



Advanced Clean Fleets (ACF) Regulation Overview

October 18, 2023

Introduction

- Welcome
- Purpose and focus
- Today's format
- Zoom instructions
- Zoom survey

Outline for Today

- Air Quality, Background, Vehicles
- Drayage Fleets
- High Priority Fleets
- State and Local Government
- Model Year, Milestones Schedule
- Extensions & Exemptions
- Reporting & Recordkeeping
- Resources, Wrap-up

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

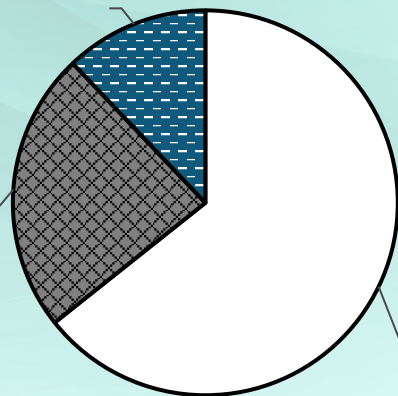


Biggest Trucks Have Highest Emissions

Daily Truck Population



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



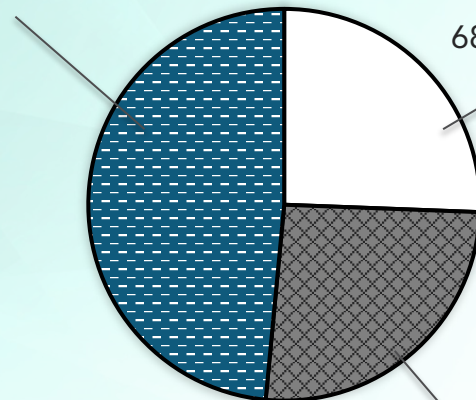
Class 4-8 Straight
Trucks and Buses
427,000 (24%)



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

Daily NOx Emission

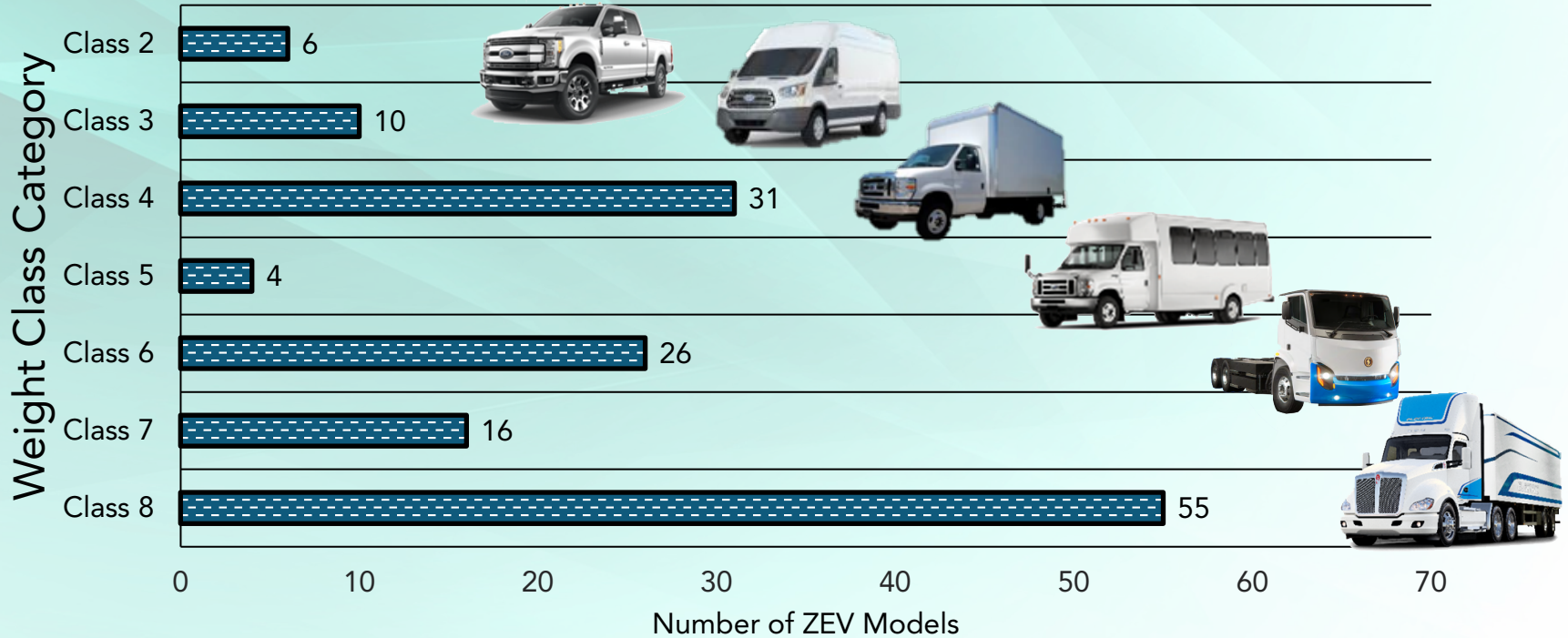
Class 7-8
Tractors
129.7 tpd (48%)



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

Class 4-8
Straight
Trucks and
Buses
69.3 tpd
(26%)

ZEV Models in United States



135 models already delivered to fleets, 148 different models are available to be ordered/pre-ordered,

Vehicle Resources

californiahvip.org/vehiclecatalog

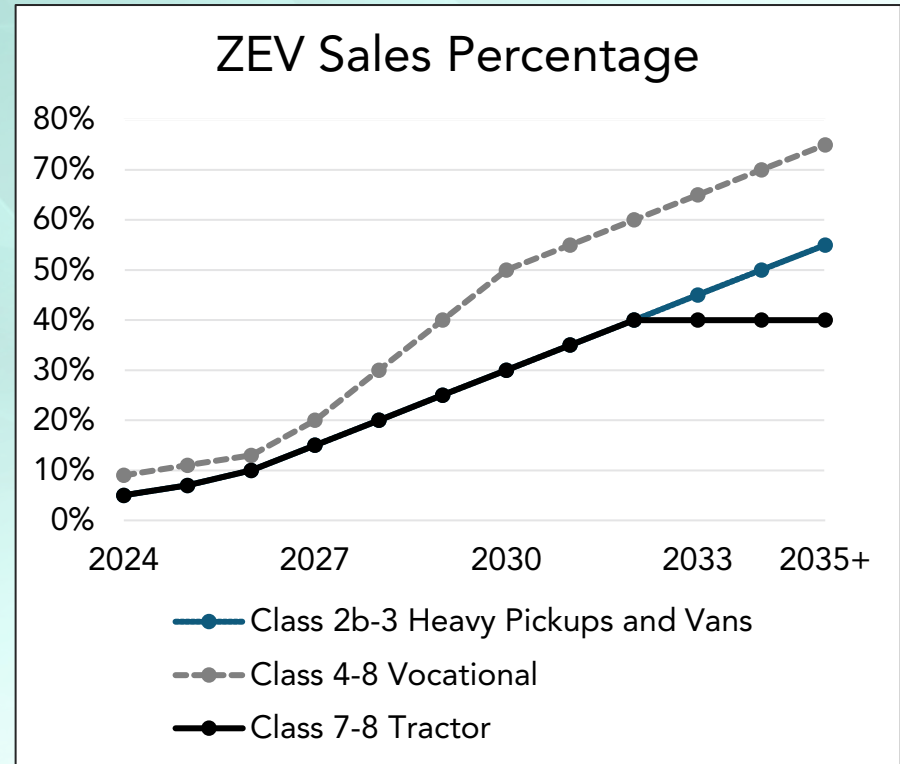
globaldrivetozero.org/tools/zeti

The screenshot shows the California HVIP website's vehicle catalog. At the top, there are navigation tabs: Funding, Vehicles (selected), Purchasers, Sellers, and News & Events. The main heading is "HVIP Eligible Vehicles". Below this, there is a sub-heading "Start by selecting a vehicle type below. Then select the vehicle(s) you are interested in to see the list of dealers and manufacturers who sell them." There are two buttons: "Approved Dealers" and "Archived Vehicles". The vehicle types are displayed in a grid of 10 categories, each with an icon and a label: 2b, ePTO, Heavy-Duty Bus, Medium-Duty Bus, Refuse, School Bus, Step & Panel Van, Straight Truck, Tractor, and All vehicles.

The screenshot shows the Global Drive to Zero Zeti tool interface. At the top, there is a navigation bar with links: HOME, MOU, ABOUT, NEWSROOM, PUBLICATIONS, EVENTS, TOOLS. The main heading is "ZERO-EMISSION TECHNOLOGY INVENTORY". Below this, there are regional filters: US & Canada (selected), Europe, China, India, Mexico, South America, and Oceania. There are two main selection sections: "SELECT FUEL TYPE" and "SELECT AVAILABILITY". The "SELECT FUEL TYPE" section has two options: Electric (selected) and Fuel Cell. The "SELECT AVAILABILITY" section has a timeline with three points: Available (selected), 2023, and 2024. Below these are two more sections: "SELECT A VEHICLE PLATFORM" and "SELECT A VEHICLE MANUFACTURER". The "SELECT A VEHICLE PLATFORM" section has 10 options: Coach Bus, School Bus, Shuttle Bus, Transit Bus, Cargo Van, MD Step Van, MD Truck, HD Truck, Yard Tractor, and Other. The "SELECT A VEHICLE MANUFACTURER" section has a grid of 40 manufacturer logos, including A, Affinity, BYD, CEV, ERM, ETV, GM, Honda, Hyundai, IONIQ, JAC, KIA, LONSTAR, MAZDA, Mercedes-Benz, NISSAN, ORANGE, PACCAR, PROTERIA, RIVIAN, SEA, TATA, TESLA, TOYOTA, and UES.

Advanced Clean Trucks Regulation

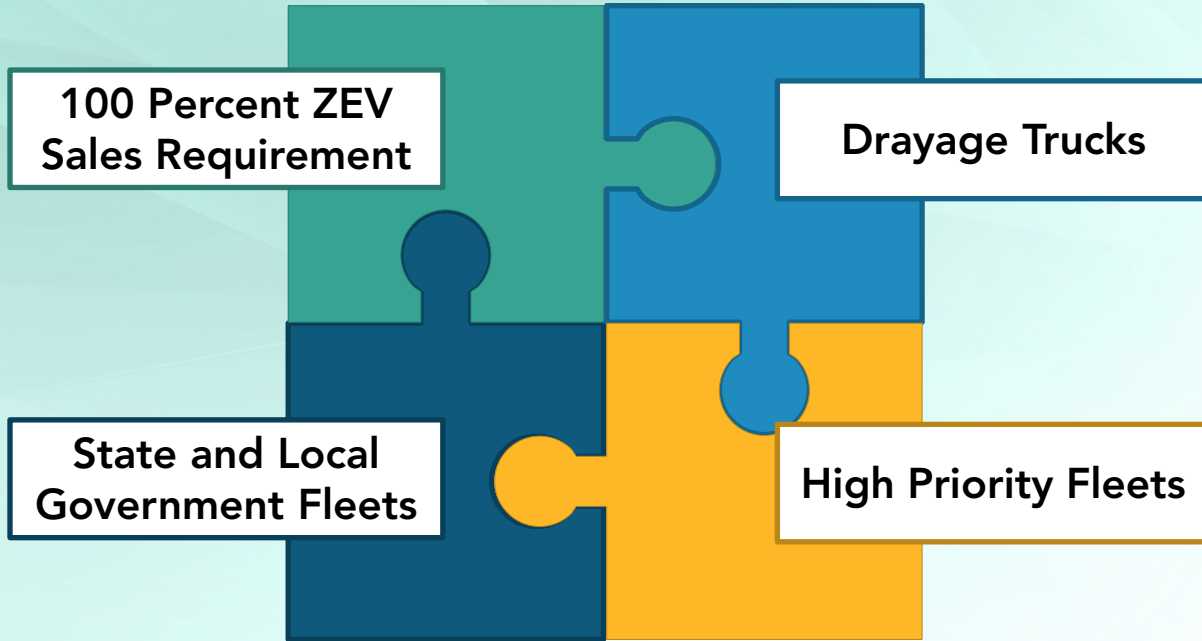
- Manufacturers to sell ZEVs in all vehicle classes as a percentage of total sales*
- Credit for pre-2024 sales
- 320,000 ZE trucks to California by 2035
- Board resolution setting 2035, 2040, and 2045 fleet goals





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

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

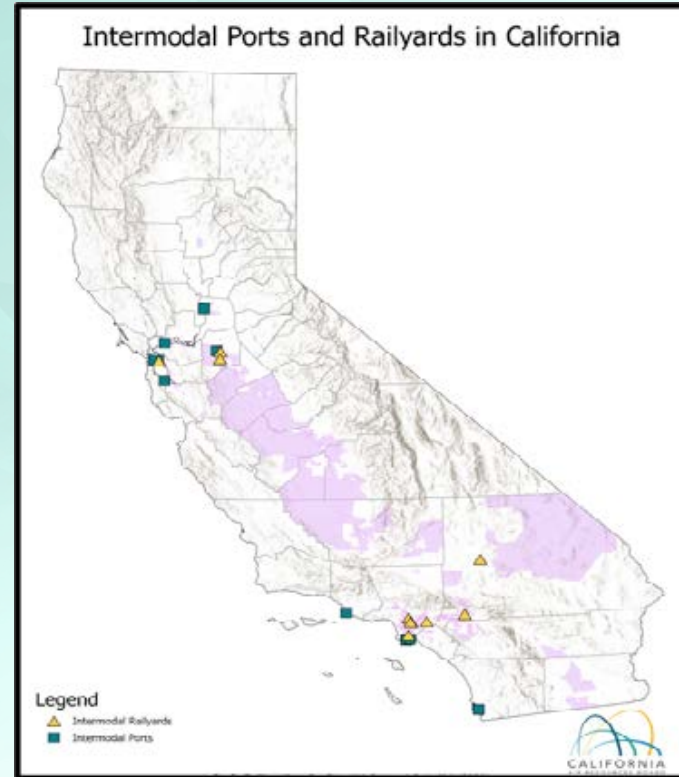
All drayage
trucks must be
ZEVs

- 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

Seaports and Intermodal Railyards

"Seaport" means the property where marine and seaport terminals are located for the loading and unloading of water-borne commerce onto and from ocean-going vessels




"Intermodal railyard" means a facility owned or operated by a Class I Railroad that receives both drayage trucks and locomotives.



Drayage Truck Registration

- All legacy or combustion drayage trucks intending to begin or continue operations at a California seaport or intermodal railyard must be registered in TRUCRS by December 31, 2023.
- Only zero-emission drayage trucks can register to be added for drayage beginning January 1, 2024.
- A detailed reporting discussion is later in the presentation. [Website: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/registration-reporting](https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/registration-reporting)

Welcome to the Truck Regulation Upload, Compliance and Reporting System (TRUCRS)

 NEW USERS	 EXISTING USERS	 RESOURCES
<p>Create New Account</p> <p>TRUCRS User Guides</p> <p>FAQs and Fact Sheets</p>	<p>Username <input type="text"/></p> <p>Password <input type="password"/></p> <p>Log In</p> <p>Change Login Information/Close Account</p> <p>Forgot Username/Password?</p>	<p>Verify Fleet Compliance</p> <p>Report Non-Compliant Fleets or Vehicles</p> <p>Financial Assistance</p>

For assistance, e-mail trucrs@arb.ca.gov or call 1-866-6DIESEL (1-866-634-3735)

Questions

- Drayage questions
- Next up:
 - High Priority Fleets
 - State and Local Governments
 - Model Year and Milestones Schedules
 - Extensions & Exemptions
 - Reporting & Recordkeeping
 - Helpful Resources

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 ZEVs or NZEVs

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



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

State and Local Government Requirements

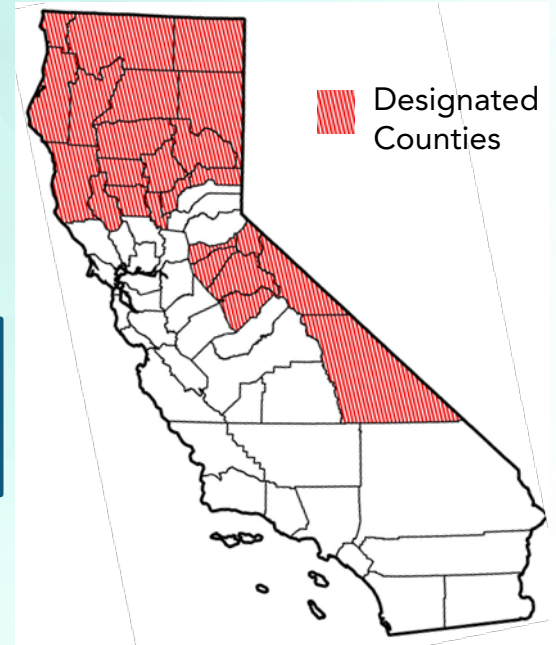
2024-2026

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






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

ZEV Milestone Option Example

Vehicle Type	# of Vehicles	ZEVs in 2025	ZEVs in 2029	ZEVs in 2033	ZEVs in 2037	ZEVs in 2041	ZEVs in 2042
Box trucks, vans, two-axle buses, yard trucks 	60	6	15	45	60	60	60
Work trucks, day cab tractors, three-axle buses 	20	0	2	10	15	20	20
Sleeper cab tractors and specialty vehicles 	20	0	0	5	10	15	20
ZEV Milestones	100	6	17	60	85	95	100

Questions

- HPF, SLG & Compliance Schedule Questions
- Break
- Next up:
 - Extensions & Exemptions
 - Reporting & Recordkeeping
 - Helpful Resources

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

Reporting

- Staff is expanding TRUCRS
 - Fleets can use same TRUCRS ID, update information
 - Drayage is online (HFP, SLG targeted for end of year)
 - Updating detailed reporting guides
 - Reporting landing page: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/registration-reporting>

TRUCRS

Welcome to the Truck Regulation Upload Compliance and Reporting System (TRUCRS)

Hi CARB Trucking [Log Out](#)

[Account Home](#) [Account Settings](#)

Add a New Company [To add a vehicle click 'View or Update' below.](#)

TRUCRS ID	Company Name	Update or Delete Company	# Trucks Reported	# Trailers Reported	Compliance Status
There is no fleet in this account currently.					



Upcoming Reporting Dates





- Drayage
 - All Legacy - December 31, 2023
- State and Local Government Fleets
 - April 1, 2024
- High Priority Fleets
 - February 1, 2024
- Fleet changes need to be reported within 30 days.


Resources

- ACF homepage:
arb.ca.gov/our-work/programs/advanced-clean-fleets
 - Multiple factsheets
 - Searchable FAQ
 - Fleet Calculator
 - ZEV Truckstop
- Truck Regulation Implementation Group
 - Infrastructure, rule provisions, outreach, border communities

ACF Program Webpage:

<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

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- Advanced Clean Trucks
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The Advanced Clean Fleets (ACF) Regulation is the latest development in CARB's decades-long history of setting increasingly stringent emission standards for mobile sources that are needed to protect the public health and welfare of Californians. The ACF Regulation requires fleets that are well suited for electrification to transition to zero-emission vehicles (ZEV) through requirements to both phase-in the use of ZEVs for targeted fleets and requirements that manufacturers only manufacture ZEV trucks starting in the 2036 model year.

[MORE ABOUT THIS PROGRAM >](#)

Email Updates


Keep up to date on future meetings and important events for the Advanced Clean Fleets regulation by signing up for our email updates.

PRIMARY CONTACT


Advanced Clean Fleets
Email zevfleet@arb.ca.gov
Phone (866) 634-3735

CATEGORIES


Topics [On-Road Heavy-Duty Vehicles](#)



Advanced Clean Fleets
Regulation Training Webinar
October 18, 2023



California Approves
Groundbreaking Regulation



One-stop shop for zero-emission truck information
Funding, technical assistance, events, and more

Additional Resources

- ACF email: zevfleet@arb.ca.gov
- Truckstop homepage: arb.ca.gov/truckstop
- Hotline: 1-866-634-3735



Thank You