



## California's ZEV and Emissions Truck Regulations Go Too Far Too Fast

January 17, 2024

**Issue:** Three new California Air Resources Board (CARB) mandates will have a major detrimental impact on truck dealerships and fleets in California as well as the national truck market.<sup>1</sup> Here is an overview of the mandates:

- **CARB Omnibus Low Nitrogen Oxide (NOx) Rule (Pending EPA Waiver)**: The proposed rule would drastically cut NOx emissions from conventional heavy-duty engines (the last 2% of NOx emissions) and lengthen the useful life and emissions warranty of medium- and heavy-duty diesel engines for use in vehicles with a gross vehicle weight rating (GVWR) greater than 10,000 pounds. Currently no manufacturers have an engine compliant with this rule.

While CARB's NOx rule, amended in July 2023, is finalized, it would ramp up stringency nearly three years ahead of EPA's burdensome NOx rule, and the two rules would sync up in 2027. (OEMs have already agreed to voluntarily comply with this rule despite not yet having the required waiver from the EPA.)

- **CARB Advanced Clean Trucks (ACT) Rule**: Requires manufacturers to sell an increasing percentage of zero-emission medium- and heavy-duty vehicles (ZEVs). By 2035, ZEV truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.<sup>2</sup>
- **CARB Advanced Clean Fleets (ACF) Rule**: Requires fleets operating in California to purchase ZEVs starting in 2024 and applies to fleets with 50 or more trucks (drayage fleets are included regardless of size), or \$50 million or more in annual revenue. ACF will also require fleets to purchase ZEVs for any new truck additions or opt-in to an increasingly stringent ZEV phase-in schedule but allows purchasers to continue to operate existing vehicles for their useful life. While CARB is not enforcing this rule pending a waiver from EPA, the agency appears to expect fleets to comply nonetheless. Fleets having difficulty accessing charging infrastructure may be eligible for an exemption.

### **Problems with CARB's 3 Regulations:**

- **Speed of Adoption**: The gradual banning of the diesel engine is happening faster than what should replace it – a technologically viable, affordable EV with accompanying charging infrastructure. As a result, California truck dealers will soon be unable to meet their customers' needs. For example, Ford, Ram, and Isuzu will not be selling specific models in California because of CARB's NOx mandate's stringent requirements.
- **A 65% to 90% Lower Diesel Product Availability** for California truck dealers is expected in 2024 vs. 2023. With lower product availability, customers will not have sufficient diesel product available for sale in California to meet the demands of normal replacement cycles.

<sup>1</sup> In November, CARB asked the EPA for a preemption waiver regarding the challenged provisions of the ACF rule. On December 28, CARB issued an [enforcement notice](#) encouraging fleets to voluntarily report and comply with ACF while the EPA makes its decision regarding the waiver.

<sup>2</sup> California Air Resources Board, [Advanced Clean Trucks Fact Sheet](#), (August 2021).



### **Problems with CARB's 3 Regulations (cont.):**

- **Affordability:** A typical electric Class 8 truck costs roughly \$400,000, and the average cost for a comparable diesel-powered vehicle is \$180,000. The price difference can be up to three times the amount for a diesel truck.<sup>3</sup> For the NOx rule, the rule is expected to add up to \$25,000 for a new Class 8 tractor.<sup>4</sup>
- **Lack of Charging:** Installing charging infrastructure in California and across the country is delayed. The wait for installing charging infrastructure is roughly a minimum of 18 months. Projections suggest that there will not be enough public charging infrastructure available to support EPA forecasted adoption rates.
- **Limited Range:** The average range for a Class 8 electric truck is about 150 miles.<sup>5</sup> This can make it challenging to meet the needs of the customer that can travel 1,500 miles without refueling a comparable diesel truck.
- **Rationing Diesel Trucks:** According to information shared by manufacturers, under the new rules, truck dealers will be required to sell five ZEVs for one CARB compliant 2024 diesel truck.
- **Older, Less Clean Trucks Remain on the Road Longer and Older, Used Trucks will be Purchased Instead of New Trucks:** Due to reduced availability of diesel trucks a pre-buy is not an option.

### **Potential Fallout:**

- **Job Loss:** CARB estimates that over 43,000 jobs in California will be eliminated due to their omnibus low NOx rule.<sup>6</sup>
- **Market Gaps:** The long-haul sleeper truck does not have a ZEV equivalent capable of replacing the range of a diesel. The long-haul customer is not subject to ACF enforcement for two years and will likely qualify for an exemption; however, there are minimal diesel trucks available in the marketplace to purchase.
- **Slowing Fleet Turnover:** Truck buyers who are worried about the performance and capabilities of the new ZEVs will likely hold onto their older trucks longer delaying both fleet turnover and achieving environmental goals.
- **Impacts Nationally:** Truck dealers outside of California are receiving limited ZEV inventory because all the ZEVs are being allocated to California. With manufacturers no longer selling certain non-electric vehicles in California, truck dealers are losing the ability to sell trucks that fit the needs of their customers.

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<sup>3</sup> Transport Topics, [Electric Truck Options Expand](#), (May 10, 2023).

<sup>4</sup> Heavy Duty Trucking, [Will 2027 Change Trucking's Technology Track?](#), (November 1, 2022).

<sup>5</sup> American Trucking Associations, [Regulators have put the cart in front of the horse](#), (April 19, 2023).

<sup>6</sup> California Air Resources Board, [Appendix C-3 Further Detail on Costs and Economic Analysis](#), p. 74, (June 2020).