

MHD ZEV Market

- By the end of 2022, there were more than 240 different models of zero-emission vans, trucks, and buses commercially available from 60 manufacturers
- Most trucks and vans operate less than 100 miles per day and several zero-emission configurations are available to serve that need. As technology advances, zero-emission trucks will become suitable for more applications.
- Most major truck manufacturers, such as Daimler and Volvo, have introduced or have announced plans to introduce market ready zero-emission trucks in the near future. Manufacturers that cannot meet the sales targets in the Advanced Clean Trucks program have the option to purchase excess credits from other manufacturers.



Available Funding



- The Inflation Reduction Act of 2022 provides federal tax credits for commercial electric vehicles and allocates \$1 billion to replace Class 6 and 7 vehicles with EVs.
- The commercial EV tax credit is capped at \$7,500 for vehicles with a gross vehicle weight rating (GVWR) less than 14,000 pounds and capped at \$40,000 for vehicles with a GVWR greater than 14,000 pounds.
- The Inflation Reduction Act also provides \$60 million for EPA's Diesel Emission Reduction Act Program and \$2.25 billion to deploy zero-emission technology at port facilities.

Charging Infrastructure



- In the near term, it is anticipated that the majority of charging infrastructure deployed to support electric trucks will be located at fleet depot locations.
- More and more utilities across the country are administering fleet advisory services and make-ready programs to help accelerate the buildout of charging infrastructure needed to support widespread truck electrification.
- Further, in addition to new federal funding for corridor charging available under the Infrastructure Investment and Jobs Act, the ACT regulation provides market certainty that will help unlock additional charging infrastructure investments from utilities and charging station developers, including at public charging locations along interstate highway routes.
- There are several grant programs through the Volkswagen Settlement and the Bipartisan Infrastructure Law that incentivizes charging infrastructure and adoption

Volkswagen Settlement

- At the state level, the NC DEQ is investing \$93.5 million across the state in charging infrastructure and the replacement of heavy-duty vehicles with cleaner alternatives through the Volkswagen Settlement program.
- DEQ provided grants to replace heavy-duty diesel vehicles like buses and tractor-trailers with low and zero-emission alternatives, including electric vehicles.
- Funds have also supported new DC Fast and Level 2 chargers across the state. Funds for new Level 2 chargers are still available.

NEVI

- NC will receive up to \$109 million from the Bipartisan Infrastructure Law's National Electric Vehicle Infrastructure (NEVI) program to install EV chargers to support LD ZEVs in the state.
- Nationally, NEVI seeks to create a network of 500,000 electric vehicle charging stations along designated corridors by June 2027.
- NCDOT in Aug. 2022 released its EV Infrastructure Deployment Plan.
- Stations will be installed every 50 miles along the state's portion of the interstate highway system.

Advanced Clean Trucks—Fact Sheet

ACT OVERVIEW

Timeline

- The Advanced Clean Trucks rulemaking process kicked off in October 2022 when Governor Cooper signed Executive Order 271
- EO 271 focuses on growing North Carolina’s medium- and heavy-duty zero-emission vehicle market, and in addition to directing DEQ to begin the rulemaking process for ACT, the EO takes a whole-of-government approach in recognizing the health, workforce, and environmental benefits of transitioning to clean medium-and-heavy duty trucks
- We are engaging with a diverse set of stakeholders to inform rulemaking and complementary strategies to shore up transition to MHD EVs in North Carolina
- The rule and regulatory impact analysis will be presented to the Air Quality Committee in May of 2023 and presented to the full EMC in July 2023. If the EMC votes to move to public comment in July, we expected a final vote from the EMC to adopt the rule in November 2023.

Benefits

- The Advanced Clean Trucks rule was first introduced by California and has now been adopted by 6 other states (Oregon, Washington, New York, New Jersey, Massachusetts, Vermont). Several other states are also exploring adopting ACT
- The ACT would require vehicle manufacturers to sell zero-emission MHD vehicles as an increasing percent of their annual MHD sales. Increasing each year to reach 40-75% of sales in 2035, depending on vehicle size
- ACT provides manufacturers with flexibility—through credits, trading, and other features—to comply with the sales requirements as various segments of the medium- and heavy-duty zero emission vehicles market grow at different speeds.



Benefits cont.

- The ACT program is needed because large trucks contribute to air pollution at disproportionate rates compared to smaller cars and because the transportation sector is responsible for more greenhouse gas emissions than any other sector in North Carolina.
- The program will provide fleet owners with more newly available technologies without restricting their ability to buy traditional gas and diesel-powered vehicles

What ACT Covers

- The vehicles subject to this program are vehicles sold in North Carolina with gross weights of at least 8,500 pounds. Consumer passenger vehicles are not subject to the rules.
- Examples of medium-and-heavy duty vehicles under ACT include delivery vans, box trucks, dump trucks, semi-trucks, and other large commercial vehicles.
- ACT would not apply to off-road vehicles, such as farm equipment or construction vehicles. ACT does not include transit buses as they are under a different California rule.
- ACT in North Carolina must be adopted to be identical to the California rule to be compliant with Section 177 of the Clean Air Act. There is no flexibility in the wording of the rule itself except for minor changes like replacing “California” with “North Carolina.”
- Consumers and fleets are not required to buy zero-emission trucks under the ACT regulation. The regulatory requirement falls upon manufacturers to deliver and sell an increasing percentage of zero-emission trucks.

For more information:

www.nc.deq.gov/ACT

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