all Defendants maintain an office and conduct their official duties within this judicial district, and/or a substantial part of the events or omissions giving rise to this action occurred within this judicial district.

THE PARTIES

20. Plaintiff Daimler Truck North America LLC is a limited liability corporation organized under the laws of the State of Delaware with its principal place of business in the State of Oregon.

21. Plaintiff International Motors, LLC is a limited liability corporation organized under the laws of the State of Delaware with its principal place of business in the State of Illinois.

22. Plaintiff PACCAR Inc. is a corporation organized under the laws of the State of Delaware with its principal place of business in the State of Washington.

23. Plaintiff Volvo Group North America LLC is a limited liability corporation organized under the laws of the State of Delaware with its principal place of business in the State of North Carolina.

24. Each Plaintiff OEM designs, develops, manufactures, and sells heavy-duty trucks.

Plaintiff OEMs each offer heavy-duty trucks in California and in all states that have opted into California's rules under 42 U.S.C. § 7507. These vehicles commonly sell for well over $100,000 when sold at retail in California, and many thousands of Plaintiff OEMs' heavy-duty trucks are sold in California and other opt-in states each year.

25. Under CARB's regulations, all Plaintiff OEMs are subject to CARB's enforcement of emissions standards for new motor vehicles and new motor vehicle engines. In addition, as a regulator, CARB asserts that Plaintiff OEMs (and other manufacturer signatories) are also contractually bound to comply with the now-preempted state law emissions standards pursuant to the Clean Truck Partnership. This use of the Clean Truck Partnership, a regulatory partnership originally designed to harmonize federal and state law, is an impermissible attempt to enforce preempted standards under the Clean Air Act. As a result of CARB's attempts to enforce these unlawful state standards, Plaintiff OEMs currently suffer and will continue to suffer concrete and particularized injuries, which can be redressed only by this Court's order adjudicating Plaintiff OEMs' obligations under federal and California law. Plaintiff OEMs' injuries are fairly traceable to CARB's conduct and would be redressed by a favorable decision.

26. Defendant California Air Resources Board is a branch of the California Environmental Protection Agency, which is an agency of the State of California. The California Health and Safety Code authorizes CARB to promulgate and enforce regulations to control emissions from new motor vehicles and engines. CARB is headquartered in Sacramento, in the State and Eastern District of California, and held meetings in Sacramento, California regarding Advanced Clean Trucks, Omnibus Low NOx, Advanced Clean Cars II, and upon information and belief, performed official duties related to other regulatory actions discussed herein in Sacramento, California.

27. Defendant Steven Cliff is the Executive Officer of the California Air Resources Board. The Executive Officer of CARB is authorized to implement and enforce motor vehicle emission standards in the State of California. This suit is brought against the Executive Officer in his official capacity. The Executive Officer maintains an office in Sacramento, in the State and Eastern District of California, and he performs his official duties in Sacramento, California.

28. Defendant Gavin Newsom is the Governor of the State of California. In addition to directing CARB to enforce the rules at issue here, Governor Newsom has threatened through Executive Order detrimental regulatory treatment and exclusion from government purchase and incentive programs for vehicle and engine manufacturers that do not follow the Clean Truck Partnership or do not certify their products in compliance with preempted CARB standards. This suit is brought against the Governor in his official capacity. The Governor maintains an office in Sacramento, in the State and Eastern District of California, and performs his official duties in Sacramento, California.

FACTUAL AND LEGAL BACKGROUND

I. The Clean Air Act and California Regulation of Heavy-Duty Vehicle Emissions

29. Under Section 202(a) of the Clean Air Act, the EPA Administrator "shall by regulation prescribe … standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1).

30. In enacting the Clean Air Act, Congress sought to construct a nationwide regulatory regime focused on limiting emissions of certain pollutants by new motor vehicles. 42 U.S.C. § 7521. Congress entrusted this endeavor to EPA and expressly preempted State enforcement of emissions standards or the imposition of State certification requirements. *See* 42 U.S.C. § 7543(a). Section 209(a) demonstrates Congress's clear intent to preempt States from adopting or enforcing standards relating to the control of emissions from new motor vehicle engines. *Id.*

31. Specifically, Section 209(a) expressly and unequivocally states that "[n]o State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part." *Id*. In addition, Section 209(a) prohibits states from requiring "certification, inspection, or any other approval relating to the control of emissions … as a condition precedent" to initial sale or registration of a new vehicle

or engine. *Id*.

32. Aware of the unique air pollution concerns California faces, however, Congress also included Section 209(b), which allows EPA to grant a waiver of preemption so California can craft its own regulations under EPA's guidance. 42 U.S.C. § 7543(b). Section 209(b) of the Clean Air Act gives EPA the authority to issue a "waiver" to California to adopt and enforce its own vehicle emissions standards that are "at least as protective of public health and welfare as applicable Federal standards," if certain statutory criteria are met. 42 U.S.C. § 7543(b). Section 177 of the Clean Air Act allows other states to adopt California's standards in lieu of the federal standards—in other words, to opt-in to the California program in an identical manner. 42 U.S.C. § 7507. Absent an EPA-approved waiver, the adoption or enforcement of any state law regulating mobile source emissions is expressly preempted under federal law. 42 U.S.C. § 7543(a).

33. A preemption waiver granted by EPA under Section 209(b) also allows California to impose a requirement for "certification … or any other approval relating to the control of emissions … as a condition precedent to sale"—a practice otherwise forbidden by the second clause of Section 209(a). 42 U.S.C. § 7543(a). EPA implemented this statutory prohibition by allowing CARB to mandate conditions precedent where the state has received a preemption waiver for the emission standards applicable to a particular class of vehicles (as opposed to requiring CARB to seek separate preemption waivers for conditions precedent). Final Agency Action Regarding the Motor Vehicle Provisions of the Clean Air Act, Item 6 (Conditions Precedent to the Sale, Titling, or Registration of New Motor Vehicles in California), 50 Fed. Reg. 35,122, 35,123 (Aug. 29, 1985); *see also* California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption; Notice of Determination, 55 Fed. Reg. 28,825 (July 13, 1990) (explaining that prior EPA preemption waivers for specific "classes of vehicles and engines, based on California's standards and/or accompanying enforcement procedures, removes the prohibitions of section 209(a) regarding … conditions precedent for those classes"). Under the California Health and Safety Code, these conditions precedent include a requirement that new vehicles and engines receive approval from CARB before they are sold in the state, known as certification. Cal. Health & Safety Code, §§ 43151 & 43512; *see also* § 1036.801 "Certification," California

Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles (Sept. 9, 2021) ("September 2021 CARB Heavy-Duty Test Procedures") (providing definition of "Certification" for purposes of CARB regulatory program), *incorporated by reference into* Cal. Code Regs. tit. 13, § 1956.8(b). When successful, certification culminates in an order from CARB approving a particular vehicle or engine for sale in California during that model year. *See* § 1036.801 "Certificate of Conformity," September 2021 CARB Heavy-Duty Test Procedures (defining the certification document issued by CARB). Opt-in states may also require that manufacturers receive California certification before offering vehicles or engines in their states. *See, e.g.*, 310 Mass. Code Regs. 7.40 ("No person or other entity, including manufacturers, shall … deliver for sale … a new vehicle … in or into Massachusetts unless the vehicle has received a California ARB Executive Order for all applicable requirements of Titles 13 and 17 [California Code of Regulations] …."). Selling vehicles in California without a CARB certification is a serious offense that subjects the seller to substantial civil penalties. *See* Cal. Health & Safety Code § 43154(a)(1).

34. Despite not having waivers to adopt regulations as required by Section 209(a), relying on *the potential* to obtain preemption waivers from EPA, between 2021 and 2023, CARB adopted a series of standards applicable to the vehicles and engines manufactured by Plaintiff OEMs—including larger trucks, such as tractor-trailers, categorized as "heavy-duty" under the regulations, and more moderately sized, generally commercial vehicles categorized as "medium-duty." But now, all of CARB's standards applicable to trucks and engines are preempted by federal law, either because the specific regulatory program was explicitly preempted due to Congressional action or because CARB acted without a waiver, and in fact, never received a waiver for the program at all.

35. *First*, as explained further below, the President has signed joint resolutions of Congress that expressly preempted the following standards under the Clean Air Act:

a. The **Advanced Clean Trucks Regulation** requires manufacturers to sell increasing percentages of zero-emissions vehicles year-over-year, or to buy credits from other entities that exceeded their own percentage obligations. *See* Cal. Code Regs. tit. 13, §§ 1963.1, 1963.2. In April 2023, under the Biden Administration, EPA granted a

waiver request for the then-current version of CARB's Advanced Clean Trucks, along with three other regulatory programs for which CARB had requested waivers (heavy-duty emission warranty requirements, zero-emission airport shuttles, and certification of zero-emission powertrains). Notice of Decision, Advanced Clean Trucks Waiver of Preemption, 88 Fed. Reg. 20688, 20689 (Apr. 6, 2023). As discussed further below, on June 12, 2025, the President signed legislation disapproving and abrogating this waiver for the Advanced Clean Trucks and other standards. At signing, the President stated that Advanced Clean Trucks and the other standards covered by the invalidated waiver were "fully and expressly preempted by the Clean Air Act and cannot be implemented." *See* Statement by the President, The White House (June 12, 2025) ("June 12 Statement by the President"), https://perma.cc/Y4JJ-4HLS.[4]

b. The **Omnibus Low NOx Regulation** requires manufacturers to reduce heavy-duty vehicle emissions of nitrogen-oxide (NOx) and particulate matter. *See* Cal. Code Regs. tit. 13, § 1956.8. This regulatory package also included extensive changes to other CARB standards affecting heavy-duty engines and vehicles. *See* CARB, Final Regulation Order, Title 13, at 3, Docket No. EPA-HQ-OAR-2022-0332, https://www.regulations.gov/document/EPA-HQ-OAR-2022-0332-0005.[5] In January 2025, just before the inauguration of the new President, EPA granted a waiver request

[4] Despite Congress withdrawing the waiver of preemption that authorized Advanced Clean Trucks under the Clean Air Act, CARB recently approved new amendments to those standards changing the availability of credits used for compliance with EV mandates. *See* CARB, CARB approves amendments to clean truck standards to provide flexibility while maintaining emissions benefits (July 24, 2025), https://perma.cc/8D4R-A26K. CARB cannot adopt or attempt to enforce the amended version of Advanced Clean Trucks until CARB receives a waiver from EPA under Section 209 of the Clean Air Act. And because EPA cannot issue a waiver for Advanced Clean Trucks without a subsequent act of Congress, *see* 5 U.S.C. § 801(b)(2), the Advanced Clean Trucks amendments are also fully preempted under Section 209.

[5] Noting that the rulemaking amends the following sections of title 13, California Code of Regulations: 1900,1956.8, 1961.2, 1965, 1968.2, 1971.1, 1971.5, 2035, 2036, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2121, 2123, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2133, 2137, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2423, and 2485; and adopts title 13, California Code of Regulations, sections 2139.5, 2166, 2166.1, 2167, 2168, 2169, 2169.1, 2169.2, 2169.3, 2169.4, 2169.5, 2169.6, 2169.7, 2169.8, and 2170.

for CARB's Omnibus Low NOx—covering both the criteria pollutant standards and the other regulatory modifications included in the waiver submission. Notice of Decision, Omnibus Low NOx Regulation Waiver of Preemption, 90 Fed. Reg. 643 (Jan. 6, 2025). As discussed further below, on June 12, 2025, the President signed legislation disapproving and abrogating that waiver. At signing, the President stated that Omnibus Low NOx was "fully and expressly preempted by the Clean Air Act and cannot be implemented." *See* June 12 Statement by the President.

c. The **Advanced Clean Cars II Regulation** primarily applies to light-duty vehicles (*e.g.*, cars and pickup trucks) but includes modifications to several other regulatory programs that apply to heavy-duty vehicles and engines. For heavy-duty vehicles and engines, Advanced Clean Cars II modified standards for evaporative emissions, Cal. Code Regs. tit. 13, § 1976, and refueling emissions, Cal. Code Regs. tit. 13, § 1978. *See* Advanced Clean Cars II, Cal. Off. of Admin. Law Approval ("ACC II OAL Approval"), at 227-30, Docket No. EPA-HQ-OAR-2023-0292, https://www.regulations.gov/document/EPA-HQ-OAR-2023-0292-0016. The on-board diagnostics standards applicable to medium-duty vehicles were also modified in Advanced Clean Cars II. Cal. Code Regs. tit. 13, § 1968.2, ACC II OAL Approval at 284–304. EPA approved the waiver for Advanced Clean Cars II, including the changes affecting heavy-duty vehicles and engines, on January 6, 2025. Notice of Decision, Advanced Clean Cars II Waiver of Preemption, 90 Fed. Reg. 642 (Jan. 6, 2025). As discussed further below, on June 12, 2025, the President signed legislation disapproving and abrogating this waiver. In a statement at signing, the President stated that Advanced Clean Cars II was "fully and expressly preempted by cannot be implemented." *See* June 12 Statement by the President. As a result, the evaporative emissions and refueling emissions standards applicable to heavy-duty vehicles and the medium-duty on-board diagnostics standards, which were included in Advanced Clean Cars II, now lack a preemption waiver for the version of the standards currently enacted in California. These standards are thus preempted

and invalid.

36. *Second*, California has sought to implement certain standards for which it has never obtained an EPA waiver of federal preemption.

a. The **Advanced Clean Fleets Regulation** requires, among other things, that manufacturers exclusively sell zero-emission vehicles in California beginning in model year 2036. Cal. Code Regs. tit. 13, § 2016. CARB submitted a waiver request for Advanced Clean Fleets to EPA in July 2024; it then withdrew the request in January 2025. *See* Withdrawal of California's Request for a Waiver (Jan. 13, 2025), Docket No. EPA-HQ-OAR-2023-0589, https://www.regulations.gov/docket/EPA-HQ-OAR-2023-0589.[6] EPA has not granted a preemption waiver permitting CARB to implement the Advanced Clean Fleets Rule. As a result, it is preempted by the Clean Air Act.

b. The **"Phase 2" Greenhouse Gas Regulations** reduced the greenhouse gas (GHG) emissions standards for heavy-duty vehicles and partially aligned California's GHG standards for 2021 and subsequent model years with the federal Phase 2 Greenhouse Gas standards albeit with some differences. *See* CARB, Omnibus Regulation Clean Air Act Authorization Request Support Document, 37 (Jan. 31, 2022), https://perma.cc/7GSJ-QTBJ. CARB previously signaled its intent to submit a waiver request to EPA for its Phase 2 GHG emissions standards, but there is no public record that CARB has submitted such a request. *See id.* at 37 n.38 ("CARB will submit a separate waiver request for the California Phase 2 GHG Regulation"); EPA, Vehicle Emissions California Waivers and Authorizations, https://www.epa.gov/state-and-local-transportation/vehicle-emissions-california-waivers-and-authorizations. Despite

[6] More recently, CARB stated in federal court that it intends to propose repealing most of Advanced Clean Fleets to settle a pending challenge to those rules, although it has not indicated that it will repeal the model year 2036 100% zero-emission vehicle sale requirement most relevant here. Stipulation and Request to Hold Case in Abeyance Pending Outcome of Rulemaking, *Cal. Trucking Ass'n v. Cliff*, No. 2:23-cv-02333 (E.D. Cal. Apr. 25, 2025). A CARB Member explained, "without federal approval, the regulation would have been a legal zombie: dead on its feet, but still scaring the living." Dean Florez, Why California recently revised its clean air regulations for zero-emission trucks, The Sacramento Bee (May 6, 2025), https://www.sacbee.com/opinion/op-ed/article305738891.html.

the lack of preemption waiver, CARB's Phase 2 Greenhouse Gas emissions standards facially apply to manufacturers beginning in model year 2021. *See* Cal. Code Regs. tit. 17, § 95663. In one of CARB's recent directives to industry, discussed further below, CARB stated that it "will continue to accept and process certification applications … under the certification requirements" of the multiple CARB regulations, including the Phase 2 Greenhouse Gas program. May 23, 2025 MAC at 3.

c. The **Heavy-Duty On-Board Diagnostic Regulations** apply to the self-diagnostic systems incorporated into the computers of vehicles to monitor vehicle and engine components that can impact emissions performance. *See* Cal. Code Regs. tit. 13, § 1971.1. California has not obtained a waiver for its standards at section 1971.1 since 2016, which only covered amendments to the rule through 2013. *See* 81 Fed. Reg. 78,149 (Nov. 7, 2016). CARB amended the standards in 2016[7] and 2019.[8] Because these later amendments lack waivers, no preemption waiver exists that covers the on-board diagnostic standards currently adopted under California law.

II. Regulatory Uncertainty and the Clean Truck Partnership

37. As California promulgated the aforementioned standards, the heavy-duty truck and engine manufacturers raised serious concerns about the legality of CARB's actions and the technical feasibility of meeting CARB's standards within the limited timeline allotted. Among others, two objections are particularly salient here.

38. First, Omnibus Low NOx was dramatically different from the federal criteria pollutant emissions standards. As EPA noted in its rulemaking for criteria pollutant standards, Omnibus Low NOx imposed emissions standards "even more stringent" than the *most* stringent rules considered by

[7] CARB, On-Board Diagnostic Systems II, https://perma.cc/TV8H-HKLB (documenting adoption of standards on July 25, 2016).

[8] CARB, Heavy-Duty On-Board Diagnostic System Requirements 2018, https://perma.cc/P65V-YR8Q (documenting adoption of standards on Oct. 3, 2019).

EPA.[9] On behalf of its members, the industry trade association (the Truck and Engine Manufacturers Association (EMA)) expressed concerns during CARB's rulemaking process that the Omnibus Low NOx emissions standards were unachievable, urging CARB to forego Omnibus Low NOx and instead "work in good faith with all stakeholders to develop a cost-effective *nationwide* [heavy-duty vehicle and engine] low-NOx program to take effect in 2027." EMA, Comments on CARB's Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments (Aug. 13, 2020) at 4 (emphasis added).[10]

39. Second, product development in the heavy-duty truck and engine requires long lead times—a fact so well-recognized that the Clean Air Act itself specifically requires at least four years of lead time and a three-year regulatory stability period for heavy-duty emissions standards. 42 U.S.C. § 7521(a)(3)(C). But when CARB promulgated new emissions standards in Omnibus Low NOx, it did not provide the requisite statutory lead time. Instead, CARB adopted the rules on December 22, 2021, which then became effective in model year 2024—providing only two years of lead time.[11]

40. Consequently, EMA filed suit against CARB asserting that Omnibus Low NOx did not comply with the Clean Air Act's mandated lead time. Complaint at ¶ 3, *Engine Mfrs. Ass'n v. Cal. Air Resources Bd.*, No. 2:22-cv-03663-JFW-PVC (C.D. Cal. May 27, 2022). When EPA commenced a waiver proceeding regarding Omnibus Low NOx and accepted comments on the lead time issue, EMA withdrew its lawsuit.[12]

41. Shortly thereafter, CARB publicly wrote to EMA stating that in recognition of EMA

[9] *See* Final Rule, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, 88 Fed. Reg. 4296, 4301 (Jan. 24, 2023).

[10] Available for download at https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=hdomnibus2020&comment_num=8&virt_num=7.

[11] Cal. Code Regs. tit. 13, § 1956.8(a)(2)(C) (establishing model year 2024-2026 standards); 2021, No. 53-Z, Cal. Regulatory Notice Reg., 1809 (Dec. 31, 2021), https://perma.cc/9JCQ-3NHA (indicating adoption date for revised California Code of Regulations title 13, section 1956.8); CARB, Final Regulation Order, Title 13, at 7-11, Docket No. EPA-HQ-OAR-2022-0332, available for download at https://www.regulations.gov/document/EPA-HQ-OAR-2022-0332-0005.

[12] Press Release, EMA, Truck & Engine Manufacturers Withdraw Lawsuit on Leadtime Requirement for Heavy-Duty Emissions Standards (Aug. 11, 2022), https://perma.cc/LZ3X-RJJZ.

dropping its litigation, CARB sought "discussion" with EMA and was open to "exploring areas of alignment between state and federal combustion rules"—a potential path out of the regulatory quagmire for heavy-duty truck and engine manufacturers.[13] Nine months later, in July 2023, CARB announced the Clean Truck Partnership, a document styled as an "Agreement" between a regulator—CARB—on one hand, and a regulated industry—heavy-duty truck and engine manufacturers, along with their trade association EMA—on the other.[14] The Clean Truck Partnership outlined a plan for CARB to undertake several of the regulatory actions sought by industry. First, CARB stated that it would provide four-year lead-time for future emission standards, as EMA had pursued in its litigation against CARB. Ex. A (CTP), ¶ 5. Second, CARB agreed to propose amendments that would harmonize Omnibus Low NOx emissions standards with EPA's federal standards, subject to certain limited exceptions—in effect, agreeing to a more achievable NOx standard that would apply nationwide, as EMA had proposed during the Omnibus Low NOx rulemaking. Ex. A (CTP), ¶¶ 1(iii), 7. And third, CARB agreed to work with industry to try to make the mandates contained in Advanced Clean Trucks more feasible. Ex. A (CTP), App'x C, ¶ B. The Clean Truck Partnership was thus intended to help harmonize and facilitate compliance with state and federal heavy-duty vehicle emission standards.

42. Although the document was labeled as an "agreement," the Clean Truck Partnership imposed new regulatory requirements on manufacturers. For this reason, the U.S. Department of Justice has described the "agreement" as an independent "regulatory mechanism by which CARB attempts to enforce" its preempted emissions standards. Ex. B (Aug. 7, 2025 DOJ Letter), at 2. The Clean Truck Partnership dictated that under certain circumstances where CARB was found to lack authority for Advanced Clean Trucks, Omnibus Low NOx, or the 100 percent zero-emission vehicle sales requirement of Advanced Clean Fleets, manufacturers would still have to comply with those standards. Ex. A (CTP), ¶ 2. Next, the Clean Truck Partnership provided that "California will maintain its certification program," asserting CARB's authority to impose certification requirements on manufacturers.

[13] Letter from Steven S. Cliff, Executive Officer, CARB, to Jed R. Mandel, President, EMA (Oct. 14, 2022), https://perma.cc/3RQF-XXV2.

[14] Press Release, CARB and truck and engine manufacturers announce unprecedented partnership to meet clean air goals (July 6, 2023), https://perma.cc/85J7-U75K.

Ex. A (CTP), App'x B, at 1. By creating a regulatory structure that manufacturers had to follow even when CARB had lost federal authority due to "the outcome of any litigation challenging the waivers or authorizations for those regulations or of CARB's overall authority to implement those regulations," Ex. A (CTP), ¶ 2, the Clean Truck Partnership ostensibly became a buttress for the new CARB emissions standards and certification obligations applicable to the highly regulated truck industry. Underscoring that the Clean Truck Partnership is fundamentally a regulatory scheme rather than a private agreement, the Clean Truck Partnership does not provide any enforcement mechanism or private right of action among the industry signatories for noncompliance—EMA and manufacturers cannot impose penalties on each other, nor can they deny each other certifications to sell trucks or engines.

43. Furthermore, the Clean Truck Partnership created a new category of regulatory restrictions: limits on the rights of manufacturers and EMA to speak freely and petition the government. The advocacy-limiting mandates that CARB included in the Clean Truck Partnership prohibit EMA and manufacturers from challenging enumerated CARB standards, including Omnibus Low NOx, Advanced Clean Trucks, and the Advanced Clean Fleets 100 percent zero-emission vehicle sales requirement. To that end, the Clean Truck Partnership dictates: "[manufacturers] will not (i) challenge CARB's issuance of the regulations set forth in Appendix B[15]; (ii) file a Petition for Review or otherwise challenge any U.S. EPA waiver or authorization granted for such regulations; (iii) file amicus briefs supporting challenges to such waivers or authorizations, or such regulations; or (iv) support stay motions or similar motions practice challenging such waiver or authorization decisions, or such regulations." Ex. A (CTP) ¶ 4. As a result, the Clean Truck Partnership purports to insulate the State and its emissions standards from legal challenges.

44. The Clean Truck Partnership further limits "advocacy" by EMA and manufactures in any state that is considering adopting CARB's Omnibus Low NOx or Advanced Clean Trucks. Ex. A (CTP) App'x D, ¶ A. In that regard, it explicitly imposes a requirement on EMA and manufacturers to

[15] Omnibus Low NOx, Advanced Clean Trucks, the 100 percent zero-emission sales requirement in Advanced Clean Fleets, the Zero Emission Airport Shuttle regulation, the Zero Emission Powertrain Certification Procedure and its incorporated standards and test procedures, the 2018 Heavy-Duty Warranty Amendments, and the Standards and Test Procedures for 2004 and Subsequent Model Year Heavy-Duty Diesel Engines and Vehicles (as amended April 18, 2019).

"support or not oppose the adoption of CARB's Omnibus [Low NOx] regulations in any prospective Section 177 states" for model year 2027 and later, and to remain "neutral … in response to any prospective Section 177 States' proposals to consider adopting CARB's [Advanced Clean Trucks] regulations." Ex. A (CTP) App'x D, ¶¶ C, E.

45. In sum, through the Clean Truck Partnership, CARB sought to impose industry-wide emissions standards and certification requirements, in a manner that would insulate those standards from litigation challenging CARB's regulatory authority, from any future industry criticism, and from any potential industry-supported judicial review. CARB imposed the Clean Truck Partnership in its capacity as an industry regulator, not in its capacity as a market participant.

46. In December 2024, the American Free Enterprise Chamber of Commerce brought federal litigation against CARB and the signatories to the Clean Truck Partnership (including Plaintiff OEMs), seeking a declaratory judgment that the Clean Truck Partnership is preempted and unlawful and an order enjoining the Clean Truck Partnership's enforcement. *See Am. Free Enter. Chamber of Com. v. Engine Mfrs. Ass'n*, No. 3:24-cv-50504 (N.D. Ill. Dec. 16, 2024). Responsive pleadings currently are due August 14, 2025.

III. The Federal Government Enacts Law Preempting CARB's Standards

47. CARB and the federal government have now adopted diametrically opposed positions about what law, regulations, and standards apply to heavy-duty truck manufacturers—including whether the Clean Truck Partnership is a lawful mechanism for CARB to compel compliance with now-preempted California standards.

48. As explained above, California's authority to regulate heavy-duty vehicle and engine emissions depended on Clean Air Act preemption waivers granted by EPA. In June 2025, the President signed a Joint Resolution of Congress under the Congressional Review Act that expressly stripped California's preemption waivers for Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II. In response, CARB now points to the Clean Truck Partnership as a source of its ongoing authority to enforce compliance with its standards, while the federal government expressly includes

the Clean Truck Partnership within the category of preempted regulatory actions.

49. On February 19, 2025, EPA submitted the waiver decisions for Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II to Congress as rules subject to the Congressional Review Act. *See* 5 U.S.C. §§ 551(4), 804(3). The Congressional Review Act enables Congress to enact joint resolutions invalidating new rules adopted by federal agencies within a review period triggered upon the submission of the rule to Congress. 5 U.S.C. §§ 801–808. In May 2025, both chambers of Congress voted to pass joint resolutions invalidating the Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II waiver decisions. *See* H.R.J. Res. 87, 119th Cong. (2025); H.R.J. Res. 88, 119th Cong. (2025); H.R.J. Res. 89, 119th Cong. (2025). President Trump signed the joint resolutions on June 12, 2025. *See* Statement by the President, The White House (June 12, 2025) ("June 12 Statement by the President"), https://perma.cc/M4Q4-28BM. Once Congress passed and the President signed the measures repealing the recent EPA waivers, CARB lost authority under the Clean Air Act to adopt and enforce its standards. *See Diamond Alt. Energy, LLC v. EPA*, 145 S. Ct. 2121, 2131 n.1 (2025) ("Acting under the Congressional Review Act, Congress recently passed and the President signed legislation to block … California regulations.").

50. As a result, the federal government has taken the position that Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II are "fully and expressly preempted by the Clean Air Act and cannot be implemented." June 12 Statement by the President; *see also* 5 U.S.C. § 801(b)(1). The President stated that the resolutions make clear that "California's attempts to impose an electric vehicle mandate, regulate national fuel economy, and regulate greenhouse gas emissions are not eligible for waivers of preemption under section 209 of the Clean Air Act." June 12 Statement by the President. Further, the Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II waivers cannot be reissued in "substantially the same" form unless authorized later by another legislative action by Congress. *Id.*; 5 U.S.C. § 801(b)(2). Therefore, pursuant to federal law, CARB's Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II are now preempted and void ab initio and have no effect. *See Diamond Alt. Energy*, 145 S. Ct. at 2135 n.3 (explaining that "the result from setting aside EPA's approval of the California regulations" is that "California may not

enforce its greenhouse-gas emissions limits and electric-vehicle mandate for new vehicle fleets").

51. Furthermore, on August 7, 2025, the U.S. Department of Justice sent a letter to heavy-duty truck and engine manufacturers reiterating the federal government's position that the Congressional Review Act resolutions preempted CARB's standards, and further stating that the Clean Truck Partnership is itself preempted as an attempt to enforce emissions standards that lack a waiver under Section 209(b) of the Clean Air Act. As DOJ writes, "The Clean Truck Partnership … compels manufacturers to comply with CARB's ongoing enforcement of the Omnibus [Low NOx] and [Advanced Clean Trucks] regulations[.]" Ex. B (Aug. 7, 2025 DOJ Letter), at 2. In the letter, DOJ commands Plaintiff OEMs to "immediately cease and desist your compliance with both the Clean Truck Partnership and its preempted state vehicle emission regulations." *Id.*

IV. California Continues to Enforce Preempted Emissions Standards

52. And yet, while the federal government demands that Plaintiff OEMs do one thing, California directs OEMs to do another. California has taken the position that Congress's waiver-disapproval resolutions were "reckless, politically motivated, and illegal attacks on California,"[16] and has made clear that it will continue to attempt to enforce the requirements included in Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II, including the vehicle and engine certification requirements.

53. On June 12, 2025, California sued EPA and the President seeking an order "declar[ing] that the [Congressional Review Act] Resolutions have no effect on the status or enforceability of state emissions control programs." Complaint at 4, *California v. EPA*, No. 4:25-cv-04966 HSG (N.D. Cal. June 12, 2025). California alleges, among other things, that Congress's actions were *ultra vires*, violated the Congressional Review Act and the Administrative Procedures Act, and flouted the Constitution's structural guarantees regarding separation of powers and federalism. *Id.* at 27–39. The State has

[16] *See* Press Release, Governor Gavin Newsom, Assault on California continues: Governor Newsom sues Trump over illegal attempt to revoke state's clean air policies (June 12, 2025), https://perma.cc/L3Q8-S8QJ/.

not sought a temporary restraining order or preliminary injunction. The initial case management conference is currently set for September 16, 2025, and as of this filing no further substantive court dates have been set in that case.

54. While its legal dispute is pending, California has stated that it will continue to enforce the preempted emissions standards included in Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II, and require manufacturers to certify regulatory compliance before selling vehicles in California. To that end, California has repeatedly asserted that it will use the Clean Truck Partnership, which was intended to harmonize compliance with state and federal law, to compel the industry to comply with now-preempted California emissions standards over federal law.

55. CARB cannot use the Clean Truck Partnership as a backdoor to enforce California's preempted emissions standards. Even if it could, CARB has not met—and indeed cannot meet—several of its own obligations under the Clean Truck Partnership. As a result, CARB cannot use the Clean Truck Partnership to force the industry to comply with California's emissions standards.

56. For one thing, the Clean Truck Partnership requires CARB to substantively amend Advanced Clean Trucks and Omnibus Low NOx, largely for the purpose of harmonization of state and federal emissions standards. *See* Ex. A (CTP) App'x A, B. As explained above, however, the President signed Joint Resolutions of Congress under the Congressional Review Act that expressly revoked California's preemption waivers for Advanced Clean Trucks and Omnibus Low NOx. Following the signature of these Joint Resolutions into law, pursuant to the Congressional Review Act, EPA cannot reissue CARB's waivers for those standards without a subsequent act of Congress expressly permitting such action. 5 U.S.C. § 801(b)(2). As a result, CARB is statutorily foreclosed from meeting its obligation under the Clean Truck Partnership to amend Advanced Clean Trucks and Omnibus Low NOx. If CARB tries to do so, such attempts will be meaningless as California would be preempted from enforcing those rules, amended or otherwise. In particular, CARB's commitment in the Clean Truck Partnership to align the emissions standards in Omnibus Low NOx with EPA's corresponding emissions standards is now impossible. CARB has not, and cannot, fulfill this obligation consistent with federal law.

57. For another, when CARB signed the Clean Truck Partnership, it also committed "to work together" with manufacturers "to resolve any issues that may warrant regulatory amendments to either the Omnibus or ACT regulations." Ex. A (CTP) App'x D, ¶ G. But CARB recently amended Advanced Clean Trucks without engaging with the industry in the manner contemplated by Clean Truck Partnership or addressing the industry's objections and concerns filed during the comment process. *See* EMA, Comments on CARB's Proposed Amendments to the Advanced Clean Trucks Regulations and the Zero-Emission Powertrain Certification Test Procedure (July 14, 2025).[17] CARB has also refused to work with the manufacturers to resolve issues related to infrastructure and customer demand that undermine the viability of Advanced Clean Trucks. Among other things, CARB has proposed to withdraw the sections of Advanced Clean Fleets that would have required trucking fleets to purchase zero-emission trucks. *See supra* note 6. In other words, CARB has removed the buy-side requirement corresponding to the sales mandates imposed on manufacturers by Advanced Clean Trucks, thereby making manufacturer compliance with Advanced Clean Trucks even more challenging.

58. Furthermore, CARB did not abide by its commitment in the Clean Truck Partnership to provide manufacturers with three years to make up a shortfall in the proportion of zero-emission vehicles required to be sold pursuant to Advanced Clean Trucks. The Clean Truck Partnership stated that CARB "will propose to modify [Advanced Clean Trucks] to lengthen the number of years a manufacturer has to make up a deficit from one year to three years." Ex. A (CTP) App'x C, ¶ B. But the standards as adopted did not provide the promised three-year make-up period. Instead, it only allowed manufacturers to carry over 30 percent of the deficit from year-to-year—a material restriction not contemplated by the Clean Truck Partnership. *See* Cal. Code Regs. tit. 13, § 1963.3(b) (providing that "[i]f the net deficit balance is more than 30 percent of the deficits generated from the most recent model year, the net deficit must be reduced to below 30 percent by the end of the first and second years of the

[17] Available to download at https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=2025actpooling&comment_num=523&virt_num=11. *See also* Press Release, CARB approves amendments to clean truck standards to provide flexibility while maintaining emissions benefits (July 24, 2025), https://perma.cc/8D4R-A26K.

makeup period.").

59. Because CARB has not met numerous commitments under the Clean Truck Partnership, CARB is foreclosed from using the Clean Truck Partnership to force the industry to comply with CARB's preempted standards.

60. Notwithstanding the foregoing, CARB has stated its intent to enforce its preempted standards in multiple ways, each of which are independently preempted by the Clean Air Act, which, again, expressly preempts not only the adoption of state emissions standards for which there is no federal waiver, but "attempt[s] to enforce" preempted standards as well. 42 U.S.C. § 7543(a). Furthermore, those attempts to enforce purport to rely on the Clean Truck Partnership—further underscoring the status of that document as a regulation in and of itself, which CARB is using, in effect, to circumvent the Clean Air Act and to enforce the preempted state standards.

61. **Manufacturers Advisory Correspondence.** On May 23, 2025, CARB issued a Manufacturers Advisory Correspondence ("MAC") document styled as "Regulatory Guidance" in response to the Congressional resolutions disapproving the prior preemption waivers. May 23, 2025 MAC. The directive states that the "Congressional resolutions of disapproval … are the result of illegal actions and are thus invalid," and that the disapproved standards remain "applicable to manufacturers." *Id.* at 1. The MAC goes on to state that CARB "will continue to accept and process certification applications," justifying this as "necessary" to "facilitate meeting the commitments of the Clean Truck Partnership." *Id.* at 2; *see also id.* at 3 ("CARB will continue to accept and process certification applications for model year 2025 and 2026 model year medium- and heavy-duty vehicles under the certification requirement of the Heavy-Duty Engine and Vehicle Omnibus regulation[.]"). California has thus taken the position that compliance with CARB's emissions standards and their related conditions precedent to sale are required by the Clean Truck Partnership, even though the underlying regulations establishing those emissions standards have been preempted. This further demonstrates that the Clean Truck Partnership itself operates as a regulation, as well as an attempt to enforce CARB's preempted emission standards.

62. CARB's directive further requires compliance with the preempted standards to "ensure

the requirements of certification are met to enable lawful vehicle sales in California" under the California Health and Safety Code, *id.* at 2, citing statutory provisions that a "person shall not offer for sale … a new motor vehicle … unless the motor vehicle … has been certified" under California law. Cal. Health & Safety Code § 43151. Notably, violations of this section can incur penalties of up to $48,788 "for each such action." Cal. Health & Safety Code § 43154(a)(1).[18] Thus, CARB has threatened to impose substantial fines against any manufacturer who sells vehicles in California without a CARB certificate, again notwithstanding the fact that the Clean Air Act expressly prohibits such certifications in the absence of a waiver. 42 U.S.C. § 7543(a); *see also* CARB, CARB approves amendments to clean truck standards to provide flexibility while maintaining emissions benefits (July 24, 2025), https://perma.cc/8D4R-A26K ("The [May 23, 2025 MAC] explained that CARB would continue accepting and processing certification applications for 2026 models to ensure continuity and enable lawful vehicle sales in California.").

63. **Executive Order N-27-25.** On June 12, 2025, Governor Newsom issued Executive Order N-27-25, which described the waiver-disapproval resolutions as part of "President Trump's war on California"[19] and directed CARB to implement the Clean Truck Partnership—which incorporates the emissions standards included in Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II—and report "manufacturer progress towards those commitments" to the Governor semi-annually. Executive Order N-27-25 stated that manufacturers that continue to certify compliance with California's preempted standards will be "prioritize[d] … in government vehicle procurement decisions," will receive priority "funding" to "support the purchase of zero-emission vehicles" and directed CARB to identify other "opportunities for special considerations and flexibilities for" manufacturers that comply with the preempted standards when crafting future regulations. Executive Order N-27-25, https://perma.cc/9HZG-EHRV.

---

[18] The statutory penalty is adjusted annually for inflation. *See* CARB, Memorandum to Enforcement Division Staff, Increase in Maximum Penalties Based on 2024 California Consumer Price Index (Feb. 21, 2025), https://perma.cc/YG4F-9T7Q.

[19] *See* Press Release, Gov. Gavin Newsom, Governor Newsom signs executive order doubling down o n state's commitment to clean cars and trucks, kickstarts next phase of leadership (June 12, 2025), htt ps://perma.cc/HHM4-CPXY.

64. By contrast, none of those privileges or opportunities will be extended to manufacturers who do not follow the standards "regardless of the status of those regulations under federal law." Executive Order N-27-25. Instead, Executive Order N-27-25 suggests that such manufacturers will be put on California's "manufacturer purchasing restriction list," as indeed California has done to disfavored vehicle manufacturers during a prior dispute over whether California's emissions standards were preempted. *See*, *e.g.*, David Shepardson, *California to Stop Buying GM, Toyota and Fiat Chrysler Vehicles Over Emissions Fight*, Reuters (Nov. 18, 2019), https://www.reuters.com/article/idUSL2N27Y0HU/ (reporting that Governor Newsom "halt[ed] all purchases of new vehicles for state government fleets from" manufacturers that did not agree with CARB's positions in preemption litigation). The California Executive Order thus purports to adopt and enforce California's separate state emissions regulatory regime in direct conflict with federal law.

V. Plaintiff OEMs are Irreparably Injured as a Result of California's Actions

65. With the federal government and California taking irreconcilable positions on the enforceability of CARB's standards, Plaintiff OEMs face both current and imminent injuries from two sources: California's attempt to enforce the preempted standards and California's threats to punish Plaintiff OEMs based on their speech.

a. Injury From California's Enforcement of Preempted Emissions Standards

66. California appears to be intent on acting *ultra vires*. The federal government has acted to expressly preempt CARB's standards, and California is prohibited by the Clean Air Act from attempting to enforce its heavy-duty emissions standards. Yet CARB has announced that it will nevertheless enforce the preempted standards. For example, in the May 23, 2025 MAC, CARB reiterated that manufacturers will need to obtain a model year 2026 California certification "to enable lawful vehicle sales," May 23, 2025 MAC at 2, implicitly threatening steep penalties for any violations, *see* Cal. Health & Safety Code §§ 43151, 43154(a)(1) (imposing penalties for selling without a CARB certificate).

67. Against this backdrop, Plaintiff OEMs urgently need clarity regarding the law and emission standards that apply to its vehicles and engines for model year 2026. To adequately plan product production and allocation, Plaintiff OEMs must know which vehicles they are authorized to sell, and *where*, well in advance of the start of a model year on January 1. And applying for and receiving CARB certifications takes months. As noted previously, CARB's own description of the process lays out a timeline of up to sixty days, at the conclusion of which the manufacturer may receive a certification—or only "substantive feedback … about what further information is needed," heralding an even longer certification process.[20] Thus, working backwards from the January 1, 2026 start of the model year, to allow adequate planning time, Plaintiff OEMs must know within a matter of weeks whether they must seek a model year 2026 certification from CARB. Without regulatory certainty, Plaintiff OEMs are unable to engage in meaningful product planning, reducing their ability to deliver to customers the products they need and want.

68. Applying for a CARB certification entails a substantial investment of time and resources on the part of Plaintiff OEMs. In addition to the direct cost of paying CARB certification fees, obtaining a certification involves expensive emissions testing to ensure compliance with CARB standards—testing which, to generate the requisite emissions testing results, needs to start roughly eight months before the submission of a certification application. For example, Plaintiff OEMs must "age" engines to simulate real-world wear and tear to ensure that certain regulatory requirements are met—an expensive process that uses emission testing laboratories that could otherwise be used for research and development. And once an application is submitted, CARB can take months to provide a certification. As a result, the certification process can take upwards of a year, and it requires Plaintiff OEMs to invest substantial resources.

b. Injury From California's Suppressions of Plaintiff OEMs' Free Speech

69. California is suppressing Plaintiff OEMs' speech and petitioning rights to insulate State officials from judicial oversight. To accomplish this, California has threatened Plaintiff OEMs and

[20] CARB, On-Road Heavy-Duty and Off-Road Compression Ignition Certification Programs: Certification Steps Overview, https://perma.cc/UUT3-HWG5.

other heavy-vehicle manufacturers with unfavorable regulatory treatment if they challenge the preempted standards, including that CARB will identify "opportunities for special considerations and flexibilities for" manufacturers when crafting future standards only if those manufacturers continue following the standards that California is prohibited by the Clean Air Act from attempting to enforce. *See* Executive Order N-27-25. Further, California has stated its intent to prohibit its agencies from purchasing vehicles unless they are from manufacturers that agree with CARB's position—a pledge to punitively restrict the purchase of Plaintiff OEMs' products in its government-owned fleet—and has directed de-prioritizing those manufacturers from government incentive programs. *See supra* ¶¶ 63-64. Both the May 23, 2025 MAC and Executive Order N-27-25 root the requirement to comply with preempted regulations in the Clean Truck Partnership—a document that, as detailed above, includes measures to restrict manufacturers' ability to challenge the legality of CARB's standards.

70. As the Ninth Circuit aptly put it, "Courts have adopted various metaphors to encapsulate the dilemma facing a pre-enforcement plaintiff—'the rock … and the hard place,' 'the Scylla … and the Charybdis,' and the choice to comply or 'bet the farm.'" *Peace Ranch LLC v. Bonta*, 93 F.4th 482, 487 (9th Cir. 2024) (citations omitted). Plaintiff OEMs are in such a dilemma here. But as the Supreme Court explained, "where threatened action by *government* is concerned," a plaintiff is not required "to expose [itself] to liability before bringing suit to challenge the basis for the threat." *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 128–29 (2007). Thus, Plaintiff OEMs apply to this Court for declaratory relief clarifying which laws they must follow when offering new heavy-duty vehicles and engines for sale, and prohibiting the Defendants from violating Plaintiff OEMs' constitutional rights.

COUNT I

(Clean Air Act Preemption—CARB Standards)

71. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

72. The Supremacy Clause of the U.S. Constitution enshrines the "Laws of the United States" as "the supreme Law of the Land." U.S. Const. Art. VI. Accordingly, the Supremacy Clause "provides the constitutional foundation for federal authority to preempt state law." *Beaver v. Tarsadia*

Hotels, 816 F.3d 1170, 1178 (9th Cir. 2016). Congress expressly preempts state law "when the text of a federal statute explicitly manifests Congress's intent to displace state law." *Ass'n des Éleveurs de Canards et d'Oies du Quebec v. Bonta*, 33 F.4th 1107, 1114 (9th Cir. 2022). Courts must invalidate preempted state laws. *See CSX Transp., Inc.*, *v. Easterwood*, 507 U.S. 658, 663 (1993) ("Where a state statute conflicts with, or frustrates, federal law, the former must give way.").

73. The Clean Air Act prohibits states from not only adopting, but from any "attempt to enforce any standard" relating to new motor vehicle and engine emissions unless a waiver is granted. 42 U.S.C. § 7543(a). The ordinary meaning of "enforce" is to "compel obedience to." *See* Enforce, Dictionary.com, https://perma.cc/F4E8-L355 (last visited Aug. 10, 2025); *see also* Black's Law Dictionary (4th rev. ed. 1968) (same). The Supreme Court explained that an "attempt" to enforce an emissions standard includes preliminary acts falling short of enforcement. *Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 541 U.S. 246, 257 (2004). As the court observed, the term "attempt to enforce" in Section 209(a) is not limited to the actual imposition of penalties for violations but includes steps preliminary to that action. *Id.*

74. As relevant here, California is trying to enforce emissions standards and conditions precedent to sale of new heavy-duty vehicles and engines, even though its heavy-duty vehicle emissions standards are all preempted by the Clean Air Act:

a. *First*, all standards contained within the waiver submissions to EPA for Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II are preempted because the Clean Air Act waivers granted based on those submissions were *explicitly* revoked by Congressional resolutions passed pursuant to the Congressional Review Act. Without any operative waivers, CARB is therefore preempted from "attempt[ing] to enforce" or requiring "certification, inspection, or any other approval relating to" a manufacturer's compliance with Advanced Clean Trucks, Omnibus Low NOx, and Advanced Clean Cars II. 42 U.S.C. § 7543(a). This prohibition also reaches the evaporative emissions and refueling emissions standards applicable to heavy-duty

vehicles along with the medium-duty on-board diagnostics standards, which were included in the Advanced Clean Cars II waiver, as well as the heavy-duty warranty, zero-emission airport shuttles, and certification of zero-emission powertrain regulations included in the Advanced Clean Trucks waiver.

b. *Second*, the Advanced Clean Fleets, Phase 2 Greenhouse Gas, and Heavy-Duty On-Board Diagnostic standards lack waivers under the Clean Air Act and are thus preempted. First, CARB withdrew its waiver request to EPA for Advanced Clean Fleets on January 13, 2025, before EPA could make a waiver decision. By CARB's own account, without a Clean Air Act waiver, Advanced Clean Fleets is "dead on its feet."[21] Second, although CARB previously indicated it would submit a waiver request to EPA for its Phase 2 Greenhouse Gas standards, there is no public indication it has submitted such a waiver or that one has been issued. The Phase 2 Greenhouse Gas standards therefore must likewise be considered a legal nullity. Finally, as to the Heavy-Duty On-Board Diagnostic standards, CARB has failed to obtain a waiver for the current standards, and thus the standards currently adopted in California has no preemption waiver to support it.

75. Because none of the aforementioned CARB standards have lawful and operative Clean Air Act waivers, they are expressly preempted by federal law.

76. Absent declaratory and injunctive relief, in a matter of weeks Plaintiff OEMs will need to begin investing or will be forced to continue to invest substantial resources to certify to and comply with California's model year 2026 emissions standards.

77. Such investments would irreparably harm Plaintiff OEMs. *See, e.g.*, *Thunder Basin Coal Co. v. Reich*, 510 U.S. 200, 220–21 (1994) (Scalia, J., concurring in part and in the judgment) ("[C]omplying with a regulation later held invalid almost always produces the irreparable harm of nonrecoverable compliance costs."). Because sovereign immunity bars money damages against a state,

[21] Dean Florez, Why California recently revised its clean air regulations for zero-emission trucks, The Sacramento Bee (May 6, 2025), https://www.sacbee.com/opinion/op-ed/article305738891.html.

California Pharm. Ass'n v. Maxwell-Jolly, 563 F.3d 847, 851–52 (9th Cir. 2009), *vacated on other grounds*, 565 U.S. 606 (2012), Plaintiff OEMs would thus not be able to recover any costs resulting from complying with regulations later found to be invalid, a harm that is by definition unrecoverable and irreparable, *see Texas v. EPA*, 829 F.3d 405, 434 (5th Cir. 2016).

78. Plaintiff OEMs are therefore entitled to (1) a declaration that CARB's emissions standards applicable to new heavy-duty vehicles and engines are preempted by the Clean Air Act, and (2) an injunction barring Defendants from taking any steps to enforce those standards against Plaintiff OEMs.

COUNT II

(Clean Air Act Preemption—May 23, 2025 MAC & EO N-27-25)

79. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

80. The Clean Air Act provides that absent a preemption waiver, "[n]o State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or … engines," including by requiring "certification, inspection, or any other approval relating to the control of emissions" as a condition of sale. 42 U.S.C. § 7543(a).

81. Because none of CARB's emissions standards applicable to new heavy-duty vehicles and engines have lawful and operative waivers, they are preempted by the Clean Air Act.

82. Nevertheless, Defendants are "attempt[ing] to enforce" their preempted emissions standards in the following two ways:

a. *First*, CARB issued a MAC in which it announced that it "will continue to accept and process" certification applications from manufacturers demonstrating compliance with the standards set forth in Advanced Clean Trucks and Omnibus Low NOx, and that such certification is required to "enable lawful vehicle sales in California." May 23, 2025 MAC at 2–3 (citing statutes that make it illegal to sell uncertified vehicles).

b. *Second*, in Executive Order N-27-25, Governor Newsom directed CARB to penalize any heavy-duty vehicle manufacturers that fail to certify compliance with

> CARB's preempted standards. Those penalties include deprioritizing the non-certifying "manufacturers in government vehicle procurement decisions," cutting their access to "funding" relating to "the purchase of zero-emission vehicles," and leveraging any other "special considerations and flexibilities" in crafting future rules to disadvantage non-certifying manufacturers. Executive Order N-27-25 at 3.

83. The May 23, 2025 MAC and Executive Order N-27-25 are therefore unlawful "attempt[s] to enforce" preempted emissions standards, and they impose unlawful "certification" requirements "relating to the control of emissions" as a condition of sale in California. 42 U.S.C. § 7543(a); *see* California State Motor Vehicle Pollution Control Standards; Waiver of Federal Preemption; Notice of Determination, 55 Fed. Reg. 28,825 (July 13, 1990) (explaining that prior EPA preemption waivers for specific "classes of vehicles and engines, based on California's standards and/or accompanying enforcement procedures, removes the prohibitions of section 209(a) regarding … conditions precedent for those classes").).

84. Such actions are expressly preempted by the Clean Air Act.

85. Absent declaratory and injunctive relief, Plaintiff OEMs will be irreparably harmed as they are now forced to choose between investing substantial resources to comply with ultimately preempted standards on the one hand, and risking significant liability (and a loss of customer goodwill) from regulatory noncompliance on the other hand. *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 381 (1992); *Am. Trucking Ass'ns, Inc. v. City of Los Angeles*, 559 F.3d 1046, 1057–58 (9th Cir. 2009).

86. Plaintiff OEMs are thus entitled to (1) a declaratory judgment that the May 23, 2025 MAC and Executive Order N-27-25 violate the Clean Air Act and Supremacy Clause of the U.S. Constitution; and (2) an injunction barring Defendants from carrying out the enforcement, compliance, and punishment directives described in the May 23, 2025 MAC and Executive Order N-27-25.

COUNT III

(Clean Air Act Preemption—Clean Truck Partnership)

87. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

88. Section 209(a) of the Clean Air Act broadly preempts actions by any "State or any political subdivision thereof" that "*adopt* or *attempt* to enforce … any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines" subject to federal regulation. 42 U.S.C. § 7543(a) (emphasis added). By dictating that manufacturers must "meet, in California, the requirements of the relevant regulations … regardless of the outcome of any litigation challenging the waivers/authorizations for those regulations, or CARB's overall authority to implement those regulations," Ex. A (CTP) App'x B, the Clean Truck Partnership violates both strictures of Section 209(a)'s comprehensive and express preemption of state action.

89. First, the Clean Truck Partnership operates as an *adoption* of a standard. Specifically, it purports to readopt and implement the CARB standards at issue in the event of litigation outcomes adverse to CARB. Functionally, the Clean Truck Partnership thus becomes the backstop regulatory mechanism for CARB to implement the specific emissions standards—the listed regulations—applicable to heavy-duty vehicles and engines. The Clean Truck Partnership applies to all manufacturer signatories, which represent all manufacturers of heavy-duty on-highway internal-combustion vehicles and engines. Ex. A (CTP) ¶ 2, App'x B, at 1.

90. Second, by purporting to require compliance by the manufacturers, in the absence of lawful authority, the Clean Truck Partnership represents an *attempt to enforce* the cited standards. *See* Executive Order N-27-25 at 2 (describing requirements of the Clean Truck Partnership as requiring manufacturers "to meet California's heavy-duty vehicle emission standards that will require the sale and adoption of zero-emissions technology in California, regardless of the outcome of any change in law concerning California's authority to implement its more stringent emissions standards under the federal Clean Air Act").

91. Any adoption of a standard or attempt to enforce a standard relating to the control of emissions must have a waiver from EPA, or it is expressly preempted. *See* 42 U.S.C. §§ 7543(a), (b).

The Clean Truck Partnership lacks a waiver and is thus preempted by Section 209(a).

92. Even if the Clean Truck Partnership were understood as an agreement rather than the adoption and enforcement of a backstop regulation, it still cannot be a backdoor for CARB to enforce preempted emissions standards. Under well-established law, "a government official cannot do indirectly what she is barred from doing directly." *Nat'l Rifle Ass'n of Am. v. Vullo*, 602 U.S. 175, 190 (2024). Because Defendants cannot directly enforce their preempted standards—which would violate the Supremacy Clause and frustrate Congress's decision to ensure that the nation is governed by a single national emissions policy—they cannot use the Clean Truck Partnership to indirectly accomplish the same end. After all, "[i]t would be a palpable incongruity to strike down" an act that directly compels compliance with a preempted law, while "uphold[ing] an act by which the same result is accomplished under the guise of a surrender of a right in exchange for a valuable privilege." *Frost v. R.R. Comm'n of State of Cal.*, 271 U.S. 583, 593 (1926).

93. Therefore, the Clean Truck Partnership is preempted for the same reasons as the May 23, 2025 MAC and Executive Order N-27-25 are preempted. Absent declaratory and injunctive relief, Plaintiff OEMs will be irreparably harmed as they are forced to choose between investing substantial resources to comply with ultimately preempted standards on the one hand, and risking significant liability (and a loss of customer goodwill) from regulatory noncompliance on the other hand. *Morales*, 504 U.S. at 381; *Am. Trucking Ass'ns*, 559 F.3d at 1057–58.

94. Plaintiff OEMs are therefore entitled to (1) a declaratory judgment that the Clean Truck Partnership violates the Clean Air Act and Supremacy Clause of the U.S. Constitution, and (2) an injunction barring Defendants from taking any steps to enforce the Clean Truck Partnership.

COUNT IV

(First Amendment—EO N-27-25, May 23, 2025 MAC, Clean Truck Partnership)

95. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

96. The First Amendment prohibits governments from "abridging the freedom of speech" or the right "to petition the Government for a redress of grievances." U.S. Const. amend. I; *see also*

Gitlow v. New York, 268 U.S. 652 (1925) (incorporating the First Amendment against the States).

97. At the heart of the First Amendment is "a profound national commitment to the principle that debate on public issues should be uninhibited, robust, and wide-open." *N.Y. Times Co. v. Sullivan*, 376 U.S. 254, 270 (1964). Standing shoulder to shoulder with the citizenry's interest in uninhibited, robust debate on public issues is its equally profound "mistrust of governmental power." *Citizens United v. Fed. Election Comm'n*, 558 U.S. 310, 340 (2010).

98. To protect these freedoms, the First Amendment generally prohibits government officials from "impos[ing] rules and conditions which in effect insulate [their] own laws from legitimate judicial challenge." *Legal Servs. Corp. v. Velazquez*, 531 U.S. 533, 548–49 (2001).

99. A condition that restricts a citizen's right to bring lawful challenges against the government will be void and unenforceable if the government's asserted interests in enforcing that condition are outweighed by strong policy interests that are rooted in the First Amendment. *Davies v. Grossmont Union High Sch. Dist.*, 930 F.2d 1390, 1399 (9th Cir. 1991). By contrast, a condition that requires a private party to forfeit their First Amendment rights is valid and enforceable if the government has a compelling interest in the restriction and there is a sufficiently "close nexus—a tight fit—between the specific interest the government seeks to advance … and the specific right waived." *Id.*

100. The government's interest in conditioning favorable treatment on the waiver of a constitutional right "may wane as time passes," however. *Powell v. SEC*, --- F.4th ----, No. 24-1899, 2025 WL 2233792, at *11 (9th Cir. Aug. 6, 2025).

101. Here, whatever compelling interest Defendants might have had prior to June 2025 in enforcing the Clean Truck Partnership and its conditions limiting Plaintiffs' rights to challenge those conditions, such interests no longer exist today.

102. Indeed, when the parties entered into the Clean Truck Partnership in 2023, the federal government had not yet enacted laws that specifically preempted California from enforcing its emissions standards. On the contrary, at that time, California could still apply for Clean Air Act waivers from EPA that would allow California to adopt and enforce its own emissions standards. But in June 2025, the federal government statutorily vitiated those federal waivers, thereby prohibiting California

from enforcing the emissions standards contained in the Clean Truck Partnership, a contingency not covered by the document. *See* Ex. A (CTP) ¶ 2 (providing that Plaintiffs' commitments are triggered by successful "*litigation* challenging the waivers or authorizations for those regulations or of CARB's overall authority to implement those regulations" (emphasis added)).

103. Just as importantly, EPA cannot grant California the waivers it needs to adopt or attempt to enforce the now-preempted emission standards contained in the Clean Truck Partnership—or any other versions "in substantially the same form"—without a subsequent act of Congress specifically authorizing such action. *See* 5 U.S.C. § 801(b)(2). Because Defendants have no interest, let alone a compelling one, in enforcing preempted standards, there can no longer be a "close nexus … between the specific interest the government seeks to advance" by restricting Plaintiffs' speech "and the specific right waived." *Davies*, 930 F.2d at 1399.

104. On the other side of the ledger, "[c]riticism of government is at the very center of the constitutionally protected area of free discussion." *Rosenblatt v. Baer*, 383 U.S. 75, 85 (1966).

105. This means that the public interest against enforcing the Clean Truck Partnership's speech restrictions is "of the highest order," whereas Defendants have no interest at all in suppressing legitimate challenges against unlawful standards. *Davies*, 930 F.2d at 1397; *see also Velazquez*, 531 U.S. at 548–49.

106. That imbalance in interests suggests a First Amendment violation in and of itself. But even setting that aside, the Clean Truck Partnership's speech restrictions are simply too sweeping to satisfy any "nexus" requirement. *See Powell*, --- F.4th ----, 2025 WL 2233792, at *11.

107. Indeed, the Clean Truck Partnership not only prevents Plaintiffs from challenging CARB's standards, but it also requires them to support or remain neutral towards "any prospective Section 177 states' proposals" to implement CARB's preempted standards. Ex. A (CTP) ¶ 2, App'x D.

108. It is well established that government officials cannot, without violating the First Amendment, require their citizens to follow unlawful standards or force them to "adopt—as their own—the Government's view on an issue of public concern" as a condition of receiving favorable regulatory treatment. *Agency for Int'l Dev. v. Alliance for Open Society Int'l, Inc.*, 570 U.S. 205, 218

(2013).

109. That Defendants have unconstitutionally restricted Plaintiffs' speech rights is even more apparent given that Defendants have promised to not only put Plaintiffs "back in the position they were in before" they signed the Clean Truck Partnership if Plaintiffs challenge CARB's standards and agenda, but have also threatened to make them even worse off if Plaintiffs exercise their speech rights. *Powell*, --- F.4th ----, 2025 WL 2233792, at *11. Indeed, Defendants have threatened to engage in "conduct that, viewed in context, could be reasonably understood to convey a threat of adverse government action" in retaliation for speaking against or challenging the government. *See Nat'l Rifle Ass'n of Am. v. Vullo*, 602 U.S. 175, 191 (2024).

110. For years, California previously has attempted to insulate itself and its emissions regulations from legitimate challenge by penalizing any manufacturers who disagree with CARB. *See*, *e.g.*, David Shepardson, *California to Stop Buying GM, Toyota and Fiat Chrysler Vehicles Over Emissions Fight*, Reuters (Nov. 18, 2019), https://www.reuters.com/article/idUSL2N27Y0HU/ (Governor Newsom "halt[ed] all purchases of new vehicles for state government fleets from" manufacturers that did not agree with CARB's positions in preemption litigation).

111. More recently, Governor Newsom issued Executive Order N-27-25, which directs CARB to penalize any heavy-duty truck manufacturers that fail to certify compliance with CARB's now-preempted standards or comply with the Clean Truck Partnership's speech restrictions. Those penalties include deprioritizing the non-certifying "manufacturers in government vehicle procurement decisions," cutting their access to "funding" relating to "the purchase of zero-emission vehicles," and—most significantly—leveraging "special considerations and flexibilities" in forthcoming regulatory programs to disadvantage manufacturers who refuse to certify compliance with CARB's preempted standards or otherwise challenge CARB's emissions agenda. Executive Order N-27-25 at 3.

112. CARB's May 23, 2025 MAC similarly compels manufacturers—by implicit threat of substantial fines—to comply with CARB's preempted standards and certification requirements, compliance that CARB also characterized as "necessary" to "facilitate meeting the commitments of the Clean Truck Partnership" and "enable lawful vehicle sales." May 23, 2025 MAC at 2–3 (citing Cal.

Health & Safety Code §§ 43100, 43151-43153).

113. For all these reasons, Defendants are violating Plaintiffs' First Amendment rights. There is no "close nexus … between the specific interest the government seeks to advance" by enforcing the Clean Truck Partnership "and the specific right waived" therein. *Davies*, 930 F.2d at 1399. And "[t]here is no room under our Constitution" for Defendants to use threats of fines and unfavorable treatment to retaliate against critical speech, *Terminiello v. City of Chicago*, 337 U.S. 1, 4 (1949), "insulate [their] own laws from legitimate judicial challenge," *Velazquez*, 531 U.S. at 548, or enforce unconstitutional and preempted regulations, *Baird*, 81 F.4th at 1042.

114. Absent declaratory and injunctive relief, Plaintiff OEMs will be irreparably harmed. *CTIA – The Wireless Ass'n v. City of Berkeley*, 928 F.3d 832, 851 (9th Cir. 2019) ("A party seeking preliminary injunctive relief in a First Amendment context can establish irreparable injury ... by demonstrating the existence of a colorable First Amendment claim."). Plaintiff OEMs are therefore entitled to (1) a declaration that Executive Order N-27-25 and the May 23, 2025 MAC violate the First Amendment's guarantee of the right to participate in uninhibited debate of issues of public importance; (2) a declaration that the Clean Truck Partnership is unenforceable because it violates the public policy in the First Amendment; and (3) an injunction barring Defendants from using Executive Order N-27-25, the May 23, 2025 MAC, or the Clean Truck Partnership to insulate themselves from legitimate legal challenges or to punish entities that raise such challenges.

COUNT V

(Art. I, § 3 Cal. Constitution—EO N-27-25, May 23, 2025 MAC, Clean Truck Partnership)

115. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

116. Article I, Section 3 of the California Constitution provides that "[t]he people have the right to instruct their representatives, petition government for redress of grievances, and assemble freely to consult for the common good." This provision of the California Constitution is "[a] protective provision more definitive and inclusive" than its federal counterpart in the First Amendment. *Robins v. Pruneyard Shopping Ctr.*, 23 Cal. 3d 899, 908, 910 (1979).

117. "The right to petition for redress of grievances is the right to complain about and complain to the government." *Wolfgram v. Wells Fargo Bank*, 53 Cal. App. 4th 43, 51 (1997). "The right includes the right to petition the executive or legislative branches directly" and also encompasses "the right to petition the judicial branch for resolution of legal disputes." *Vargas v. City of Salinas*, 200 Cal. App. 4th 1331, 1342 (2011).

118. Under California Civil Code section 52.1(c), "Any individual whose exercise or enjoyment of rights secured by the Constitution or laws of the United States, or of rights secured by the Constitution or laws of [California]" may sue the persons who violated their rights for declaratory, injunctive, and monetary relief. California state courts have held that "reasonable, narrowly drawn restrictions designed to prevent abuse of the right can be valid under the state Constitution." *Chorn v. Workers' Comp. Appeals Bd.*, 245 Cal. App. 4th 1370, 1385 (2016) (cleaned up).

119. A government condition that restricts the ability of a party to "file or participate in litigation or support legislation to challenge or modify" the terms of that contract will violate Article I, Section 3 unless the government shows that: (1) the condition requiring the party to surrender their petitioning rights is "reasonably related" to a compelling government interest; (2) "the public value of imposing the condition manifestly outweighs its burden on constitutional rights"; and (3) "there are no less restrictive means" to achieve the government interest. *San Diego Cnty. Water Auth. v. Metro. Water Dist. of S. California*, 12 Cal. App. 5th 1124, 1157, 1160 (2017). If the government fails to meet its burden, the California Constitution will be violated "however well-informed and voluntary th[e] waiver" of the party's petitioning rights. *Id.* (citation omitted).

120. Here, Defendants—via Executive Order N-27-25, the May 23, 2025 MAC, and the Clean Truck Partnership—have attempted to deny Plaintiff OEMs and other manufacturers their petitioning rights guaranteed under the California Constitution. As alleged, Defendants have no cognizable interest in insulating themselves from legitimate legal challenges to state actions. "Where the right to petition is at issue, therefore, the government interest must be unrelated to the suppression of constitutionally protected petitioning activity." *Mejia v. City of Los Angeles*, 156 Cal. App. 4th 151, 163 (2007); *cf.* Cal. Civ. Code § 1668 ("All contracts which have for their object, directly or indirectly, to

exempt any one from responsibility for his own fraud, or willful injury to the person or property of another, or violation of law, whether willful or negligent, are against the policy of the law.") The right to petition the government "is essential to the functioning of a democracy," and the interest in protecting that right far outweighs any conceivable interest the government might have in insulating CARB from legitimate challenge, especially with respect to federally preempted regulations. *City of San Jose v. Superior Ct.*, 2 Cal. 5th 608, 615 (2017).

121. Absent declaratory and injunctive relief, Plaintiff OEMs will continue to be irreparably harmed and subjected to violations of its petitioning rights under State law. Plaintiff OEMs are therefore entitled to (1) a declaration that Executive Order N-27-25, the May 23, 2025 MAC, and Defendants' interpretation of the Clean Truck Partnership violate Article I, Section 3 of the California Constitution; and (2) an injunction barring Defendants from enforcing Executive Order N-27-25, the May 23, 2025 MAC, or the Clean Truck Partnership to restrict Plaintiff OEMs' petitioning rights under Article I, Section 3 of the California Constitution.

COUNT VI

(California APA—May 23, 2025 MAC)

122. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

123. Pursuant to 28 U.S.C. § 1367(a), subject to certain exceptions, "in any civil action of which the district courts have original jurisdiction, the district courts shall have supplemental jurisdiction over all other claims that are so related to claims in the action within such original jurisdiction that they form part of the same case or controversy."

124. Here, it is appropriate for this Court to hear a related state law claim that arises out of the same case and controversy: specifically, that the May 23, 2025 MAC is an underground regulation promulgated in violation of the California Administrative Procedure Act ("California APA").

125. This claim does not raise novel or complex issues of State law, nor does it substantially predominate over the claims over which this Court has original jurisdiction. *See* 28 U.S.C. §§ 1367(c)(1)–(2).

126. Under the California APA, any "person may obtain a judicial declaration as to the validity of any regulation or order of repeal by bringing an action for declaratory relief." Cal. Gov't Code § 11350.

127. The California APA places procedural requirements on state agencies, including CARB, before the agencies can issue regulations to "ensure that those persons or entities whom a regulation will affect have a voice in its creation." *Tidewater Marine Western, Inc. v. Bradshaw*, 14 Cal. 4th 557, 568 (1996); *see also* Cal. Gov't Code §§ 11346.2, 11346.8. Accordingly, California Government Code section 11340.5(a) states that a state agency shall not "issue, utilize, enforce, or attempt to enforce any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, which is a regulation as defined in [Government Code] Section 11342.600, unless the guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule has been adopted as a regulation" and the procedures of the APA have been satisfied. Regulations promulgated in violation of this provision are unlawful "underground regulations." *See* Cal. Code Regs. tit. 1, § 250.

128. Section 11342.600 of the California Government Code "defines 'regulation' very broadly to include 'every rule, regulation, order, or standard of general application or the amendment, supplement, or revision of any rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure.'" *Tidewater Marine Western*, 14 Cal. 4th at 571 (quoting Cal. Gov't Code § 11342(g)). A "regulation" under the California APA "has two principal identifying characteristics." *Tidewater Marine Western*, 14 Cal. 4th at 571. "First, the agency must intend its rule to apply generally, rather than in a specific case," and second, the regulation must "implement, interpret, or make specific the law enforced or administered by [the agency], or govern … [the agency's] procedure." *Id*.

129. The May 23, 2025 MAC is an underground regulation promulgated in violation of the California APA.

a. *First*, the MAC is a rule of general application. The MAC is a "blanket interpretation[s]" that CARB "intend[s] to apply in … all cases of a particular class or

kind," indicating that it too embodies "polic[ies] of general application and thus … regulation[s]." *Tidewater Marine Western*, 14 Cal. 4th at 573; *see also Vasquez v. Dep't of Pesticide Regul.*, 68 Cal. App. 5th 672, 689 (2021). The MAC is not an individual adjudication. It does not involve a case-specific exercise of CARB's discretion and is not designed to apply a "rule to a specific set of existing facts." *Strumsky v. San Diego Cnty. Emps. Ret. Ass'n*, 11 Cal. 3d 28, 35 n.2 (1974). Rather, it sets forth which standards are in effect in California for the 2026 model year, impacting an entire industry, and therefore has a prospective legislative purpose. For example, in the MAC, CARB takes the position that it will certify vehicles for model year 2026 pursuant the Advanced Clean Trucks and Omnibus Low NOx. The MAC is thus a new regulatory program that requires manufacturers of internal-combustion powered on-road heavy-duty trucks and engines to comply with CARB's now-preempted standards.

b. *Second*, the MAC implements CARB's legal authority. It creates new obligations for an entire industry, requiring all manufacturers of heavy-duty trucks and engines to comply with preempted standards. Although the underlying regulations went through the California APA process, the requirement that manufacturers certify vehicles and engines for model year 2026 pursuant to those regulations even in the absence of federal authorization under the Clean Air Act is a novel interpretation and implementation of CARB's legal authority, yet this requirement did not go through the California APA process. The MAC also provides CARB with new authorities not contained in other laws or regulations. For example, the MAC similarly purports that CARB can certify vehicles and engines for the 2026 model year pursuant to the requirements of preempted standards. As such, it "implements and makes specific the law the [agency] administers," thereby establishing the second requirement for an underground rulemaking. *Vasquez*, 68 Cal. App. 5th at 673; *see also Tidewater Marine Western*, 14 Cal. 4th at 571. CARB did not follow the California APA procedures to promulgate the MAC. CARB did not file a copy of the regulatory correspondence with the Secretary of State

of California, as required by section 11343 of the California Government Code, nor did CARB follow the requirements to provide notice and an opportunity for public comment as required by Office of Administrative Law regulations. Cal. Code Regs. tit. 1, §§ 5 (Submission of Notices for Publication), 44 (Public Availability of Changes to Regulations).

130. Nor does the MAC satisfy the exemptions in section 11340.9 of the California Government Code, so CARB's actions are not excused from the California APA requirements.

131. The California APA's notice and comment requirements serve to further the APA's goals of "bureaucratic responsiveness and public engagement in agency rulemaking." *Morning Star Co. v. State Bd. of Equalization*, 38 Cal. 4th 324, 333 (2006). In promulgating the MAC as an underground regulation in violation of the California APA, CARB deprived stakeholders of this transparency and engagement that is designed to promote reasoned and informed policymaking.

132. Absent declaratory and injunctive relief, Plaintiff OEMs will continue to be irreparably harmed and subjected to unlawful regulations. Plaintiff OEMs are therefore entitled to (1) a declaration that the May 23, 2025 MAC constitutes an underground regulation that violates the California APA; and (2) an injunction barring Defendants from enforcing the May 23, 2025 MAC.

COUNT VII

(California APA—Clean Truck Partnership)

133. Plaintiffs repeat and reallege the preceding paragraphs as if fully set forth herein.

134. For many of the same reasons, the Clean Truck Partnership is also an underground regulation promulgated in violation of the California APA.[22]

[22] The Western States Trucking Association filed a petition with the California Office of Administrative Law ("OAL") alleging that the Clean Truck Partnership is an underground regulation promulgation in violation of the California APA on June 18, 2-25. Western States Trucking Association, WSTA Petition to OAL Regarding CTP (June 18, 2025), https://perma.cc/D9M2-7JT4. As of the date of this Complaint, the OAL's deadline to determine whether to take up the petition is August 18, 2025. OAL, Underground Regulation Petitions Under Review, https://perma.cc/ST7F-R7JY. The California APA provides that administrative exhaustion is not required to seek a judicial determination regarding whether an agency has promulgated an underground regulation. Cal. Gov't Code, § 11350(a) ("The

a. *First*, the Clean Truck Partnership includes rules of general application. The Clean Truck Partnership is a "blanket interpretation" that CARB "intend[s] to apply in … all cases of a particular class or kind," indicating that it embodies "polic[ies] of general application and thus [] regulation[s]." *Tidewater Marine Western*, 14 Cal. 4th at 573; *see also Vasquez*, 68 Cal. App. 5th at 689. Here, the Clean Truck Partnership applies to all manufacturers of internal-combustion powered on-road heavy-duty trucks and engines, and it sets forth which regulations are in effect in California across this entire industry. Further, it purports to provide CARB with the authority to maintain its certification program regardless of whether CARB has any underlying authorization for its regulations. In doing so, the Clean Truck Partnership creates a new regulatory program where all manufacturers in an industry must comply with preempted standards, all as upheld through the enforcement mechanism of CARB's requirement for certification.

b. Framing the Clean Truck Partnership as an agreement does not exempt that action from being a rule of general applicability subject to the California APA. State law and principles of administrative law dictate that CARB was not permitted to use an agreement with regulated parties to avoid California APA procedural requirements. *Vasquez*, 68 Cal. App. 5th at 687; *see also Am. Hosp. Ass'n v. Bowen*, 834 F.2d 1037, 1053–54 (D.C. Cir. 1987).

c. *Second*, the Clean Truck Partnership implements CARB's legal authority. The Clean Truck Partnership purports to create new obligations for an entire industry, requiring all manufacturers of internal-combustion powered on-road heavy-duty trucks and engines to comply with preempted standards. Although the underlying regulations went through the California APA process, the requirement that manufacturers comply with those regulations even in the absence of federal authorization is a novel

right to judicial determination shall not be affected by the failure either to petition or to seek reconsideration of a petition filed pursuant to Section 11340.7 before the agency promulgating the regulation or order of repeal"); Cal. Gov't Code. § 11340.7 (providing the right to petition state agencies for the repeal of a regulation).

interpretation and implementation of CARB's legal authority, yet this requirement did not go through the California APA process. The Clean Truck Partnership also provides CARB with new authorities not contained in other laws or regulations. For example, the Clean Truck Partnership provides that CARB can maintain its certification program regardless of the authorization for the regulations underlying the certification program. As such, the Clean Truck Partnership "implements and makes specific the law the [agency] administers," thereby establishing the second requirement for an underground rulemaking. *Vasquez*, 68 Cal. App. 5th at 673; *see also Tidewater Marine Western*, 14 Cal. 4th at 571.

135. Nor does the Clean Truck Partnership satisfy the exemptions in section 11340.9 of the California Government Code, so CARB's actions are not excused from the California APA requirements.

136. In promulgating the Clean Truck Partnership as an underground regulation in violation of the California APA, CARB deprived stakeholders of the transparency and engagement that is required by law to promote reasoned and informed policymaking. *Morning Star*, 38 Cal. 4th at 333.

137. Absent declaratory and injunctive relief, Plaintiff OEMs will continue to be irreparably harmed and subjected to unlawful regulations. Plaintiff OEMs are therefore entitled to (1) a declaration that the Clean Truck Partnership constitutes an underground regulation that violates the California APA; and (2) an injunction barring Defendants from enforcing the Clean Truck Partnership.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff OEMs respectfully request that this Court enter the following relief:

I. A declaratory judgment, pursuant to 28 U.S.C. § 2201 and Rule 57 of the Federal Rules of Civil Procedure, that all emissions standards included in the waiver submissions for Advanced Clean Trucks, Advanced Clean Cars II, and Omnibus Low NOx are preempted by the Clean Air Act;

II. A declaratory judgment, pursuant to 28 U.S.C. § 2201 and Rule 57 of the Federal Rules of Civil Procedure, that Heavy-Duty On-Board Diagnostics, and Phase 2 Greenhouse Gas, and the 100

percent zero-emission vehicle sales requirement in Advanced Clean Fleets are preempted by the Clean Air Act;

III. A declaratory judgment, pursuant to 28 U.S.C. § 2201 and Rule 57 of the Federal Rules of Civil Procedure, that CARB cannot require any conditions precedent to initial retail sale, including requirements under California Health and Safety Code §§ 43151 and 43512 for CARB certification prior to initial retail sale, when CARB lacks valid preemption waivers for its emissions standards;

IV A declaratory judgment, pursuant to 28 U.S.C. § 2201 and Rule 57 of the Federal Rules of Civil Procedure, that the May 23, 2025 MAC, Executive Order N-27-25, and the Clean Truck Partnership violate the Clean Air Act and the Supremacy Clause of the U.S. Constitution;

V. A declaratory judgment, pursuant to 28 U.S.C. § 2201 and Rule 57 of the Federal Rules of Civil Procedure, that Executive Order N-27-25, the May 23, 2025 MAC, and the Clean Truck Partnership violate the First Amendment to the U.S. Constitution, public policy, and Article I, Section 3 of the California Constitution, and are therefore void;

VI. A declaratory judgment, pursuant to 28 U.S.C. §§ 1367 and 2201, and Rule 57 of the Federal Rules of Civil Procedure, that the May 23, 2025 MAC, and Clean Truck Partnership are underground regulations in violation of California Government Code § 11340.5(a) and thus invalid;

VII. Preliminary and permanent injunctions, pursuant to Rule 65 of the Federal Rules of Civil Procedure:

a. Enjoining Defendants from enforcing or attempting to enforce the Advanced Clean Trucks, Advanced Clean Fleets, Advanced Clean Cars II, Heavy-Duty On-Board Diagnostic, and Omnibus Low NOx, and Phase 2 Greenhouse Gas standards without a waiver of preemption from EPA;

b. Enjoining Defendants from requiring any conditions precedent to initial retail sale, including requirements under California Health and Safety Code §§ 43151 and 43512 for CARB certification prior to initial retail sale, without a waiver of preemption from EPA;

c. Enjoining Defendants from enforcing or attempting to enforce any standard or approval relating to the control of emissions for new heavy-duty motor vehicles or engines for

which a waiver is necessary under 42 U.S.C. § 7543 and has not been obtained;

d. Enjoining Defendants from enforcing or attempting to enforce Executive Order N-27-25, the May 23, 2025 MAC, and the Clean Truck Partnership;

e. Requiring Defendants to redress the unlawful promulgation of the underground regulations included in the May 23, 2025 MAC, and Clean Truck Partnership by reissuing these regulations in accordance with the California APA, or, in the alternative, withdrawing such regulations; and

VII. Such other relief available under federal or state law that may be considered appropriate under the circumstances, including fees and costs of this action to the extent allowed by federal or state law.

Dated: August 11, 2025

Respectfully submitted,

BENJAMIN WAGNER, State Bar No. 163581

GIBSON, DUNN & CRUTCHER LLP
BENJAMIN WAGNER, State Bar No. 163581
310 University Avenue
Palo Alto, CA 94301-1744
Telephone: 650.849.5395
Facsimile: 640.849.5095
BWagner@gibsondunn.com
RACHEL S. BRASS, State Bar No. 219301
One Embarcadero Center, Suite 2600
San Francisco, CA 94111-3715
Telephone: 415.393.8293
Facsimile: 415.393.8306
RBrass@gibsondunn.com
STACIE B. FLETCHER (*pro hac vice* forthcoming)
MIGUEL A. ESTRADA (*pro hac vice* forthcoming)
VERONICA J.T. GOODSON, State Bar No. 314367
1700 M Street N.W.
Washington, D.C. 20036-4504
Telephone: 202.955.8500
Facsimile: 202.467.0539
SFletcher@gibsondunn.com

MEstrada@gibsondunn.com

VGoodson@gibsondunn.com

Attorneys for Plaintiff Daimler Truck North America LLC

/s/ Robin M. Hulshizer
(as authorized on Aug. 11, 2025)
ROBIN M. HULSHIZER, State Bar No. 158486

LATHAM & WATKINS LLP

ROBIN M. HULSHIZER, State Bar No. 158486
ARTHUR FOERSTER *(pro hac vice* forthcoming*)*
KEVIN M. JAKOPCHEK *(pro hac vice* forthcoming*)*

330 North Wabash Avenue, Suite 2800
Chicago, IL 60611
Telephone: 312.876.7700
Facsimile: 312.993.9767
Robin.hulshizer@lw.com
Arthur.foerster@lw.com
Kevin.jakopchek@lw.com

BELINDA S. LEE, State Bar No. 199635

505 Montgomery Street, Suite 2000
San Francisco, CA 94111-6538
Telephone: 415.391.0600
Facsimile: 415.395.8095
Belinda.lee@lw.com

Attorneys for Plaintiff International Motors, LLC

/s/ Eugene Illovsky
(as authorized on Aug. 11, 2025)
EUGENE ILLOVSKY, State Bar No. 117892

ILLOVSKY GATES & CALIA LLP

EUGENE ILLOVSKY, State Bar No. 117892
KEVIN CALIA, State Bar No. 227406

1611 Telegraph Avenue, Suite 806
Oakland, CA 94612
Eugene@illovskygates.com
Kevin@illovskygates.com

CLIFFORD CHANCE LLP

JOSEPH A. OSTOYICH *(pro hac vice* forthcoming*)*
WILLIAM LAVERY *(pro hac vice* forthcoming*)*
STEVE NICKELSBURG *(pro hac vice* forthcoming*)*
DANIELLE MORELLO *(pro hac vice* forthcoming*)*
DOROTHEA R. ALLOCCA *(pro hac vice* forthcoming*)*

2001 K Street NW
Washington, DC 20006-1001
Telephone: 202.253.9077
joseph.ostoyich@cliffordchance.com
william.lavery@cliffordchance.com
steve.nickelsburg@cliffordchance.com
danielle.morello@cliffordchance.com
dodi.allocca@cliffordchance.com

Attorneys for Plaintiff PACCAR Inc

/s/ Jeffrey M. Goldman
(as authorized on Aug. 11, 2025)
JEFFREY M. GOLDMAN, State Bar No. 233840

TROUTMAN PEPPER LOCKE LLP

JEFFREY M. GOLDMAN, State Bar No. 233840

350 South Grand Avenue, Suite 3400

Los Angeles, CA 90071
Telephone: 213.928.9800
Facsimile: 213.928.9850
jeffrey.goldman@troutman.com

T. SCOTT MILLS, State Bar No. 313554

600 Peachtree Street, N.E., Suite 3000
Atlanta, Georgia 30308-2305
Telephone: 404.885.3000
Facsimile: 404.885.3900
scott.mills@troutman.com

JEREMY HEEP *(pro hac vice* forthcoming*)*
DANIEL J. BOLAND *(pro hac vice* forthcoming*)*

3000 Two Logan Square
Eighteenth & Arch Streets
Philadelphia, PA 19103
Telephone: 215.981.4000
Facsimile: 215.981.4750
jeremy.heep@troutman.com
daniel.boland@troutman.com

Attorneys for Plaintiff Volvo Group North America LLC

EXHIBIT A

Agreement

The California Air Resources Board ("CARB"), the Truck and Engine Manufacturers Association ("EMA"), and the undersigned heavy-duty on-highway (HDOH) manufacturer members of EMA (the "OEMs") (collectively, the "Parties") recognizing the importance of: (i) preserving and protecting the environment; (ii) ensuring current and future CARB regulations affecting new HDOH vehicles and engines will achieve significant reductions of air pollutants from such vehicles and engines; (iii) promoting the transition of the HDOH commercial vehicle industry to zero -emissions; (iv) maintaining a strong and viable industry; and (v) providing certainty and stability for the HDOH industry and its customers, do hereby agree as follows:

1. CARB staff commits to initiate the actions set forth in Appendices A, B, and C and, where required for implementation, will recommend such actions to the CARB Board for its approval. The intent of the actions set forth in Appendix A is to revise the existing compliance flexibility provisions of CARB's Omnibus Regulation[1] by raising the existing caps on legacy engines and streamlining certain other provisions without increasing emissions compared to the preexisting Omnibus Regulation. The intent of the actions set forth in Appendix B is (i) to clarify which authorities and regulations remain status quo in California, (ii) to specify which regulations are covered by the OEMs' commitment in point 2 below, and (iii) to amend the Omnibus Regulation's 2027 and later model year requirements to align with the United States Environmental Protection Agency's (U.S. EPA) Clean Trucks Plan (CTP) Oxides of Nitrogen (NOx) Final Rule,[2] except for certain specified exceptions, subject to separate CARB provisions and control. Appendix C also describes actions related to CARB's Emission Warranty and Information Reporting (EWIR) program, CARB's Advanced Clean Trucks (ACT) regulation,[3] and certain other matters. In addition, Appendix C contains CARB's commitment on implementation flexibility for automatic recalls during the 2024 to 2034 model year timeframe for the EWIR and In Use Compliance Regulations, as well as ongoing efforts on ACT and Advanced Clean Fleet (ACF) Regulations.

---

[1] The Omnibus regulation is comprised of new California Code of Regulations (Cal. Code Regs.), title 13, sections 2139.5, and 2169.1 through 2169.8; amendments to, Cal. Code Regs., title 13, sections 1900, 1956.8, 1961.2, 1965, 1968.2, 1971.1, 1971.5, 2035, 2036, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2121, 2123, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2133, 2137, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2166, 2166.1, 2167, 2168, 2169, 2170, 2423, and 2485; and amendments to Cal. Code Regs., title 17, sections 95662 and 95663.

[2] U.S. EPA. Final Rule. Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards. Federal Register, Vol. 88, No. 15, January 24, 2023

[3] The ACT regulation is set forth in Cal. Code Regs., title 13, sections 1963, and 1963.1 through 1963.5. The ACT regulation also includes a one-time fleet reporting requirement for owners and brokers of vehicles exceeding 8500 lbs GVWR in Cal. Code Regs., title 13, sections 2012, 2012.1, and 2012.2.

2. The OEMs commit to meet, in California, the relevant provisions of the CARB regulations set forth in Appendices A and B, and any agreed upon modifications to such regulations as set forth in this Agreement, irrespective of the outcome of any litigation challenging the waivers or authorizations for those regulations or of CARB's overall authority to implement those regulations.

3. The Parties acknowledge and recognize that some states have adopted certain of the CARB regulations set forth in Appendix B pursuant to Section 177 of the federal Clean Air Act ("177 States") and that those or other states may act to adopt other CARB regulations set forth in Appendices A and B. The Parties have agreed as set forth in Appendix D to certain actions they mutually or separately will take with respect to current or future 177 States. The intent of the provisions set forth in Appendix D is that the Parties will work together cooperatively to resolve issues that may warrant regulatory amendments to CARB's regulations, and that they will actively promote the infrastructure development needed to support the successful implementation of CARB's ACT regulation. The principles set forth in Appendix D are further intended to memorialize the positions that EMA and the OEMs commit to take with respect to their advocacy in current or future 177 States.

4. EMA and the OEMs will not (i) challenge CARB's issuance of the regulations set forth in Appendix B; (ii) file a Petition for Review or otherwise challenge any U.S. EPA waiver or authorization granted for such regulations; (iii) file amicus briefs supporting challenges to such waivers or authorizations, or such regulations; or (iv) support stay motions or similar motions practice challenging such waiver or authorization decisions, or such regulations.

5. In recognition of the OEMs desire for regulatory leadtime and stability, CARB's Executive Officer will direct the CARB staff to propose, and recommend that the CARB Board adopt, minimum four (4) year leadtime and three (3) year stability periods for future criteria emissions regulations affecting new HDOH engines and vehicles. The Executive Officer's direction above also will apply to CARB's planned ACT 2 rulemaking. However, that direction will not apply to the implementation of the regulatory changes included in Appendices A and B.

6. The Parties acknowledge that it is important to implement the actions contemplated by this Agreement as soon as reasonably possible. CARB's Executive Officer will release a Notice of Public Comment Period to Consider Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation to amend the existing compliance flexibility provisions of the Omnibus regulation to raise legacy caps and streamline other provisions in Omnibus as described in Appendix A as soon as possible and no later than August 29, 2023. In addition, no later than sixty (60) days after signing this Agreement, CARB's Executive Officer will advise the CARB Board of his direction to the staff regarding leadtime and stability as set forth in Section 5 above and, no later than ninety (90) days after signing this Agreement, will inform the CARB Board of the balance of the provisions set forth in this Agreement. The Parties acknowledge that all applicable provisions of California's Administrative Procedures Act must be followed in implementing the terms of this Agreement. CARB staff will use its best efforts to commence the contemplated 2027 and later model year amendments to CARB's Omnibus regulations, as described in Section

1(iii) above, as soon as possible, with a workshop to be held no later than the first quarter of 2024 and a formal rulemaking notice released no later than the third quarter of 2025.

7. CARB will send a follow-up letter to the Petition for Reconsideration it filed with U.S. EPA regarding U.S. EPA's 2027 Low NOx rule informing U.S. EPA that CARB plans to harmonize with the U.S. EPA 2027 CTP NOx rule with the exceptions noted in Appendix B. CARB will not seek additional changes to U.S. EPA's 2027 Low NOx rule, provided the U.S. EPA does not make changes to its rule inconsistent with this Agreement.

8. The Parties acknowledge the efforts that have resulted in this Agreement and their respective commitments to follow through in implementing the Agreement.

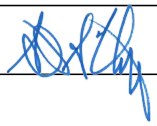
Signature pages to follow

California Air Resources Board

By: Steven S. Cliff, Ph.D.

Title: Executive Officer

Date: July 5, 2023

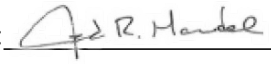
Signature: 

Truck and Engine Manufacturers Association

By: Jed R. Mandel

Title: President

Date: June 28, 2023

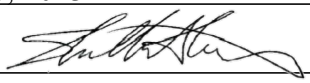
Signature: 

Cummins Inc.

By: Shelley Knust

Title: Vice President Product Compliance and Regulatory Affairs

Date: June 28, 2023

Signature: 

Daimler Truck North America By:

Sean Waters

Title: Vice President Product Compliance

Date: June 28, 2023

Signature: Sean Waters

General Motors Company

By: Hon. David Strickland

Title: Vice President Global Regulatory Affairs

Date: June 28, 2023

Signature: 

Hino Motors Limited, Inc.

By: Takashi Katou

Title: North American Manager - Regulation and Certification Div.

Date: 6/29, 2023

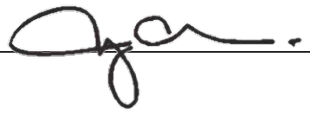
Signature: Takashi Katou

Isuzu Technical Center of America, Inc.

By: Jeffery A. Marsee

Title: Exec. Dir, Vehicle Compliance

Date: 6/30/2023

Signature: 

Navistar, Inc.

By: Michael Noonan

Title: Director - Certification and Compliance

Date: 06/28/23

Signature: Michael Noonan

PACCAR Inc

By: John Rich

Title: CTO

Date: 28 June 2023

Signature:

Stellantis N.V.

By: Thomas McCarthy

Title: SVP, Technical Safety & Regulatory Compliance

Date: June 29, 2023

Signature:

Volvo Group North America

By: Dawn D Fenton

Title: Vice President, Government Relations & Public Affairs

Date: June 28, 2023

Signature: Dawn D Fenton

Appendix A – Amendments to Omnibus Legacy Provisions in Title 13 California Code of Regulations (CCR) 1956.8 to Ease Transition

Each manufacturer must pick one option and cannot switch between options for the 2024-2026 model year (MY) period. The denominator for all percentages shown below includes total medium-duty diesel (MDD), light heavy-duty diesel (LHDD), medium heavy-duty diesel (MHDD), and heavy heavy-duty diesel (HHDD) California distribution of engine certified products. The denominator excludes chassis certified products.

Option 1

Applicable to all OEMs. The following caps would apply:
45 percent[1] legacy cap in 2024, 25 percent[1] legacy cap in 2025, 10 percent[1] legacy cap in 2026

Option 2

Only applicable to OEMs that make MHDD engines and heavy-duty diesel engines in another primary intended service class
MHDD – 60 percent[2] legacy cap in 2024, 60 percent[2] legacy cap in 2025, 0 percent legacy cap in 2026
Other service class (Total MD + LHDD + HHDD) – 15 percent[1] legacy cap in 2024, 8 percent[1] legacy cap in 2025, 0 percent legacy cap in 2026

To give certainty regarding what happens if legacy thresholds are exceeded, CARB has clarified the consequence if the legacy caps are exceeded, as detailed in footnotes 1 and 2.

---

[1] For the legacy percentage caps shown, the first number (e.g., 45 percent for Option 1 for 2024 MY) is a threshold. Deficits for legacy engine sales between 0 and the threshold of total heavy-duty diesel production volume would need to be offset at the nominal rate (i.e., 1 Mg NOx credits per 1 Mg excess NOx from a legacy engine). All deficits from sales between the threshold and 1 percent more than the threshold (e.g., between 45 and 46 percent for Option 1 for 2024 MY) would have to be offset at four times the nominal rate (i.e., 4 Mg NOx credits per 1 Mg excess NOx from a legacy engine). All sales volume above 1 percent more than the threshold (e.g., above 46 percent for Option 1 for 2024 MY) would be considered as non-compliant sales.

[2] For MHDD engine sales under option 2, the first number (e.g., 60 percent for 2024 MY) is a threshold. Deficits for legacy engine sales between 0 and the threshold of total heavy-duty diesel production volume would need to be offset at the nominal rate (i.e., 1 Mg NOx credits per 1 Mg excess NOx from a legacy engine). All deficits from sales between the threshold and 5 percent more than the threshold (e.g., between 60 and 65 percent for 2024 MY) would have to be offset at four times the nominal rate (i.e., 4 Mg [NOx credits per 1 Mg excess NOx from a legacy engine). All sales volume above 5 percent more than the threshold (e.g., above 65 percent for 2024 MY) would be considered as non-compliant sales. For example, a manufacturer uses option 2 and sells 100 total heavy-duty engines in 2024 MY. At the end of 2024 MY, the manufacturer determines that it has sold 70 legacy medium heavy-duty engines. The manufacturer must offset the emissions from 60 medium heavy-duty engines at the nominal rate. The manufacturer must offset the emissions for 5 medium heavy-duty engines (65-60=5) at four times the nominal rate. Finally, the manufacturer must also recall 5 medium heavy-duty engines (70-65=5).

Additional changes:

CARB commits that it will initiate rulemaking actions and present the following provisions through the public review process:

1. To extend the legacy engine provisions flexibility through 2026 MY (under option 1 only) to allow manufacturers to certify engines to the exhaust emissions standards for NOx and particulate matter (PM) specified in title 13, California Code of Regulations, section 1956.8(a)(2)(C)3, provided the manufacturers offset any NOx or PM deficits generated from this option.

2. To allow engine manufacturers in MY 2024 to certify legacy engines prior to certification of Omnibus-compliant engine families.

3. To allow manufacturers to offset any increases in NOx or PM emissions by undertaking projects targeted at California disadvantaged communities in the same model year that they utilize the proposed legacy engine provisions.

4. Manufacturers can carry over deficits from 2024 to 2025 MY and offset with HD-ZEP credits without any applicable multipliers.

CARB staff also commits to prepare the following Manufacturers Advisory Correspondence (MAC) documents in consultation with EMA and all member HDOH OEMs:

1. A MAC prescribing how to demonstrate legacy engine cap compliance (for example, via labeling data). CARB staff's intent is to be flexible regarding de minimus accidental leakage of non-legacy engines to California.

2. A MAC with further guidance on how to pursue projects targeted at California disadvantaged communities. Such projects may include infrastructure projects aimed at facilitating use of HD ZEVs.

Appendix B – CARB Truck Regulations Compliance and U.S. EPA Clean Trucks Plan Harmonization

CARB Carries Out Its Authority Per the Following:

1. California will maintain its certification program. That is, manufacturers will still be required to submit applications for certification including test data, certification documents, etc. to demonstrate compliance with applicable California requirements. CARB will independently evaluate whether to issue Executive Orders.

2. CARB is not committing to issue "deemed to comply certifications" based on U.S. EPA certifications.

3. CARB will maintain its On-Board Diagnostic (OBD) program, and manufacturers will need to meet CARB OBD requirements in order to be certified in California.

4. CARB will maintain its EWIR program but will implement the clarifications outlined in Appendix C of this agreement.

5. CARB will maintain its heavy-duty in-use compliance program for both diesel and Otto-cycle engines, including in-use testing conducted by manufacturers and in-use testing conducted by CARB. CARB will maintain its authority for all the elements pertaining to heavy-duty in-use requirements as described in the Omnibus regulation; however, CARB proposes to adopt the 2-Bin Moving Average Window (2B-MAW) Methodology, and the off-cycle standards and in-use duty cycle standards as shown below. In addition, as mentioned in Appendix C, CARB will use its discretion to not do automatic recalls at the required trigger points for the 2024--2034 model year engines but will take into consideration the newness of the technology and information submitted by manufacturers before making recall decisions, as well as U.S. EPA's recall decisions. CARB will also evaluate during the alignment rulemaking if it is warranted to align certain aspects, or holistically, to the U.S. EPA's In Use Compliance program.
6. CARB will maintain its mandatory Clean Idle Label requirement for California-certified engines but will propose to align with U.S. EPA's 10 grams per hour standard level.

The OEMs Commit to Meet CARB Truck Regulations

The OEMs commit to meet, in California, the requirements of the relevant regulations as specified below and any agreed upon modifications per this Agreement, regardless of the outcome of any litigation challenging the waivers/authorizations for those regulations, or CARB's overall authority to implement those regulations.

1. The Omnibus regulation,[1] as it existed on December 22, 2021, and the Standards and Test

[1] The Omnibus regulation is comprised of new title 13, California Code of Regulations (Cal. Code Regs.) sections 2139.5, and 2169.1 through 2169.8; amendments to title 13, Cal. Code Regs., sections 1900, 1956.8, 1961.2, 1965, 1968.2, 1971.1, 1971.5, 2035, 2036, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2121, 2123, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2133, 2137, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2166, 2166.1, 2167, 2168, 2169, 2170, 2423, and 2485; and amendments to title 17 Cal. Code Regs. sections 95662 and

procedures incorporated in the Omnibus regulation, as they existed on December 22, 2021. As specified above, CARB commits to initiate actions resulting in future amendments to the Omnibus regulation. Assuming those amendments are finalized, the OEMs agree to fully comply in California with the requirements of the Omnibus regulation and any standards and test procedures incorporated in the Omnibus regulation, as affected by such amendments.

2. The ACT regulation,[2] as it existed on March 15, 2021, and the 100 percent ZEV sales requirement set forth in Cal. Code Regs title 13, section 2016, as it existed on April 28, 2023. As specified above, CARB commits to initiate actions resulting in future amendments to the ACT regulation. Once those amendments are finalized, the OEMs agree to fully comply in California with the requirements of the ACT regulation and any standards and test procedures incorporated in the ACT regulation, as affected by such amendments.

3. The Zero Emission Airport Shuttle regulation,[3] as it existed on January 30, 2020.

4. The Zero Emission Powertrain Certification Procedure,[4] as it existed on January 21, 2020, and the Standards and Test procedures incorporated in the Zero Emission Powertrain Certification Procedure, as they existed on January 21, 2020, and

5. The 2018 HD Warranty Amendments,[5] as they existed on June 12, 2019, and the Standards and Test Procedures for 2004 and subsequent model year Heavy-Duty Diesel Engines and Vehicles, as amended April 18, 2019.

CARB Omnibus/U.S. EPA Clean Trucks Alignment and Exceptions

1. Revisions to the Temperature Adjustment & Compliance Allowance

As described in further detail below, CARB proposes to incorporate a modified version of the temperature adjustment function and the interim compliance allowance for a limited period of time.

95663.

[2] The ACT regulation is set forth in title 13, California Code of Regulations (Cal. Code Regs.), sections 1963, and 1963.1 through 1963.5. The ACT regulation also includes a one time fleet reporting requirement for owners and brokers of vehicles exceeding 8500 lbs GVWR in title 13, Cal. Code Regs., sections 2012, 2012.1, and 2012.2.

[3] The Zero Emission Airport Shuttle regulation is comprised of new sections 95690.1, 95690.2, 95690.3, 95690.4, 95690.5, 95690.6, 95690.7, and 95690.8, title 17, Cal. Code Regs.

[4] The Zero Emission Powertrain Certification Procedure is comprised of amendments to title 13, Cal. Code Regs., section 1956.8 and title 17, Cal. Code Regs., section 95663.

[5] The 2018 HD Warranty Amendments are comprised of amendments to title 13, California Code of Regulations (Cal. Code Regs.) sections 1956.8, 2035, 2036, and 2040.

A. Interim Compliance Allowance

CARB will propose to amend the Omnibus Regulation to include the following interim compliance allowance schedule:

- 15 mg/hp-hr applicable to MHDD and HHDD for MYs 2027-2034
- No interim compliance allowance for 2035 and subsequent MYs

The proposed interim compliance allowance would apply to both in-use duty cycle NOx emissions standards (FTP/RMC/LLC) as well as off-cycle NOx emissions standards.

B. Temperature Adjustment

For MYs 2027 to 2030, the in-use off-cycle standards for bins 1 and 2 would remain constant at temperatures above 20 ºC. The proposed temperature adjustment would apply to temperatures between 5 to 20 ºC.

For 2031 and subsequent MYs, the proposed temperature adjustment would only apply to the 0-5 ºC range.

2. Summary of Proposed CARB Emissions Standards for NOx

The CARB proposed FTP, RMC, LLC and idle NOx emissions standards are shown in Table 1 for **MHDD and HHDD** engines. As indicated earlier, the proposed interim compliance allowance would only apply to the 2027-2034 MY period.

LHDD engines - There is no applicable compliance allowance for 2027 and subsequent MYs, and CARB will propose to harmonize with the U.S. EPA duty cycle standards for the FTP/RMC (35 mg/hp-hr) and LLC (50 mg/hp-hr) NOx emissions standards.

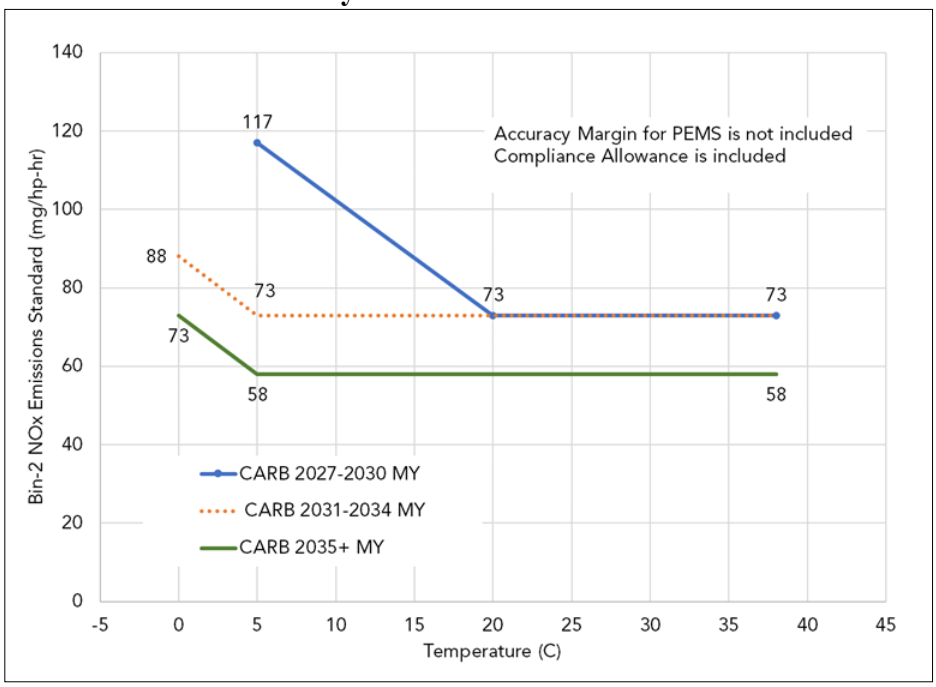
Table 1. CARB Proposed In-Use Duty Cycle NOx Emissions Standards[1]
For MHDD and HHDD Engines

MY	FTP/RMC (mg/hp-hr) *	LLC (mg/hp-hr) *	Idle (g/hr)
2027-2034 and 2024-2026 complying early with 2027	50	65	10
2035 & Subsequent	35	50	10

[1]Corresponding NOx family emission limits are calculated according to §1036.104(c)(3)
* Compliance allowance is included in the proposed NOx emissions standards

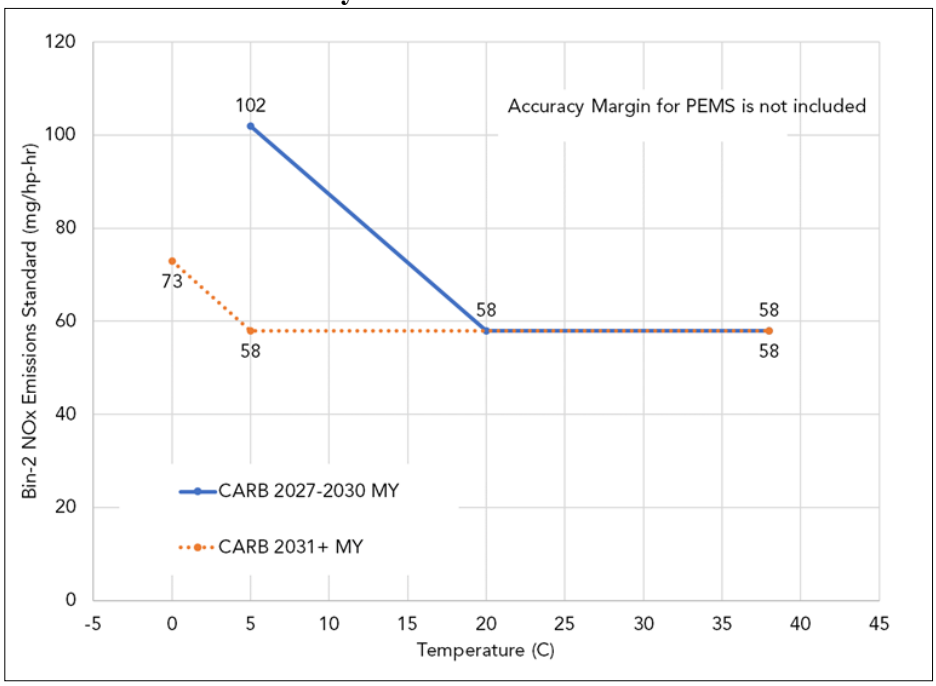
The proposed bins 1 and 2 off-cycle NOx emissions standards are shown in Figures 1 to 3 below. These figures include the impacts of both the temperature adjustment and the interim compliance allowance for various MYs.

Fig. 1 – CARB Proposal for MHDD & HHDD[1]
Bin-2 Off-Cycle NOx Emissions Standards



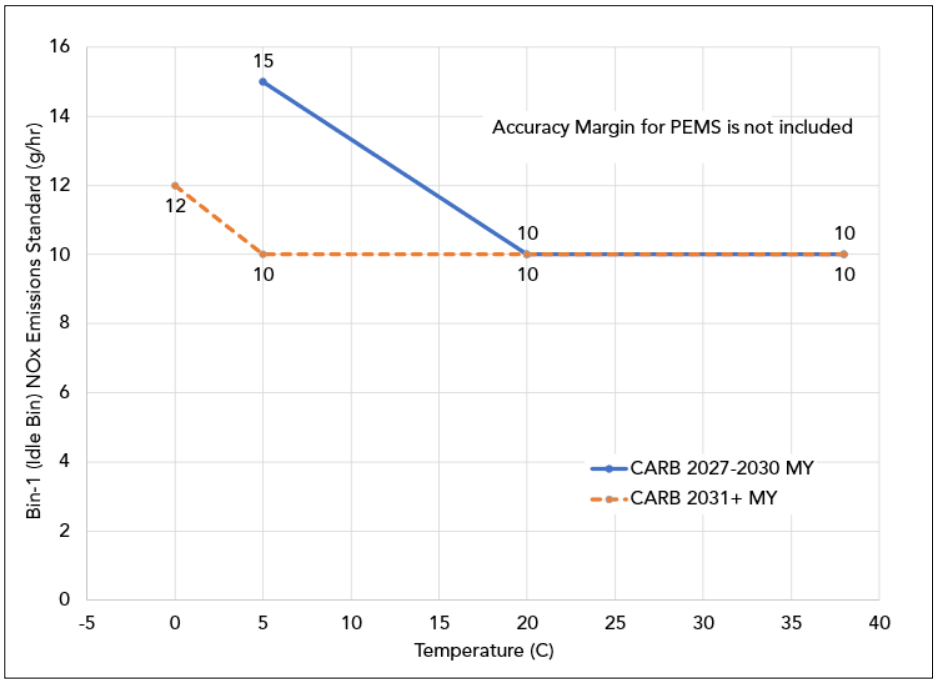
[1]Corresponding NOx family emission limits are calculated according to §1036.104(c)(3)

Fig. 2 – CARB Proposal for LHDD[1]
Bin-2 Off-Cycle NOx Emissions Standards



[1]Corresponding NOx family emission limits are calculated according to §1036.104(c)(3)

Fig. 3 – CARB Proposal for Bin-1 (Idle Bin) Off-Cycle NOx[1] Emissions Standards. Applicable to LHDD, MHDD, HHDD Engines



[1]Corresponding NOx family emission limits are calculated according to §1036.104(c)(3)

3. Confirmation of NOx Credits

CARB confirms that NOx credits generated under U.S. EPA CTP interim provisions, defined in §1036.150 and calculated according to §1036.705, may be used for 50-state engine certification for MY 2027 and later. CARB will propose and recommend that the Board adopt, starting in MY 2027, a single national ABT program for NOx standards for medium- and all classes of heavy-duty engines and vehicles, administered by U.S. EPA and CARB.

Appendix C – Emission Warranty Information Reporting, In Use Compliance, Advanced Clean Trucks and Advanced Clean Fleet Regulatory Implementation Efforts

A. Interpretation of 13 California Code of Regulations (CCR) 2143 for MYs 2024 to 2034 to Ease Transition

California Code of Regulations, Title 13, Section 2143 provides that CARB's Executive Officer is authorized to consider specified information in determining whether a recall of a vehicle or engine family is required:

"§ 2143. Failure Levels Triggering Recall and Corrective Action.

An engine family, test group, a vehicle family, a trailer family or a subgroup shall be subject to a recall when the number of failures of a specific emission-related component exceeds the failure level set forth below, unless the Executive Officer determines from the emission information report that a recall is unnecessary pursuant to the criteria set forth in Section 2148(a) and (b). … In the case of 2024-2026 MY California-certified heavy-duty diesel and Otto cycle engines, and heavy-duty vehicles, vehicles or engines in an engine family or test group shall be recalled or subject to other corrective action at the following failure levels: 4 percent or 25 (whichever is greater). In the case of 2027-2030 MY California certified heavy-duty diesel and Otto-cycle engines, and heavy-duty vehicles, vehicles or engines in an engine family or test group shall be recalled or subject to other corrective action at the following failure levels: 4 percent or 25 (whichever is greater) for the first five years of the warranty period, and 5 percent or 35 (whichever is greater) for years 6 through 7 of the warranty period and 7 percent or 50 for years 8 through 10 of the warranty period."

Recognizing the challenges associated with making engines and aftertreatment systems to a much stricter emissions standard, for MYs 2024 through 2034, CARB's Executive Officer confirms that he will objectively evaluate all information submitted by a manufacturer pursuant to 13 CCR sections 2146 and 2148 in assessing whether a recall is required if a vehicle or engine family triggers the recall criteria in 13 CCR sections 2143, 2167, 2168; under the manufacturer-run in-use testing provisions in 86.1915.B of the Diesel Test Procedures; or pursuant to in-use testing run by CARB in 13 CCR sections 2139.5 and 2140. CARB will also consider USEPA's recall decisions.

B. Advanced Clean Trucks/Advanced Clean Fleets

In a show of good faith, in calendar year 2023, CARB issued guidance on ACT credit reporting, clarifying that compliance determination and sales reporting requirements are both defined when vehicles are produced and delivered for sale in California. CARB staff will also propose to initiate a rulemaking action to that effect in calendar year 2024. Staff also will propose to modify section 1963.3(b) to lengthen the number of years a manufacturer has to make up a deficit from one year to three years.

- OEMs have requested a credit pooling concept for credits and deficits generated in states that have adopted the ACT regulation under section 177 of the federal Clean Air Act. In calendar year 2023, CARB will introduce the concept of pooling across states via a public workshop. CARB staff will work with OEMs and section 177 states in an effort to develop and implement a pooling structure for states that have adopted the ACT regulation to provide OEMs flexibility. To the degree new California rules are required, CARB staff will

propose the pooling concept to the Board as early as possible.

- In calendar year 2023, CARB will hold a public workshop to discuss the appropriate role of hydrogen-fueled internal combustion engines towards meeting the requirements of the ACT and ACF regulations.

Appendix D – Support for CARB's Regulations and for States that have Adopted CARB Regulations per S177 CAA

EMA and the OEMs have agreed to limit their advocacy, as set forth below, in states that either already have elected to adopt through Section 177 CARB's Omnibus or ACT rules, or that may choose to do so in the future.

A. In all such cases, EMA and the OEMs will not legally challenge or support others' legal challenges to any state's adoption of the regulations set forth in Appendices A and B.

B. The OEMs commit to comply with the 2027 and later model year provisions of the Omnibus regulations, as may be amended by Appendices A and B, adopted in any Section 177 state irrespective of the outcome of any litigation that has been filed or may be filed challenging the waivers or authorizations for those regulations or CARB's or any state's overall authority to implement those regulations.

C. EMA and the OEMs will support or not oppose the adoption of CARB's Omnibus regulations in any prospective Section 177 states provided the adoption is for 2027 and later model years.

D. EMA and the OEMs agree to be neutral (using the three-tier support, neutral, oppose system) in response to any prospective Section 177 states' proposals to consider adopting the Omnibus, as may be amended by Appendices A and B, regulation for 2024 through 2026 model years; provided, however, that EMA and the OEMs can provide written and verbal comments expressing concerns or issues of implementation, including engine availability for their fleet customers, and can provide other legal requirements of disclosure on business impacts.

E. EMA and the OEMs agree to be neutral (using the three-tier support, neutral, oppose system) in response to any prospective Section 177 States' proposals to consider adopting CARB's ACT regulations; provided, however, EMA and the OEMS can provide written and verbal comments expressing concerns or issues of implementation including infrastructure concerns and lack of complimentary policies.

F. The OEMs commit to put forth their best efforts to sell as many zero emission trucks as reasonably possible in every state that has or will adopt CARB's ACT regulations, even potentially exceeding any future U.S. EPA Phase 3 Greenhouse Gas requirements, irrespective of the outcome of any litigation that has been filed or may be filed challenging the waivers or authorizations for those regulations or CARB's or any state's overall authority to implement those regulations.

G. CARB, EMA and the OEMs mutually agree to work together to resolve any issues that may warrant regulatory amendments to either the Omnibus or ACT regulations and to actively promote further needed infrastructure development.

EXHIBIT B

U.S. Department of Justice

Environment and Natural Resources Division

Assistant Attorney General
950 Pennsylvania Avenue, N.W.
Washington, DC 20530-0001

Telephone (202) 514-2701
Facsimile (202) 514-0557

August 7, 2025

Sean Waters
Vice President Product Compliance
Daimler Truck North America

C/O Stacie B. Fletcher
Gibson, Dunn & Crutcher LLP
1700 M Street, N.W.
Washington, DC 20036
sfletcher@gibsondunn.com

Dear Mr. Waters:

The California Air Resources Board's (CARB's) so-called "Clean Truck Partnership" is an illegal attempt to enforce preempted state vehicle emission regulations. Section 209(a) of the Clean Air Act expressly preempts state regulation of vehicle emissions. 42 U.S.C. § 7543(a). The U.S. Environmental Protection Agency may grant a preemption waiver under certain narrow conditions. *Id.* § 7543(b). Absent a waiver, however, "[n]o State or political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicles engines." *Id.* § 7543(a).

The U.S. Environmental Protection Agency previously granted preemption waivers for two CARB regulations imposing emissions standards for heavy-duty trucks, known as the Advanced Clean Trucks (ACT) and Heavy-Duty Low NO_x Omnibus (Omnibus) regulations. *See* 88 Fed. Reg. 20688 (April 6, 2023) (ACT); 90 Fed. Reg. 643 (January 6, 2025) (Omnibus). A goal of CARB's regulations is to implement an electric vehicle mandate in the State of California and other states that adopt California's regulations.

In June and July 2025, Congress passed and President Trump signed joint resolutions of disapproval under the Congressional Review Act, invalidating EPA's preemption waivers for CARB's Omnibus and ACT regulations. As a result, section 209(a) of the Clean Air Act now preempts those regulations. Federal law thus prohibits CARB from adopting or attempting to enforce those regulations. And, of course, CARB may not circumvent federal law by disguising its enforcement of vehicle emissions regulations as an "agreement." This is particularly true where the purported agreement was entered into under threat of enforcement of the very regulations that federal law preempts. Nor may CARB attempt to enforce preempted regulations by delaying or threatening to withhold certification of new motor vehicles in California.

But CARB is using these unlawful means to enforce preempted regulations. Wielding the threat of enforcement of the onerous Omnibus and ACT regulations, CARB in July 2023 imposed on all manufacturers of internal-combustion, on-road heavy-duty trucks and engines the Clean Truck Partnership.[1] The Clean Truck Partnership allows manufacturers compliance flexibility under the preempted regulations, but it otherwise compels manufacturers to comply with CARB's ongoing enforcement of the Omnibus and ACT regulations, and to sell only zero-emission vehicles starting in 2035 according to the Advance Clean Fleets regulation (which never obtained a waiver and is therefore also preempted). The Clean Truck Partnership purports to compel this compliance regardless of whether EPA had granted any preemption waiver, regardless of the outcome of any litigation challenging the regulations or applicable waivers, and regardless of any litigation challenging "CARB's overall authority to implement these regulations." Accordingly, by its own terms, the Clean Truck Partnership is the regulatory mechanism by which CARB attempts to enforce preempted California emissions standards. This is an unlawful "attempt to enforce any standard relating to the control of emissions from new motor vehicles" in violation of the U.S. Constitution and section 209(a) of the Clean Air Act. 42 U.S.C. § 7543(a).

In short, because CARB's regulations are preempted, the Clean Truck Partnership is preempted and unlawful. You must therefore immediately cease and desist your compliance with both the Clean Truck Partnership and its preempted state vehicle emission regulations.

Sincerely,

Adam R.F. Gustafson
Acting Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

[1] Signatories include Cummins, Inc., Daimler Truck North America, Ford Motor Company, General Motors Company, Hino Motors Limited, Inc., Isuzu Technical Center of America, Inc., Navistar, Inc., PACCAR Inc., Stellantis N.V., Truck and Engine Manufacturers Association, and Volvo Group North America. *See* Clean Truck Partnership (2023).

EXHIBIT “G”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel

Standard Regulations

PRESS RELEASE

Justice Department Sues California to End Enforcement of Unlawful Emissions Standards for Trucks

Friday, August 15, 2025

For Immediate Release

Office of Public Affairs

Note: *View EDCA complaint here. View EDCA motion to intervene memo here.*

View NDIL complaint here. View NDIL motion to intervene memo here.

The Justice Department this week filed two complaints in federal courts against the California Air Resources Board (CARB) regarding the State's enforcement of preempted emissions standards through its so-called "Clean Truck Partnership" with heavy-duty truck and engine manufacturers. A parallel filing in the court of appeals addresses CARB's rules for light-duty vehicles, which are also preempted. These actions advance President Donald J. Trump's commitment to end the electric vehicle (EV) mandate, level the regulatory playing field, and promote consumer choice in motor vehicles.

The Clean Air Act preempts state regulation of vehicle emissions unless the Environmental Protection Agency (EPA) grants California a preemption waiver. Under the Biden administration, EPA granted preemption waivers for two CARB regulations imposing stringent emissions standards for heavy-duty trucks. The goal of CARB's regulations is to implement an EV mandate in California and in other states that adopt California's rules.

In June 2025, President Trump signed into law congressional resolutions under the Congressional Review Act, invalidating EPA's preemption waivers for CARB's heavy-duty truck regulations. Without these waivers, the Clean Air Act prohibits CARB from attempting to enforce those regulations. Yet, in an affront to the rule of law, CARB seeks to circumvent that prohibition by enforcing the preempted emissions standards through the Clean Truck Partnership. The Justice Department's Environment and

Natural Resources Division (ENRD) filed the complaints with motions to intervene in pending cases in the Eastern District of California and Northern District of Illinois.

“Agreement, contract, partnership, mandate — whatever California wants to call it, this unlawful action attempts to undermine federal law,” said Acting Assistant Attorney General Adam Gustafson of ENRD. “President Donald Trump and Congress have invalidated the Clean Air Act waivers that were the basis for California’s actions. CARB must respect the democratic process and stop enforcing unlawful standards.”

In related actions, ENRD moved to dismiss as moot two sets of cases in the U.S. Court of Appeals for the Ninth Circuit where industry groups had challenged EPA’s preemption waivers for cars. Those cases are now moot because Congress’s joint resolutions nullified the controversial preemption waivers.

ENRD is responsible for bringing cases against those who violate the nation’s environmental laws, as well as defending the federal government in litigation arising under a broad range of environmental statutes. The division is the nation’s environmental lawyer, and the largest environmental law firm in the country.

Chief of Staff and Senior General Counsel John Adams and Deputy Assistant Attorney General Robert Stander of ENRD filed the complaints, and attorneys with ENRD’s Appellate section are handling the cases in the Ninth Circuit. The EPA is a co-plaintiff in the filings. The U.S. Attorney’s Offices for the Northern District of Illinois and the Eastern District of California also provided assistance.

Complaint in Intervention - EDCA.pdf Memo Motion Intervene - EDCA.pdf

Complaint in Intervention - NDIL.pdf Memo Motion Intervene - NDIL.pdf

Updated August 15, 2025

Topic

ENVIRONMENT

Component

Environment and Natural Resources Division

Press Release Number: 25-853

EXHIBIT “H”

9/15/25 Letter Re: Comments on Proposed Amendments to the Advanced Clean Fleets and Low Carbon Fuel Standard Regulations

Advanced Clean Fleets Regulation

ENFORCEMENT NOTICE

December 28, 2023

[Updated 10/25/2024]

CARB's Advanced Clean Fleets Program Background

The Advanced Clean Fleets (ACF) regulation was adopted by California Air Resources Board (CARB) in April 2023 and was effective, as a matter of state law, on October 1, 2023. (California Code of Regulations, Title 13, Sections 2013, 2013.1, 2013.2, 2013.3, 2013.4,

2014,2014.1, 2014.2, 2014.3, 2015, 2015.1, 2015.2, 2015.3, 2015.4, 2015.5, 2015.6, and

2016). The ACF regulation complements CARB's recently adopted Advanced Clean Trucks regulation and will assist California in attaining the State's air quality and climate mitigation targets. The ACF regulation will help advance the introduction of vehicles that emit no criteria or GHG emissions, i.e., zero emission vehicles (ZEV) into California's truck and bus fleets requiring fleets that are well suited for electrification to transition to zero emission technologies with requirements to both phase-in the use of ZEVs for targeted fleets and requirements that manufacturers only sell ZEV trucks in California starting in the 2036 model year. The ACF regulation is expected to introduce 1,690,000 ZEVs into the California fleet by 2050. Additionally, the ACF regulation is expected to result in $26.5 billion in statewide health benefits from improved air quality and save fleet owners an estimated $48.0 billion through 2050.

Updates Regarding Enforcement of CARB's Advanced Clean Fleets Regulation

The purpose of this Enforcement Notice (Notice) is to notify the public that CARB has decided to exercise its enforcement discretion and will not take enforcement action as tothe drayage or high priority fleet reporting requirements or registration prohibitions until

U.S. EPA grants a preemption waiver applicable to those regulatory provisions ordetermines a waiver is not necessary.

CARB encourages fleets to voluntarily report and comply while the waiver request is pending and reserves all of its rights to enforce the ACF regulation in full for any period for which a waiver is granted or for which a waiver is determined to be unnecessary, including (but not limited to) the right to remove non-compliant vehicles added to fleets while the waiver request is pending. CARB will also accept requests for the extensions and exemptions available under the ACF regulation during this period.

How does this Notice apply to drayage trucks?

The drayage truck requirements deadline to report combustion-powered vehicles for drayage truck operation is December 31, 2023.

- CARB will not take enforcement action as to the drayage fleet reporting requirements or registration prohibitions until U.S. EPA grants a preemption waiver or determines a waiver is not necessary.
- If fleets add internal combustion engine vehicles to CARB's reporting system after December 31, 2023, those fleets should expect to receive the following notice from CARB:

"The Advanced Clean Fleets Regulation (Regulation) - Drayage truck requirements deadline to report combustion-powered vehicles for drayage truck operation was December 31, 2023. Any combustion-powered vehicles added to the reporting system that were not previously reported by December 31, 2023, may be restricted from performing drayage services once the U.S. Environmental Protection Agency grants California a waiver for the Regulation pursuant to section 209 of the federal Clean Air Act or determines that no such waiver is necessary."

How does this Notice apply to high priority fleets?

High priority and federal fleets requirements begin January 1, 2024.

- CARB will not take enforcement action as to the high priority fleet reporting requirements or registration prohibitions until U.S. EPA grants a preemption waiver or determines a waiver is not necessary.
- Reporting is optional until the waiver is granted or determined to be unnecessary; however, fleets will need to report their fleet as it existed on January 1, 2024, as wellas any removals or additions to the California fleet since January 1, 2024, once the waiver is granted or is determined to be unnecessary.
- If fleets add internal combustion engine vehicles to their California fleet after December 31, 2023, those fleets should expect to receive the following notice from CARB:

"Any combustion-powered vehicles added into service in California in high priority or federal fleets after December 31, 2023, may be restricted from operating once the U.S. Environmental Protection Agency grants California a waiver for the Regulation pursuant to section 209 of the federal Clean Air Act or determines no such waiver is necessary. Once the waiver is granted or determined to be unnecessary, fleets may need to remove any vehicle from the California fleet that was not eligible to be added to the California fleet after January 1, 2024, or the fleet must elect to comply with the Zero-Emission Vehicle (ZEV) Milestone Option instead of the Model Year Schedule."

How does this Notice apply to State and local government fleets?

State and local fleets requirements begin January 1, 2024.

- CARB is not required to request a waiver for the Regulation pursuant to section 209of the federal Clean Air Act to enforce as to State and local fleet.
- CARB will fully enforce all requirements including reporting and the ZEV purchasing requirements or the option to comply with the ZEV Milestone Option beginning January 1, 2024.

Updates Regarding Enforcement of CARB's Advanced Clean Fleets Regulation's Requirements Applicable to Controlling Parties [October 25, 2024]

How does this Notice apply to Controlling Parties?

Controlling parties are subject to the high-priority fleet requirements specified in California Code of Regulations (Cal. Code Regs.), title 13, sections 2015 through 2015.6, including reporting, recordkeeping, and registration prohibitions, beginning January 1, 2024.

The purpose of this Updated Enforcement Notice (Updated Notice) is to notify the public thatCARB has decided to exercise its enforcement discretion to not seek—and CARB will not ask the Attorney General to seek—monetary penalties against controlling parties for potential violations of the high-priority fleet requirements specified in California Code of Regulations, title 13, sections 2015 through 2015.6 that may occur during the time period between January 1, 2024, through 90 days after the date the U.S. EPA takes final action on California's request for a preemption waiver and authorization for the ACF Regulation.

CARB's enforcement discretion only applies if a controlling party is not otherwise subject to the high-priority fleet requirements specified in Cal. Code Regs., title 13, sections 2015(a)(1)(A)[1] or (a)(1)(B)[2] or (a)(1)(D)[3]—and only to the extent the controlling party (as definedin Cal. Code Regs., title 13, Section 2015(b)), does not own or manage the following vehicles:

A) Vehicles that are managed by the same directors, officers, managers, or distinct corporations that are controlled by the same majority shareholders;
B) Vehicles that are operated under the controlling party's state or federal operating authority or other registration;

[1] Is an entity that has $50 million or more in total gross annual revenues, including revenues from all subsidiaries, subdivisions, and branches, reported to the United States Internal Revenue Service, or its equivalent in another country in the calendar year immediately preceding the current calendar year.
[2] Is a fleet owner that owns, operates, or directs the operation of 50 or more vehicles in the total fleet,excluding light-duty package delivery vehicles.
[3] Is any federal government agency, or is a State or local government agency as defined in title 13,California Code of Regulations (CCR), section 2013(b) that has elected to comply with the ZEV Milestones Option specified in section 2015.2 pursuant to title 13, CCR, section 2013(e).

C) Vehicles owned by different entities but that are operated using common or shared resources to manage the day-to-day operations of the vehicles using the same motor carrier number, or that display the same name or logo; or
D) Vehicles owned or operated by federal, State, or local governmental agencies.

CARB reserves the right to seek civil penalties against controlling parties for above-mentioned violations alleged to occur 90 days after the date the U.S. EPA takes final action on California's request for a preemption waiver and authorization for the ACF regulation, regardless of when a contract to operate vehicles subject to this Updated Notice is executed.

However, CARB shall not in any event seek civil penalties against controlling parties for any violations of the high-priority fleet requirements specified in California Code of Regulations, title 13, sections 2015 through 2015.6 alleged to occur during the time period between January 1, 2024, through 90 days after the date of the U.S. EPA's determination on the ACF regulation preemption waiver.

For further information regarding this Notice, please contact Skott Wall at

skott.wall@arb.ca.gov and Adam Gomez at *adam.gomez@arb.ca.gov*.