



Bureau of Air Quality

Amendments to the Pennsylvania Clean Vehicles Program: Zero-Emission Vehicle Program

Citizens Advisory Council

November 16, 2021

Tom Wolf, Governor

Patrick McDonnell, Secretary

Rulemaking Outcomes

- Reduce emissions of air pollution in Pennsylvania from the Pennsylvania light-duty vehicle fleet.
- Help ensure Pennsylvania automobile dealers and consumers can get ZEVs.
- Help keep Pennsylvania competitive in regional EV sales market.

Background on PCV Program

- California allowed to set its own vehicle standards, must be granted a waiver by EPA, and other adopting states need to be identical to California standards.
- The Pennsylvania Clean Vehicles Program was last revised December 2006 to implement the CARB LEV program in PA.
 - Applied starting MY 2008 to new passenger cars and light-duty trucks *“sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired, received, titled or registered in this Commonwealth.”*
- The CARB ZEV percentage program was not adopted by PA.

Low Emission Vehicles: LEV

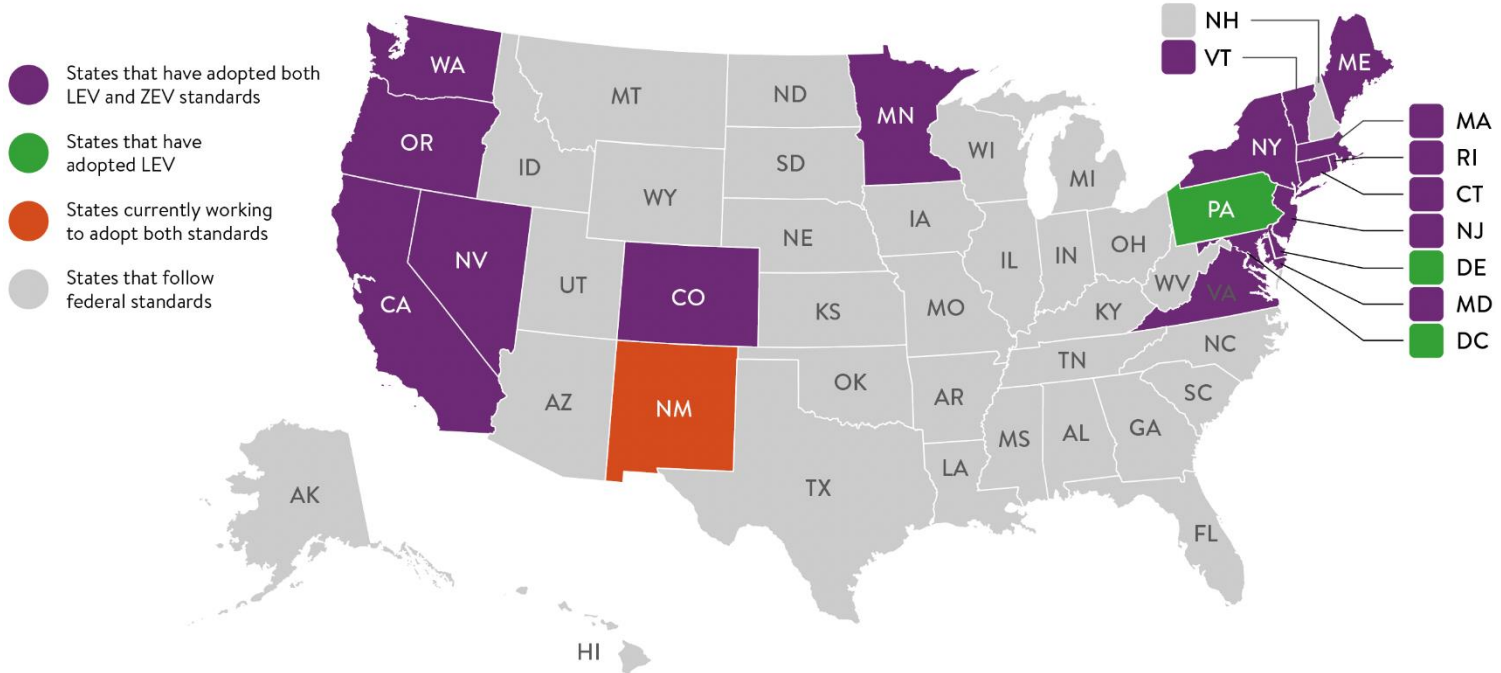
- The LEV standard is applicable to criteria pollutants and GHG for the entire fleet of vehicles in a state or region. Manufacturers can produce vehicles that exceed the LEV fleet standard to generate credits. Pennsylvania currently has a LEV program.
- LEV requirements in Pennsylvania are set forth in the regulations implementing our Pennsylvania Clean Vehicles Program.
- Amend Pennsylvania's requirements so they are realigned with California's program.

Zero Emission Vehicles: ZEV

- Pennsylvania does not currently have a ZEV program.
- This rulemaking would incorporate the existing California ZEV requirements into our Pennsylvania Clean Vehicles Program.
- The ZEV program is intended to encourage manufacturers to deliver extra ZEVs to PA. Extra ZEVs delivered will reduce criteria and GHG emissions. Manufacturers that sell more vehicles than required under the program will generate extra credits that can be sold or banked for use in future years.
- If and when California modifies its ZEV Program, a new rulemaking would be necessary to incorporate any changes.

LEV and ZEV States

Clean car states



Source: www.pca.state.mn.us/air/about-clean-cars-minnesota (accessed 11/5/21)

Proposed Amendments

- Incorporate by reference only the current version of CARB ZEV program requirements beginning in MY 2026.
 - Automakers must generate or obtain ZEV credits equal to or greater their required credit obligation for Pennsylvania.
 - The credit obligation for each manufacturer is a percentage of the average of the total Pennsylvania sales of PC/LDTs in the previous 2nd, 3rd and 4th model year. The annual CARB credit obligation percentage is 22% for MY 2025 and beyond.
 - Only medium and large volume manufacturers are subject to the credit obligation.
 - Full or partial ZEV credits are generated by any vehicle manufacturer who delivered for sale/lease in PA a credit-eligible ZEV vehicle.
 - Automakers can buy/sell ZEV credits between each other.

▶ Proposed Amendments to Chapter 126

- ZEV sales and ZEV reporting requirements:
 - ZEV credit percentage requirement for MY 2026.
 - Establish three model year PA ZEV Early Action Credit (EAC) mechanism (MY 2023 through MY 2025).
 - Sets ZEV credit generation, banking and trading provisions, and establishes requirements for addressing ZEV credit deficits.
 - Establishes ZEV credit percentage compliance reporting requirements deadline.
 - Lists requirements for automakers to earn EACs and requires DEP to add those credits to the CARB ZEV credit tracking system.

Summary of Environmental Benefits

- Estimated environmental benefits trends:
 - Overall decrease of criteria pollutants (NO_x, VOC (NMOC), PM_{2.5}, SO₂) and air toxics (e.g. benzene).
 - Contributes towards attainment and maintenance of compliance with National Ambient Air Quality Standards (NAAQS).
 - Decrease GHGs.
 - Cleaner air means improved health, welfare and environment in the Commonwealth.

VOC – Volatile Organic Compounds

PM_{2.5} – Particulate Matter <2.5µm

SO₂ – Sulfur Dioxide

ZEV Trends and Economic Benefits

- ZEV Trends:
 - Plug-in EV and full-EV demand is increasing nationwide and in Pennsylvania.
 - EV battery and manufacturing costs decreasing globally.
 - Major automakers are making commitment to manufacture affordable EVs.
 - Charging infrastructure is being built out to accommodate demand.
- Automobile manufacturers direct ZEVs to dealers in states with ZEV programs.
- Adopting ZEV will:
 - Expand ability of Pennsylvania auto dealers to acquire and sell ZEVs.
 - Provide additional consumer choice in their vehicle purchases.
 - Help keep Pennsylvania competitive in regional EV sales market with neighboring states already with existing Section 177 ZEV programs.

Social/Economic Effects of Rule

- Proportional environmental / health benefit in urban and Environmental Justice areas.
- Effect on >1,000 PA new car dealer establishments:
 - Vast majority are small businesses.
 - Increased sales vs. decreased service.
- Reduced operating/maintenance costs for owners.
- Positive effect on PA businesses that would benefit from new supply chains for increased national EV manufacturing.

➤ Social/Economic Effects of Rule (cont.)

- Helps meet consumer demand and interests.
- Use existing and planned charging infrastructure.
- PA would become the 3rd largest ZEV state.
- Automakers will be given ability to earn EACs to help comply with model year 2026 ZEV credit requirement.
- Work with CARB/automakers to estimate MY 2026 and beyond effects.

Proposed Rulemaking Schedule

- Proposed Rule to EQB – 1st quarter 2022.
- Public Comment Period – 60 days.
- 3 public hearings/information meetings – TBD.
- Final Rule to EQB – 4th quarter 2022.
- State Implementation Plan Submittal – 4th quarter 2022.



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Air Quality

Questions?

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