



What is the CARB Advanced Clean Trucks Regulation and How Does it Impact the RV Industry?

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Advanced Clean Trucks Regulation

- The Advanced Clean Trucks (ACT) regulation was adopted by the California Air Resources Board in 2021 and took effect with the 2024 model year. At the same time, the Omnibus Low NOx rule has limited the number of diesel engines that can be sold in medium-duty and heavy-duty vehicles in California.
- The goal of the ACT is to establish zero emission vehicle sales standards for medium-duty and heavy-duty vehicles – gas and diesel.
- It establishes requirements for chassis manufacturers that certify on-road vehicles or incomplete vehicles over 8,500 lbs. gross vehicle weight rating (GVWR) to produce and sell as an increasing number of zero emission vehicles (ZEVs) as a proportion of their sales, starting in the 2024 model year and ramping up through the end of the 2035 model year. All chassis manufacturers who produce more than 500 medium and heavy-duty vehicles being sold into California annually are covered by the regulation.
- The combination of the ACT and the Low NOx rule, along with the Clean Fleets rule, has led some chassis manufacturers to halt sales of traditional internal combustion engine chassis to most RV manufacturers intended for motorhomes to be sold in California, since there are no ZEV chassis rated for motorhome applications.

Omnibus Low NOx Regulation

- CARB approved the Omnibus Low NOx regulation, which established stringent NOx heavy-duty diesel engine emission standards and lower NOx standards on new certification cycles to control emissions over a broader range of vehicle operation, including idling, low load, and highway operation.
- The Heavy-Duty Low NOx Omnibus regulation implemented two key measures: the Low-NOx Engine Standard and the Lower In-Use Emission Performance Level.
- For 2024 through 2026 model year heavy-duty diesel engines rated at or above 525 bhp maximum power and certified to the provisions specified in the rule, must be labeled must contain the following statement: “This engine conforms to the 525 horsepower and above exemption specified in 13 CCR 1956.8(a)(2)(C)2 applicable to XXXX model year.”
- Failure to have the proper engine labels results in the motorhome not being able to be registered in California.
- This has greatly limited the number of diesel engines available for vehicles being sold into California, including motorhomes.

Advanced Clean Fleets Regulation

- Requires that all medium-duty and heavy-duty vehicles, including motorhomes, that are sold into California be zero emission vehicles by 2036.
- This is four years earlier than originally set out.
- Also requires fleet owners to increase percentages of ZEVs on a phased-in basis between now and 2035, which could impact some motorhome rental fleets.

ACT ZEV Sales Percentage

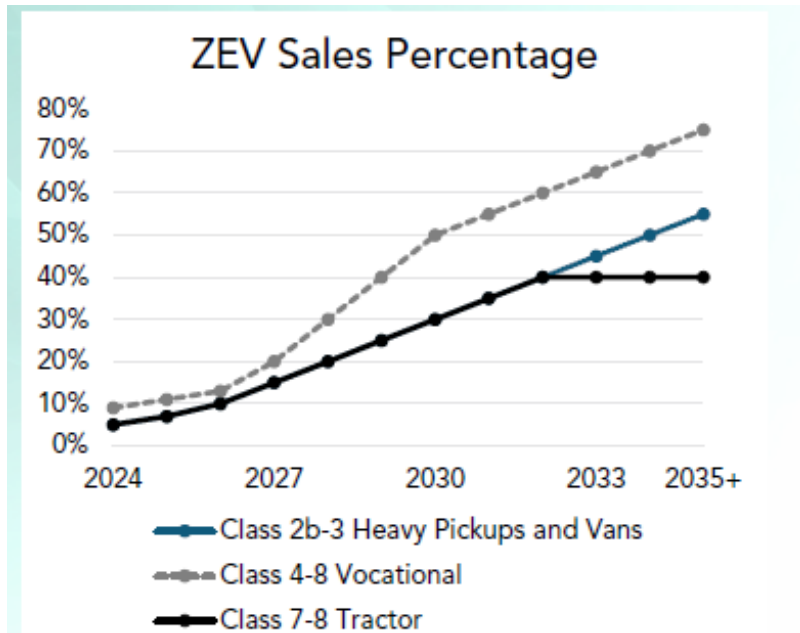


Table A-1. ZEV Sales Percentage Schedule

Model Year	Class 2b-3 Group	Class 4-8 Group	Class 7-8 Tractors Group
2024	5%	9%	5%
2025	7%	11%	7%
2026	10%	13%	10%
2027	15%	20%	15%
2028	20%	30%	20%
2029	25%	40%	25%
2030	30%	50%	30%
2031	35%	55%	35%
2032	40%	60%	40%
2033	45%	65%	40%
2034	50%	70%	40%
2035 and beyond	55%	75%	40%

Advanced Clean Trucks Regulation

- The ACT covers sales in California of new motorhomes; CARB defines a new vehicle as one with less than 7,500 miles on the odometer.
- Used motorhomes (those with more than 7500 miles) are not covered by the regulation.
- Motorhomes could still be sold to dealers in California as long as they are intended for sale to an out-of-state end consumer who does not plan to register the motorhome in an ACT state.
- In the amendments adopted in October 2024, CARB adopted new vehicle labeling and reporting requirements for chassis manufacturers that will help regulators in California ensure that new vehicles registered in California are compliant with the ACT regulation. This would also apply to vehicles purchased in other states that were brought to California to be registered.

Advanced Clean Trucks Regulation

Applies to all combustion engine vehicles

- Majority of the attention has focused on Class A and Class C diesel motorhomes, but it is critical to remember that the regulation applies to all medium-duty or heavy-duty vehicles with combustion engines – gas and diesel
- Any non-exempted on-road vehicle over 8500 GVWR is covered by the regulation, including Class B motorhomes.
- Only vehicles exempted are: emergency vehicles, military tactical vehicles, transit vehicles subject to the Innovative Clean Transit regulation, school buses purchased by K-12 school districts and other entities, and light-duty vehicles dispatched but not owned by transportation network companies (*ACT reg, Section 2012(c) Exemptions*).

ACT Deficit Make-up Period

Motorhomes can still be sold and registered either through utilization of the credit market or generating a carry forward deficit that will have to be offset by credits within three years.

This deficit make-up period provision permits a chassis manufacturer that has an outstanding deficit after the end of a given model year to make up that deficit within a consecutive three-model year period. *This provision does not apply to motorhome manufacturers, who are considered secondary vehicle manufacturers.* The three-model year period begins following the model year in which a chassis manufacturer generated the outstanding deficit. For example, if there is an outstanding deficit by the end of the 2024 model year, the makeup period would apply to the 2025, 2026, and 2027 model years.

To utilize the entire three-model year period, a chassis manufacturer would have to reduce the net deficit to below 30% by the end of the first and second years of the makeup period. Using the same example as above, this means that the manufacturer would need to reduce their net deficit balance, which would include the deficit from 2024 and any newly-accrued deficit from 2025, to below 30% by the end of the 2025 model year. By the end of the 2026 model year, the manufacturer would need to again reduce their net deficit balance, which includes outstanding deficits from 2024, 2025, and 2026, to below 30%. The entire net deficit balance would need to be offset by the end of the 2027 model year.

ACT Recordkeeping

Records of information required under ACT, the manufacturer's Statement of Origin, and documentation showing vehicles are produced and delivered for sale in California must be kept by chassis manufacturers and secondary vehicle manufacturers for CARB to audit for a period of eight years from the end of the model year the vehicles were produced. Acceptable documentation for tracking vehicles produced and delivered for sale includes at least one of the following:

1. An invoice, receipt, contract, or purchase order between the manufacturer and ultimate purchaser that shows the delivery destination to an ultimate purchaser in California;
2. An invoice, receipt, contract, or purchase order between the manufacturer and dealership that shows the delivery destination to a dealership in California;
3. A new vehicle registration in California;
4. An invoice, receipt, contract, or purchase order from a secondary vehicle manufacturer showing delivery of the manufacturer's vehicle in California;
5. An invoice, receipt, contract, or purchase order from the manufacturer that shows the delivery destination to a secondary vehicle manufacturer who must have an order from a purchaser that will take delivery of the vehicle in California;
6. A statement from the secondary vehicle manufacturer indicating delivery of the complete vehicle to a dealership or reseller in California; or
7. A purchase order from the fleet owner showing delivery to California.

ZEV Credits

- Manufacturers may earn, bank, and trade credits for ZEVs and NZEVs they produce and deliver for sale in California, including trucks supported with incentives from the Clean Truck and Bus Voucher Incentive Project.
- Motorhome manufacturers may also trade for ZEV credits as secondary vehicle manufacturers and utilize them with chassis manufacturers.
- Manufacturers who produce less than 500 vehicles sold into California can report voluntarily to earn ZEV and NZEV credits.
- Credits earned from sales of one type of vehicle can be applied to any other type of vehicle; i.e., sale of a ZEV pick-up could be applied to a motorhome internal combustion chassis.
- ZEV credits are weighted by class as shown below.
- The table on the next slide displays the credit balances for each manufacturer as of March 30, 2024, and reflects credits transferred and credits traded between manufacturers. These numbers will be updated when 2024 data is complete early next year.

Table A-2. Weight Class Modifiers

	Vehicles in the Class 2b-3	Class 4-5 Vehicles in the Class 4-8 Group	Class 6-7 Vehicles in the Class 4-8 Group	Class 8 Vehicles in the Class 4-8 Group	Vehicles in the Class 7 and 8 Tractor Group
Weight Class Modifier	0.8	1	1.5	2	2.5

ZEV Credits Available in 2024

Manufacturer (Parent Company)	Total Vehicle Sales	Total ZEV Sales	Total Credit Balance at the End of 2023
Autocar	702	2	4
Battle Motors	-	-	2
Blue Bird	583	171	720
BYD	93	93	338.5
Daimler	6,915	83	422
Ford	37,848	5,221	4,572.00
GM	17,841	822	657.6
GreenPower	-	-	158
Hyundai	35	-	87.5
Isuzu	3,091	-	-
Lightning eMotors	58	58	184.4
Lion Electric	1	1	79.5
Mercedes Benz	5,057	-	-
Micro Bird	85	40	76
Navistar	3,901	246	623
Nikola Motor	-	-	120
Nissan	120	-	-
Orange EV	210	210	420
Paccar	15,976	140	597
Rivian	11,182	11,182	8,225.60
Sea Electric	32	32	32
Stellantis	10,861	-	-
Tesla	58	58	145
Volvo	1,799	44	571
XOS Trucks	35	35	478.5
Total	116,483	18,473	18,513.60

Source:
<https://ww2.arb.ca.gov/resources/fact-sheets/ACT-Credits-Summary%202023>

ACT in Other States

Ten other states have adopted the CARB ACT rule. Effective dates are:

2025 model year

Massachusetts
New Jersey
New York
Oregon
Washington

2026 model year

Vermont

2027 model year

Colorado
Maryland
New Mexico
Rhode Island

ACT Next Steps

- CARB is holding a public hearing next Monday on credit pooling, which if implemented could provide additional means for chassis manufacturers to acquire and utilize ZEV credits. It would allow ZEV credits earned in any ACT state to be used to offset internal combustion engine chassis in California. This would fulfill commitments in the Clean Truck Partnership agreement for CARB staff to develop a proposal with manufacturers and Section 177 states regarding a credit pooling concept for credits and deficits generated in states that have adopted the ACT regulation under section 177 of the federal Clean Air Act.
- The RV Industry Association, along with our manufacturers and dealer partners, continues to stay involved in active discussions with CARB to identify and implement practical solutions that will ensure consumers and RVers can purchase and enjoy all types of RVs in California. We held meetings with CARB in July and November and we are trying to set up another meeting for next week.

Advanced Clean Trucks Regulation

Questions?

To keep up with the latest news on CARB and the ACT, please see the FAQ page on the RV Industry Association website at:

<https://www.rvia.org/news-insights/impact-carbs-act-regulation-motorhomes-what-you-need-know>

The logo for the RV Industry Association, featuring a stylized 'RV' in white with a yellow and orange gradient on the left side, followed by the words 'INDUSTRY ASSOCIATION' in white, bold, uppercase letters.

RV INDUSTRY
ASSOCIATION

A blue-tinted photograph of a family camping in a wooded area. A man is sitting in a folding chair, leaning forward and looking at a board game on the ground. A young girl and a young boy are sitting next to him, also looking at the game. In the foreground, a fire is burning in a metal fire pit. In the background, there are several RVs parked in a clearing.

Thank you!