



Advanced Clean Fleets (ACF) Regulation Overview

San Diego Community Steering Committee

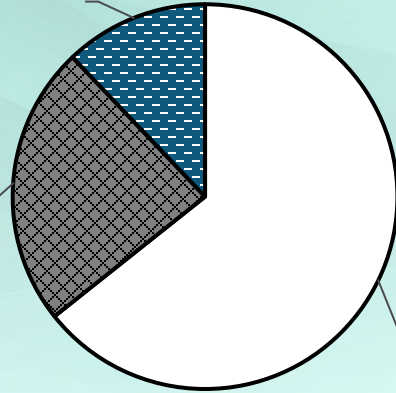
June 2024

Biggest Trucks Have Highest Emissions

Daily Truck Population



Class 7-8 Tractors
219,000 (12%)



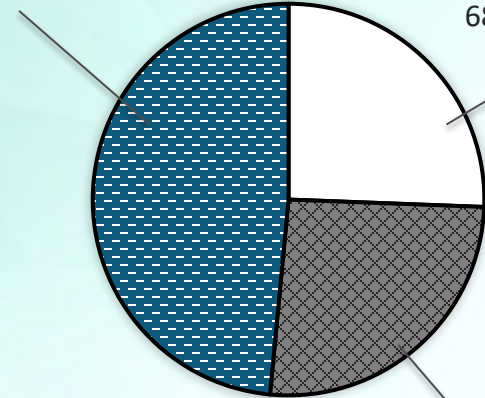
Class 4-8 Straight
Trucks and Buses
427,000 (24%)



Class 2b-3 Trucks and
Vans
1,164,000 (64%)

Daily NOx Emission

Class 7-8 Tractors
129.7 tpd (48%)



Class 2b-3 Trucks
and Vans
68.5 tpd (26%)

Class 4-8
Straight
Trucks and
Buses
69.3 tpd...

Source: California Air Resources Board (CARB) Emissions Inventory EMFAC2021, (<https://arb.ca.gov/emfac/>) Calendar Year 2021, including California International Registration Plan (IRP) and out-of-state IRP trucks; excludes motor homes, transit 2 buses, and school buses.

Measures to Clean Up Heavy-Duty Vehicles



2018
Innovative Clean
Transit



2020
Advanced
Clean Trucks



2021
Heavy-Duty
Inspection and
Maintenance



Future
Zero-Emission
Truck Measure



2019
Zero Emission Airport
Shuttle



2020
Heavy-Duty
Omnibus

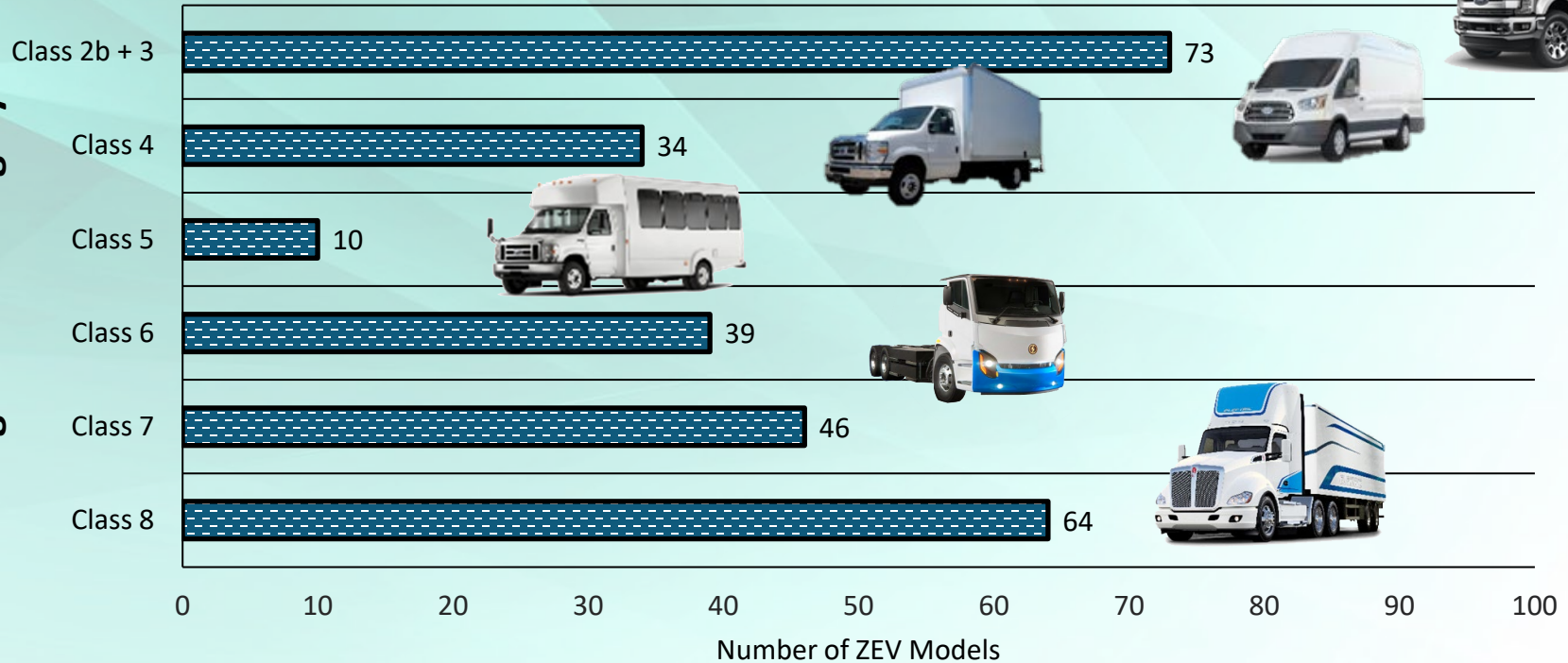


2023
Advanced
Clean Fleets



ZEV Models Certified for Sale in CA

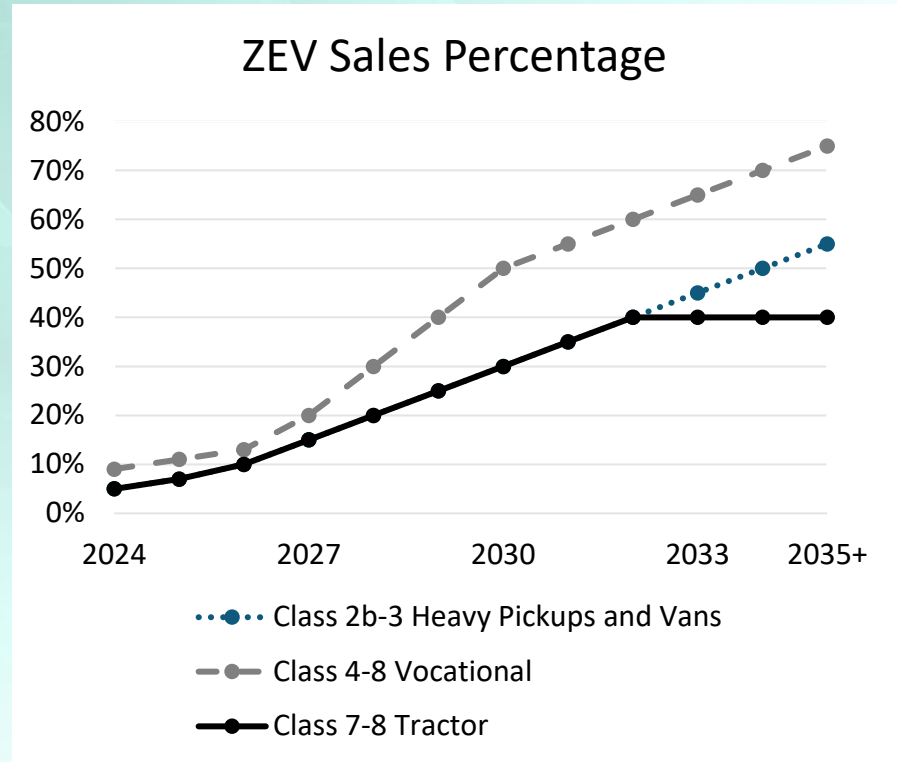
Weight Class Category



266 ZEV models certified for sale in California as of June 2024

Advanced Clean Trucks Regulation

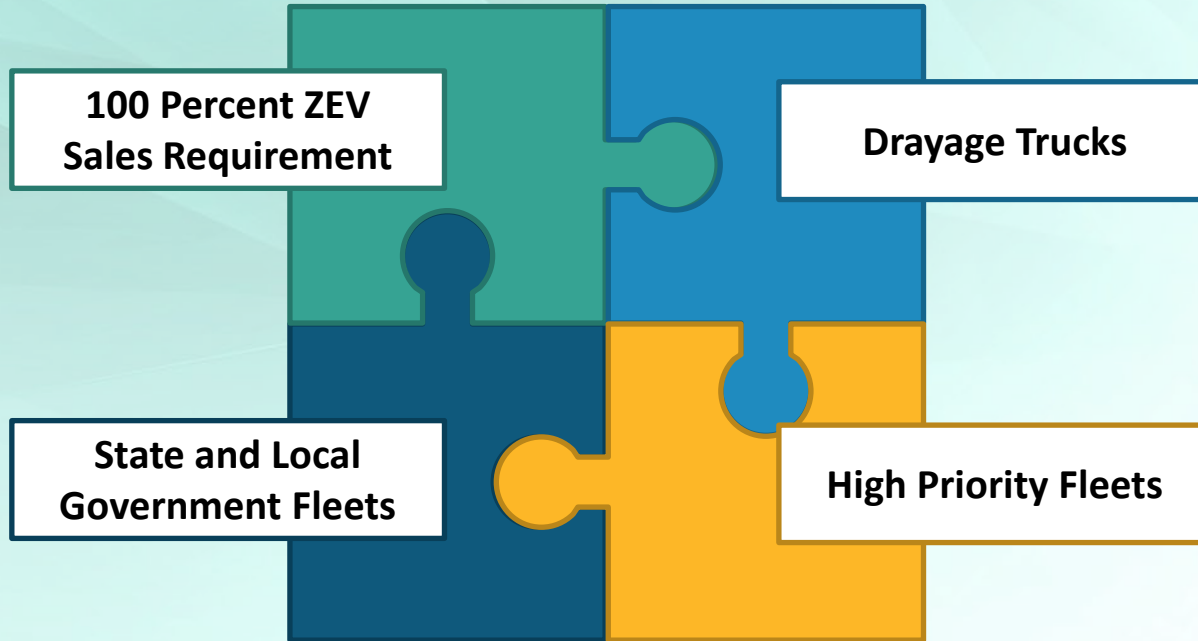
- Manufacturers to sell ZEVs in all vehicle classes as a percentage of total sales
- Credit for pre-2024 sales
- 320,000 ZE trucks to California by 2035





Regulation Summary

Advanced Clean Fleets Regulation Components



100 Percent ZEV Sales Requirement

Starting 2036, all Class 2b-8 vehicles sold into California must be ZEVs

- Provides certainty to the market and supply chain for manufacturers, fleets, infrastructure providers, service technicians, partner agencies, and local governments
- Expands market choice

High Priority and Federal 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



Model Year Schedule Summary

January 2024

Registration required for legacy trucks

January 1, 2024

Newly added trucks must be a ZEV or NZEV*

January 2025

Must annually report mileage for tractors over 12 years

January 1, 2025

ICE vehicles removed after useful life exceeded

- Legacy trucks may operate until the end of their useful life
- May use certain exemptions and extensions
- ICE vehicle removals begin January 2025

* NZEV - A near-zero-emission vehicle is a plug-in hybrid which can achieve a minimum all-electric range.



Model Year Schedule Example

| Legacy Truck Engine Year | 18 years |
|--------------------------|----------|
| 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

Optional ZEV Milestone Phase-in

- Open to High Priority and State and Local Government fleets
- Must meet ZEV milestones as a percent of total fleet
- Flexibility to add new or used ICE vehicles meeting cleanest engine requirements

| Zero-Emission Fleet Percentage | 10% | 25% | 50% | 75% | 100% |
|--|------|------|------|------|------|
| Group 1: Box trucks, vans, 2-axle buses, yard trucks, light-duty package delivery vehicles | 2025 | 2028 | 2031 | 2033 | 2035 |
| Group 2: Work trucks, day cab tractors, 3-axle buses | 2027 | 2030 | 2033 | 2036 | 2039 |
| Group 3: Sleeper cab tractors and specialty vehicles | 2030 | 2033 | 2036 | 2039 | 2042 |

Example 100 Truck Fleet

| Vehicle Type | # of Vehicles | ZEVs in 2025 | ZEVs in 2029 | ZEVs in 2033 | ZEVs in 2037 | ZEVs in 2041 | ZEVs in 2045 |
|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Box trucks, vans, two-axle buses, yard tractors, light-duty delivery vehicles  | 60 | 6 (10%) | 15 (25%) | 45 (75%) | 60 (100%) | 60 (100%) | 60 (100%) |
| Work trucks, day cab tractors, pickup trucks, three-axle buses  | 20 | 0 | 2 (10%) | 10 (50%) | 15 (75%) | 20 (100%) | 20 (100%) |
| Sleeper cab tractors and Class 8 specialty vehicles  | 20 | 0 | 0 | 5 (25%) | 10 (50%) | 15 (75%) | 20 (100%) |
| ZEV Milestones | 100 | 6 | 17 | 60 | 85 | 95 | 100 |

Drayage Trucks Requirements

Applies to Class 7-8 on-road trucks operating at California's seaports and intermodal railyards

December 31, 2023

Registration required for legacy trucks

January 1, 2024

Newly added drayage trucks must be ZEVs

January 1, 2025

Must annually report mileage for trucks over 12 years

January 1, 2035

All drayage trucks must be ZEVs

- Legacy trucks may operate until the end of their useful life
- Must visit a regulated seaport or railyard at least once a year
- May use limited extensions

State and Local Government Requirements

2024-2026

January 1, 2027

50 percent of purchases must be ZEV or NZEV

All purchases must be ZEV or NZEV

- Agencies in designated counties and divisions with 10 or fewer trucks exempt until 2027
- May use exemptions and extensions



Provisions Summary

| Provision | Summary |
|-----------------------------------|--|
| Vehicle Delivery Delay Extension | Remain compliant if ZEV order delayed |
| Infrastructure Delay Extension | Up to 5 years for onsite ZEV infrastructure delays |
| ZEV Purchase Exemption | Can buy ICE vehicle from CARB list or apply if not available in configuration needed |
| Daily Usage Exemption | Can buy ICE vehicle if mileage or hours of ZEV not suitable for placement in the fleet |
| Mutual Aid Assistance | Reserve 25% of fleet for use in mutual aid agreements |
| Waste and Wastewater Fleets | More time for CNG trucks supporting waste diversion and biomethane production |
| Rental Vehicle Provision | Flexibility to address transient rental fleet vehicles |
| Five-Day Pass | Temporary pass to operate non-compliant trucks up to 5 days per year |
| Non-Repairable Vehicle | Flexibility to purchase used replacement ICE vehicle in case of accident |
| Backup Vehicle Exemption | Excludes vehicle operated less than 1000 miles per year |
| Intermittent Snow Removal Vehicle | May purchase ICE vehicles until 2030 |
| Transit Agency Exemption | Excludes transit agencies and their maintenance vehicles until 2030 |

Regulation Summary

- Requirements phase-in ZEVs over next 10 to 20 years
- Existing vehicles can operate their full useful life
- Public and high priority fleets can use ZEV Milestones option schedule based on ZEV suitability
- NZEV count same as ZEVs until 2035 (except for drayage)
- Various provisions to address issues as needed

Enforcement Notice

- On December 28, 2023, CARB issued an enforcement notice for ACF
 - CARB will not take enforcement action on the drayage or high priority fleet reporting requirements or registration prohibitions until U.S. EPA grants a preemption waiver or determines 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 determined to be unnecessary
 - CARB will accept requests for the extensions and exemptions available under the ACF regulation during this period
- 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 after January 1, 2024



Next Steps

Infrastructure Coordination

- Agency principles of coordination and cooperation:
 - Ensure equity
 - Communication
 - Share data and analyses
 - Joint stakeholder engagement
 - Joint planning and solicitations



CalSTA

Caltrans

DGS
GENERAL SERVICES

Additional Resources

- ACF website:
arb.ca.gov/our-work/programs/advanced-clean-fleets
 - FAQs
 - Key meetings and events
 - Outreach Implementation Group (6/26)
 - ACF High-Priority Fleets Q&A (6/20)
 - Subscribe to notifications
- ZEV Truckstop: arb.ca.gov/zevtruckstop
- Email: zevfleet@arb.ca.gov
- Hotline: 1-866-634-3735