Advanced Clean Trucks is a new rule that applies to manufacturers of medium- and heavy-duty vehicles. These rules will be incorporated into Vermont's existing low and zero emission vehicle program/rules and will give Vermonters increased choice and flexibility to integrate electric vehicle and hybrid technologies into their fleets.

Purpose and goal of the rule

- ACT lays the groundwork for increasing the percentage of zero-emission trucks and buses by facilitating the further deployment of zero-emission truck and buses in best suited applications, such as transit and school buses, as well as delivery vans with shorter, fixed daily duty cycles that return to a centralized fleet depot.
- The rule will codify auto manufacturer commitments and reflects the current trends in feasibility and applicability of medium- and heavy-duty electric vehicles.

What will the rule require?

- The rule requires auto manufacturers to deliver a certain percentage of electric medium- and heavy-duty vehicles to Vermont, pursuant to a schedule that gradually increases over time.
- Vehicle consumers and fleet operators will not be required to purchase electric vehicles pursuant to this regulation.
- The requirements vary across the different vehicle weight classes to reflect the pace at which this technology is and will be feasible across vehicle use and application: By model year 2035, zero-emission truck sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 truck sales, and 40% of truck tractor sales. For example, a Class 4 delivery truck with a fixed route that returns to the same location every day to charge would be a currently feasible application of EV technology, and more widely available in a cost-effective electric option.
- Auto manufacturers only get credit for trucks once they are sold and placed in service, which will result in truck dealers getting support from manufacturers so that trucks don't sit on lots unsold.

How will the rule benefit vulnerable Vermonters and improve Vermont's economy?

- Implementation of this rule is estimated to result in more than $600 million of avoided costs related to GHG emissions reductions, and up to $24 million is health-related cost savings.
- Cleaner trucks mean better air quality state-wide and especially for Vermonters that are disproportionately impacted by poor air quality near areas with consistent heavy truck traffic.
- As an example of vehicle cost savings that will occur, an owner of a fleet of 20 electric delivery trucks (Class 4-5) is estimated to save at least $310,000 over the fleet's 12-year average lifetime when comparing the upfront and operational costs of diesel trucks to electric trucks.

Building on existing programs and policies

- In 2020, Governor Scott signed the Multi-state Zero Emission Medium- and Heavy-Duty Initiative Memorandum of Understanding which includes medium- and heavy-duty vehicle sales commitments that directly correspond with the ACT rule. To date, 18 states have signed onto the MOU.

- More than 125 different zero-emissions models are currently available across the medium- and heavy-duty vehicle sectors in North America, and this number is anticipated to exceed 240 models by 2023.[1]
- More than 3,500 zero-emission transit buses are in operation or on order in the U.S.[2] with 14 electric transit buses already planned for or operating in VT.
- Across the U.S. school districts have funded, ordered, or deployed more than 1,700 electric school buses[3] including Franklin Southwest Supervisory Union, Champlain Valley School District, Barre Unified Union School District, and South Burlington School District in VT.
- Collectively, commercial and municipal fleets have pre-ordered more than 100,000 electric medium- and heavy-duty vehicles and begun deploying the first vehicles[4] including Casella Waste Systems, Green Mountain Power, Burlington Electric Department, and the Village of Johnson.
- ACT accounts for unforeseen economic events and supply chain issues by basing the auto manufacturer's requirements on current-year sales. This way, peaks and troughs in purchases have an immediate impact on the overall number of electric vehicles that a manufacturer must sell.

Details on model year EV percentage requirements, and examples of vehicles in the class groups are provided below:

Model Year	Class 2b-3	Class 4-8	Class 7-8 Tractors
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+	55%	75%	40%

[1] CALSTART, Global Commercial Drive to Zero, Zero-Emission Technology Inventory Tool, Version 5.9 (2020), https://globaldrivetozero.org/tools/zero-emission-technology-inventory/.
[2] CALSTART, Zeroing in on ZEBs: 2021 Edition (Dec. 2021), https://calstart.org/wpcontent/uploads/2022/01/2021-ZIO-ZEB-Final-Report_1.3.21.pdf.
[3] CALSTART, Zeroing in on Electric School Buses: 2021 Edition (Dec. 2021), https://calstart.org/wpcontent/uploads/2022/01/ZIO-Electric-School-Buses-2021-Edition.pdf.
[4] 6 Environmental Defense Fund, Electric Fleet Deployment & Commitment List, https://docs.google.com/spreadsheets/d/1l0m2Do1mjSemrb_DT40YNGou4o2m2Ee-KLSvHC5vAc/edit#gid=2049738669 (accessed Mar. 4, 2022).

Class 2b-3

Class 4-8

Class 7-8 Tractors