Virginia Advanced Clean Car Standards: How It Works

The Clean Cars Program allows for states to have more stringent standards than the federal government for pollution emissions from new cars and light duty trucks. It reduces carbon dioxide along with particulate matter, ground-level ozone, and other pollutants that cause serious health problems for people living near high-traffic areas. The Clean Cars Program has two components that apply to new light duty vehicles: the Low Emission Vehicle (LEV) standard and the Zero Emission Vehicle (ZEV) standard.

Virginia would join the 17 states who either already have LEV and/or ZEV standards or are in the process of adopting them. The LEV and ZEV standards are identical in all participating states. Once Virginia finalizes adoption of the Advanced Clean Car Standards, manufacturers have two years before they must comply in Virginia.

Low Emission Vehicle Standard (LEV)

The LEV pollution-reduction standard requires that car manufacturers continue to roll out, over time, cleaner vehicles that emit less climate pollution, soot, and smog-forming pollutants. In LEV states, manufacturers are required to meet emissions standards based on the average emissions, per mile driven, across the entire fleet of new cars and light duty trucks sold. Those who fail to comply must pay a fine, but so far, manufacturers have complied. For simplicity, a sticker is placed
under the hood of vehicles which comply with the LEV standards. Over time, the standard gradually gets more stringent, giving manufacturers time to update their models and improve their engineering. Under the LEV Standard, consumers still have a choice of which vehicles to buy. In addition to public health improvements, consumers save money over the life of the vehicle, mostly because they spend less on gasoline.²

**Zero Emission Vehicle Standard (ZEV)**

The ZEV program increases the percent of light duty vehicles in each ZEV state that are zero-emission or hybrid electric (have both a plug and a gasoline tank). Almost all zero-emission vehicle options are electric vehicles, though ZEV also applies to hydrogen fuel cell vehicles and other zero-emission technology. A small percentage of sales by each manufacturer in a ZEV state must qualify as ZEV vehicles, and the percentage increases gradually over time. Compliance is achieved through credits that a car earns. The more range a vehicle has per charge, the more credit it receives. Credits not needed for compliance in any given year can be banked for future use or sold to other manufacturers. By model year 2025, the ZEV program would require that approximately eight percent of new vehicles sold in Virginia be electric. Without a ZEV program, only three to four percent of new vehicles sold would be electric in 2025.³

Some automakers prioritize sending their electric vehicles to dealerships in ZEV states. Under this program, Virginians would get access to more makes and models of EVs at a variety of price points.

**The Clean Cars Program is Flexible and Applies to Manufacturers, Not to Dealers**

The Clean Cars program does not dictate which vehicles dealerships must sell or which vehicles consumers can buy – nothing keeps a consumer from buying the vehicle of their choice. It increases consumer choice by bringing more electric vehicles to Virginia dealerships. The program applies only to new vehicles, not to vehicles already on the road or to the sale of used vehicles.

Some dealerships will decide not to offer certain models of low-emission or electric vehicles. That’s fine, since other dealerships located in areas of Virginia with higher demand for those models will be able to sell them. Manufacturers who do not sell adequate numbers of ZEVs in a ZEV state can buy credits from manufacturers who have sold above their target.

The Clean Cars Program has a two-year lag time between when the regulation is finalized and when manufacturers have to comply. Because of this delay, and because cars currently on the road will take many years to replace, we need to adopt the Clean Car LEV and ZEV standards this year in order to reap the benefits in the decade to come.

**The Clean Air Act Gives Virginia the Authority to Adopt the Clean Cars Program**

When President Nixon signed the Clean Air Act in 1970, the federal Environmental Protection
Agency became authorized to regulate vehicle emissions. Since California already had low emissions standards in place at the time, they were allowed to have more stringent standards than the federal government. Under Section 177 of the Clean Air Act, other states can adopt California's standards, but not create their own. Manufacturers have been complying with these LEV and ZEV standards for decades.

**TAKE ACTION**

*To get involved, contact our Virginia Director, Kim Jemaine: kim@chesapeakeclimate.org.*

**WORKS CITED**

1. American Lung Association, The Road to Clean Air. 2020 [link](#)
3. KMPG Forecast of EV Adoption, presented to Commonwealth Transportation Board 2019 [link](#)