



Truck Regulations Summary

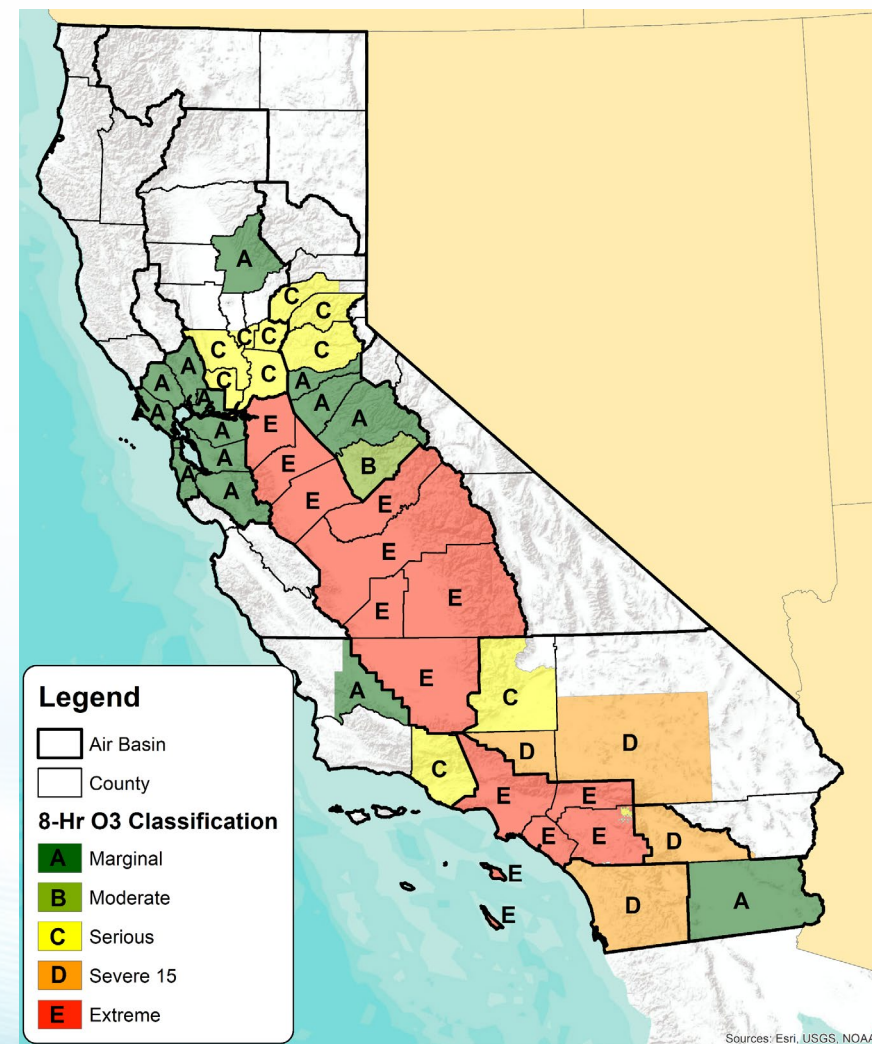
November 19, 2024

Overview

- California's Need for Emission Reductions
- Heavy-duty Omnibus Regulation
- Advanced Clean Trucks Regulation
- Product availability summary

California's Need for Emission Reductions

- More than half of Californians live in areas that exceed the most stringent 70 parts per billion (ppb) ozone standard, with many areas also exceeding the previous ozone standards of 75 and 80 ppb
 - 19 nonattainment areas in California
 - Attainment years 2020-2037
 - A disproportionate number of those most impacted by high ozone levels live in low-income and disadvantaged communities
- Key challenges:
 - South Coast ozone
 - San Joaquin Valley particulate matter (PM2.5)



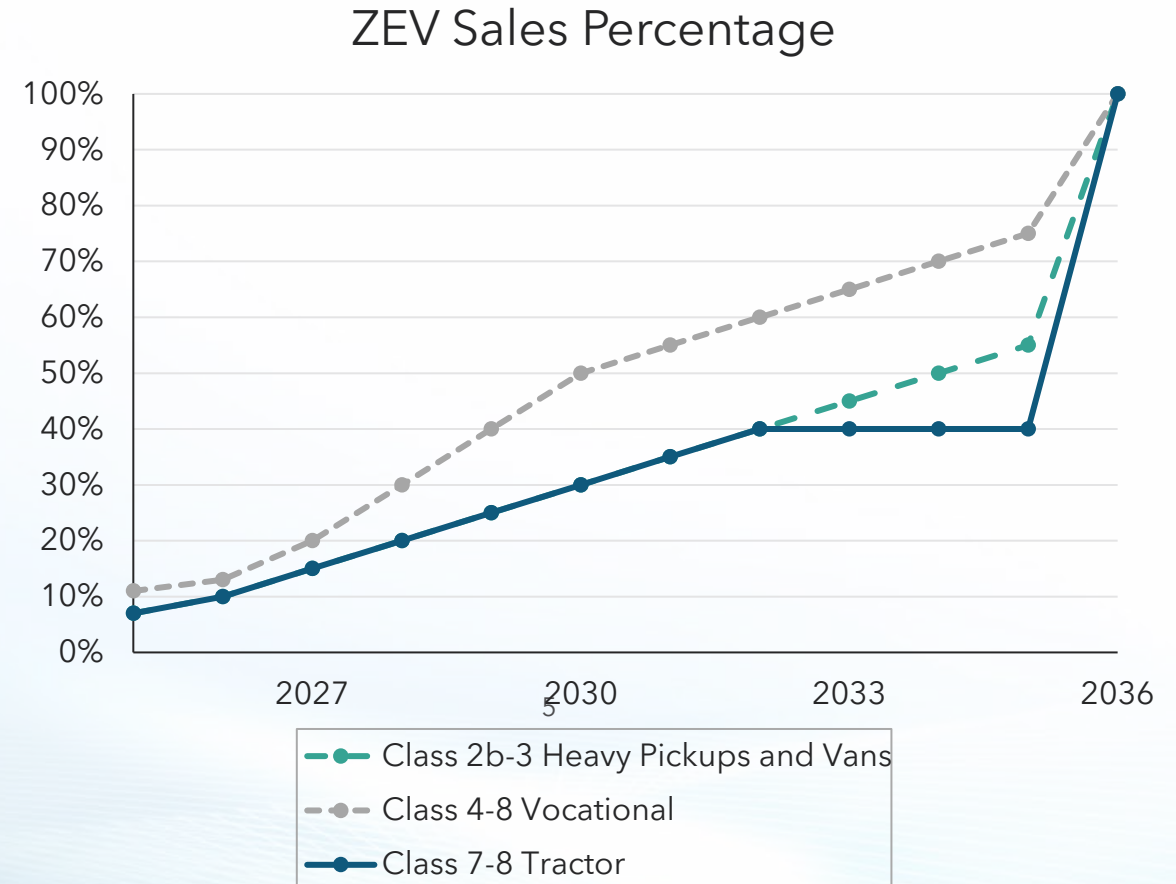
Heavy-duty Omnibus Regulation



- Requirement on engine manufacturers beginning 2024 model year
- More stringent NOx emissions standards for new medium- and heavy-duty engines
- Adopted by CARB in 2021, and amended in 2023 to address product availability issues
- Includes flexibility for engine manufacturers to build legacy engines (meeting current federal emissions standards) as a percentage of their production
- Manufacturers may meet the emissions standards using averaging, banking and trading

Advanced Clean Trucks (ACT) Regulation

- Requirement on major vehicle manufacturers beginning 2024
- Must sell zero-emission vehicles (ZEV) as a percentage of total sales*
- Adopted by CARB in June 2020
- Applies to new class 2b-8 vehicle sales
- Manufacturer flexibility



ACT Manufacturer Flexibility

- ZEV sales of any type counts towards total ZEV target
 - Tractor sales target must be met with ZEV tractor credits
- Credit for early ZEV sales
- 1 year to make-up deficits (extended to 3 years)
- Credit banking and trading between manufacturers
 - Option for secondary manufacturers to trade credits

ACT Surplus ZEV Credits from Early Sales

- Met statewide 2024 ZEV targets in 2022 – two years early
- Sales data for the 2023 MY shows
 - ~16% ZEV sales
 - >17,000 ZEV credits generated before rule start
- 2024 ZEV sales will increase ZEV credits more

[Advanced Clean Trucks Compliance and Incentives Update](#)
[ACT Credit Summary Through the 2023 Model Year](#)

Product Availability Memo Overview

- Memo to the Board regarding zero-emission truck pricing and product availability posted September 25, 2024
 - Result of 40+ meetings with stakeholders, fleets, and dealers
 - All diesel heavy-duty vehicles in Class 4 and above are affected
 - Availability for 2024 MY are not caused by the ACT regulation
 - Several contributing factors include manufacturer decisions surrounding the Omnibus regulation, supply chain issues, nationwide downturn in market, and more

<https://ww2.arb.ca.gov/resources/documents/memo-board-subject-california-truck-availability-analysis>

Solutions Addressing Availability Concerns

- Actions CARB staff are taking
 - Omnibus legacy engine cap enforcement discretion to allow additional medium heavy-duty engine sales
 - ACT amendments
 - Secondary manufacturers can trade credits
 - Deficit make-up period extended from 1 to 3 years
 - Cleanest heavy heavy-duty engines do not generate ACT deficits for 2026 MY
- Actions manufacturers are taking
 - New Omnibus-compliant engines recently certified
 - Cummins mitigation plan to offset legacy engine emissions

Backup slides

Clean Truck Partnership

- CARB agrees to align with 2027 EPA NOx standards, provide flexibility and lead time
- Manufacturers agree to comply with specified CARB truck regulations regardless of litigation outcomes
- Includes a commitment to comply with 100% zero-emission (ZE) sales starting model year 2036

