



Second Workshop on Implementation of Assembly Bill 1594

October 3, 2024

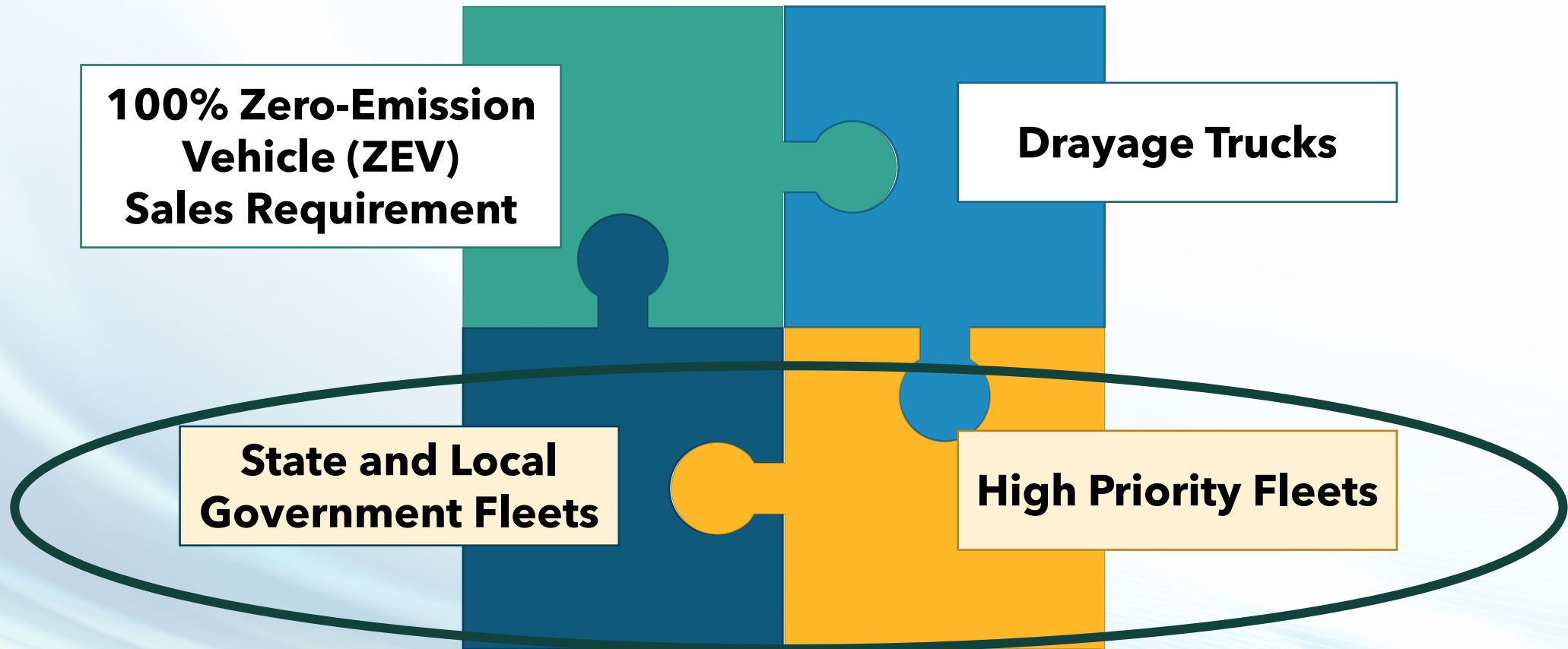
Outline of Today's Presentation

- Background
 - Summary of Assembly Bill (AB) 1594
 - Advanced Clean Fleets (ACF) Regulation overview
 - Section 100 Changes
- Proposed regulatory text
- Next steps
- Questions

AB 1594 (Garcia, Ch. 585, Statutes of 2023)

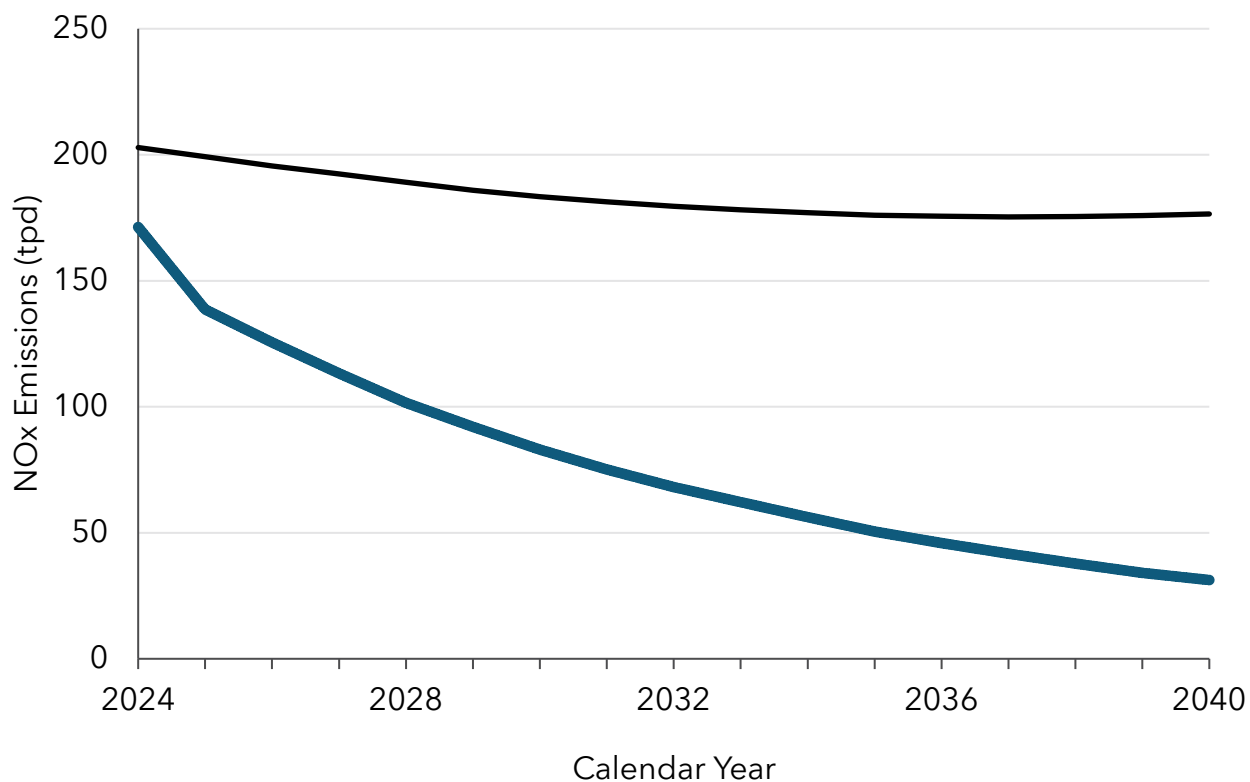
- Requires CARB amend the Advanced Clean Fleets regulation
- Applies to “traditional utility-specialized vehicles” used by “public agency utilities”
- Re-evaluates the 13-year minimum useful life threshold used to determine eligibility for some provisions
- Expands existing daily use exemption to allow for more comprehensive usage data

Advanced Clean Fleets Regulation Components



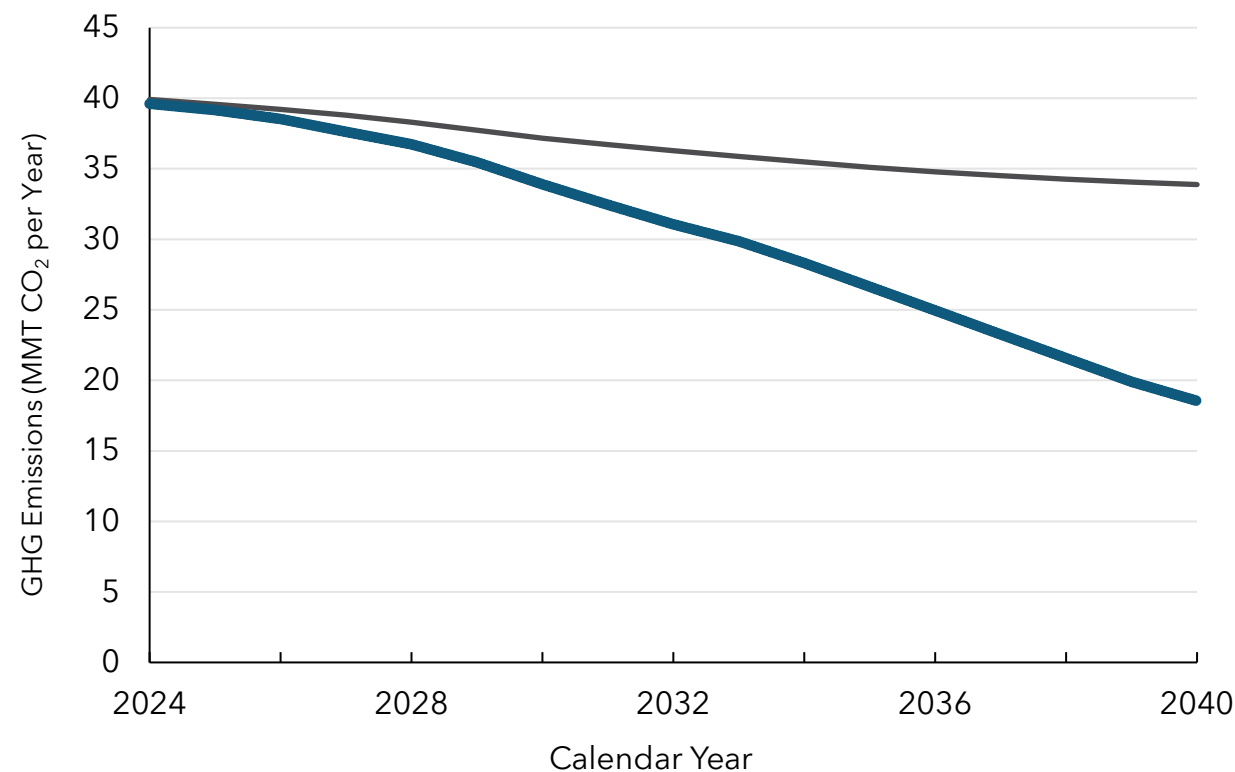
ACF, Advanced Clean Trucks (ACT), Clean Truck Check, and Heavy-Duty Omnibus Get Substantial Emission Reductions

NOx Emissions Drop 82% by 2040



— 2020 Baseline — ACT, HD Omnibus, Clean Truck Check, and ACF Regulations

GHG Emissions Drop 45% by 2040



— Baseline — ACT and ACF Regulations

Exemptions and Extensions

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 if a ZEV is not available in configuration needed
Daily Usage Exemption	Can buy ICE vehicle if available ZEVs not suitable for usage needs
Mutual Aid Assistance	Reserve 25% of fleet for use in mutual aid agreements
Waste and Wastewater Fleets	More time for compressed natural gas 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 1,000 miles per year
Intermittent Snow Removal Vehicle	May purchase ICE vehicles until 2030

ZEV Purchase and Daily Usage Exemption Eligibility Requirements

Model Year Schedule (High Priority and Federal Fleets)- The model year of the ICE vehicle being replaced is at least 16 years old or the odometer exceeds 700,000 miles, whichever occurs first.

ZEV Purchase Schedule (State and Local Government Fleets) - The model year of the ICE vehicle being replaced is at least 13 years old.

ZEV Milestones Option - The fleet owner must demonstrate their next applicable upcoming ZEV Fleet Milestone cannot be reached without exemptions by requesting and obtaining exemptions for all other ICE vehicles in their California fleet.

ZEV Purchase Exemption: Two Pathways

1. Streamlined List

- By January 1, 2025, CARB posts a list of vehicle configurations only available as ICE
- If the vehicle is on the list, then fleet can purchase ICE

2. Fleet-specific application

- Must identify vehicle being replaced and show that a comparable ZEV or NZEV is not available to meet primary intended function and other key features (Crew cab, cabover, or all-wheel drive, frame attachments)

Daily Use Exemption

Allows fleets to purchase a new ICE vehicle if BEV is available to purchase but battery capacity is not large enough to meet fleets needs

- Requires 10% or more ZEVs/NZEVs to access
- Collect daily energy usage, miles per day, and hours operated for trucks with power take off
- Fleet submits 30 consecutive working days of usage data and compares to BEV energy usage factor
 - Alternative to use actual comparable BEV and ICE vehicle data (and stationary usage) for similar routes and assignments



Available For These
Compliance Pathways:

- ✓ Model Year Schedule
- ✓ ZEV Purchase Schedule
- ✓ ZEV Milestone Option

Daily Usage Exemption Not Applicable if the Vehicle is Available as:

- Near Zero-Emission Vehicle (NZEV)
- Hydrogen fuel-cell electric vehicle (FCEV)
- Battery electric vehicle (BEV) with battery capacity of at least,
 - 150 kWh for Class 2b-3
 - 325 kWh for Class 4-6
 - 450 kWh for Class 7-8 except tractors or three-axle buses
 - 1,000 kWh for Class 7-8 tractor or three-axle bus

AB 1594 - Section 100 Changes

Section 100 Changes

- Effective October 1, 2024
- Added the definition for a public agency utility (PAU)
 - A local publicly owned electric utility (Public Utility Code §224.3)
 - A community water system (Health and Safety Code §116275)
 - Small number of private fleets included
 - A water district (Water Code §20200)
 - A wastewater treatment provider (Health and Safety Code §116773.2)
- For PAUs, Daily Usage Exemption no longer excludes three highest days of usage

Existing Rule Daily Usage Example for Class 6 Utility Trucks

- Under regulation, lowest reading for each day is picked, top 3 days are excluded
- The fourth highest reading is 81 miles*
- The comparable BEV range is 84 miles (109 kWh/1.3 kWh/mi) and exceeds the mileage reading
- One BEV must be purchased

Day	Truck 1	Truck 2	Truck 3	Truck 4	Daily Min.
1	78	87	105	107	78
2	81*	93	99	106	81*
3	78	94	102	114	78
4	76	85	102	110	76
5	78	91	104	113	78
6	246	256	311	322	246
7	245	260	310	324	246
8	242	269	289	337	242
9	80	86	104	120	80
...
30	75	92	103	111	75

Existing Rule Daily Usage Example for Class 6 Utility Trucks (continued)

- Under regulation, lowest reading for each day is picked, top 3 days are dropped
- Fourth highest reading is 94 miles*
- The comparable BEV range is 84 miles and does not meet mileage needs
- An exemption for 2nd truck would be granted

Day	Truck 1	Truck 2	Truck 3	Truck 4	Daily Min.
1	73	87	105	107	87
2	81	93	99	106	93
3	73	94	102	114	94*
4	76	85	102	110	85
5	73	91	104	113	91
6	246	256	311	322	256
7	245	260	310	324	260
8	242	269	289	337	269
9	80	86	104	120	86
...
30	75	92	103	111	92

Section 100 Daily Usage Calculations

Fleet of Class 6 Utility Trucks Owned by a PAU

- Same example as previous slides
- Per Section 100 change, no longer excludes the three highest readings, exemption now solely based on day with highest usage
- Highest reading is 246 mi.
- Exceeds BEV range of 84 miles
- All four vehicles being purchased would receive an exemption

Day	Truck 1	Truck 2	Truck 3	Truck 4	Daily Min
1	78	87	105	107	78
2	81	93	99	106	81
3	78	94	99	114	78
4	76	85	102	110	76
5	78	91	104	113	78
6	246	256	311	322	246*
7	245	260	310	324	245
8	242	269	289	337	242
9	80	86	104	120	81
...
10	75	92	103	111	75

AB 1594 - Proposed Regulation Text

Proposed Definition of a Traditional Utility-Specialized Vehicle

1. Weight class 3 and up
2. Operated by a public agency utility more than 50% of the time to maintain reliable public utility service
3. Has a body configuration that is not designed to primarily carry cargo or passengers
4. Manufacturer stated towing capacity
5. Either:
 - a. Equipped with a power take-off device; or
 - b. Equipped with four-wheel drive or six-wheel drive, specifically ones capable of providing torque and power to all wheels simultaneously



Early Access for Traditional Utility-Specialized Vehicles

- Vehicle replacement purchase plan approved by a Public Agency Utility's decision-making authority
- Recordkeeping requirements

Or

- Demonstrate Vehicle Exceeds Usage Thresholds

Vehicle Class	Mileage or Usage
Class 3 and 4	70,000 miles
Class 5 and 6	115,000 miles
Class 7 and 8	175,000 miles
Class 3 and up with power take off device	4,000 hours

High Priority and Federal Fleets
State & Local Government Agencies

ACF Other Clarifications

Other

- Modify 2030 Transit agency exemption to apply to transit support vehicles and passenger transport vehicles
- Adjust ZEV Milestones exemption application timeframe
- Modify documentation details for ZEV Purchase Exemption
- Clarify SLG exemption eligibility based on annual vehicle purchases
- Narrow requirement to hire compliant fleets to entities that hire and operate or hire and dispatch vehicles

Next Steps

- Seeking comments on draft regulation text
 - Send comments/meeting requests to ZEVFleet@arb.ca.gov
 - Upload comment letters on the public docket, <https://ww2.arb.ca.gov/public-comments/public-comment-advanced-clean-fleets-ab1594-amendments>
- Expected Board Hearing early 2025