CARB Update
for
R2C2
Lunch & Learn

Presented by
Sean Edgar
December 6, 2024



Overview (From a Regulatory Geek View)

- Internal Combustion Engine Offerings Are Changing in 2024-2027 (CARB "Omnibus")
- Update on California Air Resources Board (CARB)
 Advanced Clean Trucks ("ACT") and Advanced
 Fleets Rule ("ACF")
- Perspective from R2C2 Associate Ashley Porter from TEC Equipment
- Answer your questions

Governor Newsom's Executive Order (2020)



Full transition to

ZEV short-haul/drayage trucks by 2035





Full transition to ZEV buses & heavy-duty long-haul trucks by 2045*





ZE off-road equipment
by 2035*

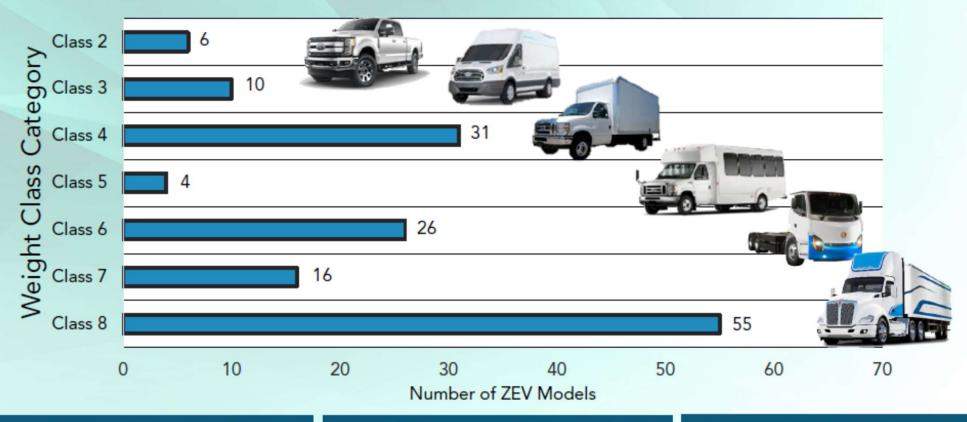
*where feasible

Lower Combustion Truck Standards

- Criteria pollutants (e.g. N0x & particulate matter)
 - Existing diesel trucks already upgraded to 2010 engines (CARB Truck & Bus Regulation)
 - Heavy-duty Omnibus regulation begins 2024 model year
 - Engine standards, test procedures and other controls
 - Averaging, banking, and trading program
- "Clean Truck Check"/Heavy-duty Inspection and Maintenance Regulation
- Greenhouse gas emissions
 - Phase 1, Phase 2 and Phase 3 Greenhouse Gas Standards (EPA)
 - CARB's Low Carbon Fuel Standard lowers carbon intensity of transportation fuels (11/8/24 hearing)

CARB'S ACT Requires Manufacturing of Zero Emission Truck Models (>8,500 lbs GVWR)

ZEV Models in US



135 models already delivered to fleets

148 different models available to be ordered/pre-ordered

More that 500 ZEV models available worldwide



CARB's ACF & High Priority Fleets

Affected businesses

Fleets with 50+ vehicles, including common ownership and control

Fleets with >\$50 million in annual revenue

Federal government fleets

Entities that hire or dispatch fleets

Affected vehicles

Class 2b-8 vehicles

Off-road yard tractors

Light-duty delivery vehicles











Option 1: Model Year Schedule

Legacy Truck	18 years			
Engine Year				
2010	2028			
2011	2029			
2012	2030			
2013	2031			
2014	2032			
2015	2033			
2016	2034			
2017	2035			
2018	2036			
2019	2037			
2020	2038			
2021	2039			
2022	2040			
2023	2041			
2024	2042			

- California fleet
 - All additions must be ZEVs
 - Legacy trucks removed after end of useful life
- Tractors
 - Earlier of 18 years or
 - End of year when odometer exceeds 800,000 miles
 - No less than 13 years
- Yard trucks and all other vehicles
 - 18 years

Option 2: ZEV Milestone Phase-in

- Open to High Priority fleets
- Must meet ZEV milestones as a percent of total fleet
- Flexibility to add new ICE vehicles that are California certified or used ICE vehicles with 2010 or newer model year

Zero-Emission Fleet Percentage		25%	50%	75%	100%
Group 1: <u>Box trucks</u> , vans, 2-axle buses, yard trucks, light-duty package delivery vehicles	2025	2028	2031	2033	2035
Group 2: Work trucks, <u>day cab tractors</u> , 3-axle buses	2027	2030	2033	2036	2039
Group 3: Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042

Work truck means any single-unit truck that is not a box truck, van, bus, or specialty vehicle

USEPA Waiver/Federal Clean Air Act

- CARB is required to obtain permission from the USEPA to enforce state mobile source rules ("Waivers")
- There are eight waivers currently awaiting action by USEPA
- ACF and Omnibus require a waiver
- Other states can "opt-in" to "identical" standards after federal waiver approval
- The outgoing Biden Administration may take action on these and clear the way for enforcement in CA and "opt-in" by like minded states

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California Truck Regulations Travel:

Section 177 of the Clean Air Act allows states to adopt California motor vehicle standards

Adopted CARB Regulations

Omnibus (IC Engines) - OR, WA, MA

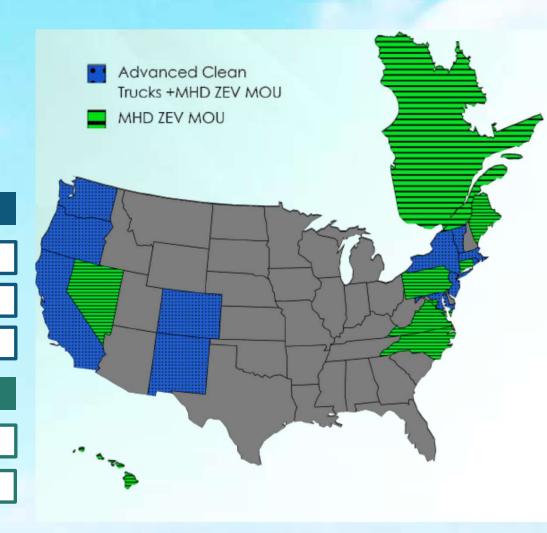
Emissions Warranty - OR & NJ

Advanced Clean Trucks - 10 states

Medium- Heavy-duty ZEV Commitments

17 states and DC

Province of Quebec, Canada



Ashley Porter

TRUCK DEALER'S VIEWPOINT

Resources

- 1. CARB ACF Language/Fact Sheets: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets
- CARB ACF Enforcement Notice: https://ww2.arb.ca.gov/sites/default/files/2023-12/231228acfnotice_ADA.pdf
- 3. CARB "Clean Truck Check" Information: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program
- 4. CleanFleets.net Services: https://cleanfleets.net/#home

Contact Information

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