

Committee: Environment and Transportation and Economic Matters

Testimony on: HB 1258 "Consumer Goods – Restrictions Based on Energy Source –

Prohibition (Energy Equality Act of 2025)"

Position: Oppose

Hearing Date: March 11, 2025

The Maryland Chapter of the Sierra Club strongly opposes HB 1258. The bill would prohibit the state or a local government from restricting the sale, purchase, or use of any consumer good based on the energy source that is used to power that good. This definition includes motor vehicles and appliances.

Additionally, the bill would remove Maryland from participating in the Advanced Clean Cars II and Advanced Clean Trucks programs. In 2023, as required by law, the Maryland Department of the Environment (MDE) adopted the Advanced Clean Cars II and Advanced Clean Trucks regulations. These regulations require vehicle manufacturers to sell an increasing percentage of zero-emission passenger cars, school buses, trucks, and delivery vans from Model Year 2027 through 2035. Section 177 of the Clean Air Act allows states to adopt vehicle emissions standards that are more strict than federal standards if they are identical to those adopted by the state of California, and MDE adopted these rules pursuant to the Maryland Clean Cars Act of 2007 and Clean Trucks Act of 2023. MDE has been a part of the highly successful Clean Cars program since 2007. No clean car state, including Maryland, has levied any penalties on vehicle manufacturers during the course of the program. While the regulations must remain identical to the state of California's regulations, MDE has full discretion over the system of penalties.

Transportation is the largest source of climate-damaging greenhouse gas (GHG) emissions and a leading source of toxic air pollution that is hazardous to human health. MDE's Climate Pollution Reduction Plan notes that the Advanced Clean Cars II and Advanced Clean Cars Trucks programs are key policies that are needed for Maryland to meet its climate targets.

These standards are also necessary to cut unhealthy air pollution. Vehicles are responsible for over 40% of Maryland's NOx emissions that contribute to ozone, or smog, pollution. Over 80% of Marylanders live in areas designated as being in nonattainment of the National Ambient Air Quality Standards for ozone, with the Baltimore region and Cecil County being in serious non-attainment. Residential neighborhoods located near major roads and highways face disproportionate burdens from transportation pollution and traffic. These neighborhoods are far more often communities of color due to decades of residential segregation, and bear a burden of higher rates of asthma and other health conditions and unremitting noise pollution.

Advanced Clean Cars II program

An April 2023 report from Energy Innovation Policy & Technology calculates that, from adopting the *ACC II rule alone*, Maryland will experience the following tangible public health benefits by 2050:

• 3,150 Avoided Asthma Attacks

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 70,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

- 15,600 Avoided Lost Workdays
- 195 Avoided Premature deaths
- 5,380 Avoided Respiratory Symptoms and Bronchitis
- 60 Avoided Nonfatal Heart Attacks
- 48 Avoided Hospital Admissions
- 26 Avoided Respiratory ER Visits
- 91,800 Avoided Minor Restricted Activity Days¹

MDE has determined that the Advanced Clean Cars II program is "our single largest existing climate pollution reduction strategy over the long term."

Electric vehicles can also generate considerable savings for consumers while reducing our dependence on foreign oil. According to the Union of Concerned Scientists, by switching to an electric car, the <u>average driver in Annapolis could save \$920 a year on fuel costs</u>.

There are <u>numerous flexibilities</u> that manufacturers can use to meet the compliance requirements including:

- **Historical credits (converted credits)**: Manufacturers can use converted credits from Advanced Clean Cars I to fulfill up to 15% of the annual requirement for Model Years 2026-2030. Additionally, according to MDE, the industry is significantly exceeding the standards that currently apply in the final years of ACC I and has already accrued enough extra credits to maximize relevant flexibility through Model Year 2031.
- Credit Pooling: Manufacturers can transfer excess credits earned in one state to another state from the same or previous model year to fulfill up to 20% of the annual requirement in Model Year 2027, and 15% in Model Year 2028.
- Early compliance credits: Manufacturers can also meet up to 15% of the annual requirement by banking credits from zero-emission vehicles sold in Maryland in Model Years 2024 to 2025.
- Environmental Justice credits: Manufacturers can receive credits that can be used to satisfy up to 5% of the annual requirement for new vehicles placed in community-based programs.
- **Plug-in hybrid vehicles**: Plug-in hybrids can be used to meet up to 20% of the annual ZEV requirement.
- **Banked credits**: Manufacturers can bank excess credits to use for future compliance for up to four model years.
- **Credit trading**: Manufacturers can trade or sell excess zero-emission vehicles and plug-in hybrid credits.
- Three year lookback provision: If a manufacturer cannot meet the annual requirement in any model year (and chooses not to buy excess credits from another manufacturer) it can make up the deficit within three model years. For example, a manufacturer could resolve a 2027 model year deficit by the end of the 2030 model year.

¹ Energy Innovation Policy & Technology LLC, "Nationwide Impacts Of California's Advanced Clean Cars II Rule" (April 9, 2023),

https://energyinnovation.org/publication/nationwide-impacts-of-californias-advanced-clean-cars-ii-rule/.

With all the added <u>flexibility mechanisms</u>, the effective sales requirement for zero-emission vehicles is as low as 19% in Model Year 2027 and 26% in 2028. For context, 12.2% of light-duty vehicles sales in Maryland were electric in the last quarter of 2024.² When the EPA finalized its emissions standards for Model Years 2027 and later, it projected in its central analysis case that battery electric vehicles would make up 26% of national sales in Model Year 2027. The number of light-duty EVs registered in Maryland increased more than six-fold from 2020 to 2023, with a 50% increase from 2022-2023 alone, such that the total number of light-duty EVs in the state topped 103,000 at the end of 2023.

Advanced Clean Trucks program

The Advanced Clean Trucks program has reasonable requirements that are feasible to implement, and plays an important role in reducing public health outcomes. Trucks and other large vehicles account for 9% of vehicles on the road, but contribute 21% of carbon pollution and 48% of particulate matter (PM2.5) pollution emitted by the entire transportation sector in Maryland. People who are heavily exposed to PM2.5 and other toxic truck emissions, like nitrogen oxides, are at a greater risk for developing asthma and other lung diseases, like chronic obstructive pulmonary disease and lung cancer.

According to a <u>report</u> by ERM, the Union of Concerned Scientists and NRDC, the Advanced Clean Trucks rule is estimated to reduce Maryland's annual fleet greenhouse gas emissions by **40 percent below 2022 levels by 2050 and avoid over 38,000 cases** of acute bronchitis, exacerbated asthma, and other respiratory symptoms in Marylanders.

The Advanced Clean Trucks rule program is already a success. In California, the state has exceeded its Advanced Clean Trucks goal two years ahead of schedule, with five times the required sales numbers of electric trucks.

As with the Advanced Clean Cars II regulation, the ACT program gradually ramps up over time, encourages early voluntary action, and <u>contains significant flexibilities</u>. The ACT regulation uses a credit and deficit system. Deficits are generated by selling vehicles into the state; credits are earned by selling ZEVs. Manufacturers achieve compliance when total credits retired equals total deficits.

- **Plug-in hybrid vehicles:** Up to 50% of Advanced Clean Truck rule sales requirements can be met with plug-in hybrids through 2035.
- Credit trading: Manufacturers can trade credits across truck classes and manufacturers, with vehicles from heavier classes earning more credits.
- Credit banking: Excess credits can be banked for five years for use in future model years where a manufacturer has a deficit.
- Early compliance credits: Manufacturers can earn early action credit for eligible ZEVs sold in the Model Year 2026, before ACT goes into effect.
- Lookback provision: If a manufacturer does not have sufficient credits, they have one year to make up the deficit. (Note: Maryland can adopt a California amendment to

² Atlas Public Policy (data available to subscribers only)

the Advanced Clean Trucks rule that would <u>provide manufacturers with a</u> <u>three-year makeup window</u> if they fall short of zero-emission sales in a given year.)

Up to 50% of Advanced Clean Truck rule sales can be met with plug-in hybrids through 2035. There is also a credit banking system that allows for trading across truck classes and manufacturers, with vehicles from heavier classes earning more credits.

A report by Atlas Public Policy assessed the feasibility of charging infrastructure needed to support the Advanced Clean Trucks rule in Maryland. The analysis found "The majority of zero-emission MHD vehicles in Maryland under ACT compliance will be class 2b/3 trucks" – which by 2032 will require approximately 21,000 Level 2 charging ports and 485 en-route fast charging ports. The report noted that "For comparison, the majority of Maryland's 84,000 light-duty EVs are likely already charged at a Level 2 charger at home." To charge class 4-8 trucks under ACT, Maryland will need about 14,000 charging ports, two-thirds of which can be Level 2 ports at depots, with higher-powered charging ports making up the remaining third.³ Atlas finds that the electricity required to charge these medium- and heavy-duty EVs in 2032 is equivalent to only 2.1% of the state's 2022 total electricity sales.

The trucking associations' claims that the ACT rule harms truck dealers stems largely from misleading practices by vehicle manufacturers. Some manufacturers have incorrectly informed dealers that diesel trucks are unavailable or that zero-emission truck sales ratios are required to obtain diesel inventory. Investigations, such as one by the <u>California Air Resources Board</u> (CARB), have indicated that "inconsistencies in communication have led dealers and fleets to believe that the ACT regulation's requirements are leading to the product shortages in the medium- and heavy-duty space which, upon discussions with all affected parties, is not backed by the data available." Additionally, CARB notes that "while OEMs are largely informing dealers and fleets that the ACT regulation is placing limits on the number of ICE vehicles which can be delivered, they have alternatively confirmed with CARB staff that this is not the case for the 2024 MY, which is consistent with the current ACT credit surplus."

Maryland's exit from the clean cars and clean trucks program would unnecessarily harm public health, significantly impede progress on achieving our climate goals, undo a decades-long legislative and regulatory process to reduce air pollution from Maryland vehicles, and erode consumer choice for more sustainable EVs.

Building Electrification

HB 1258's prohibition on restricting the sale, purchase, or use of any appliance based on the energy source that is used to power that good would impede Maryland's efforts to advance building electrification.

Building electrification is an important tool for reducing greenhouse gas emissions in the state and protecting Marylanders' health. Fuel burned in buildings accounts for approximately 16% of greenhouse gas (GHG) emissions in Maryland. The electricity used in buildings accounts for an

³ This analysis is based on ACT being in place in Maryland by Model Year 2025.

additional contribution to GHG pollution; however, this will decline over time as Maryland's energy production becomes increasingly non-emitting. As Maryland works to achieve its climate goals to reduce GHG emissions by 60% (from 2006 levels) by 2031 and reach net-zero by 2045, building electrification will play a crucial role in meeting those targets.

Building electrification will also have significant public health benefits. Currently close to half of homes in Maryland burn use gas appliances. Use of gas appliances can increase levels of nitrous oxides, benzene, and particulates inside buildings through regular use or gas leaks, all of which generate health risk. Benzene is a known carcinogen. Inside our homes, gas appliances increase the likelihood that children will develop asthma; one study showed that children in homes with gas stoves have a 42% higher risk of asthma. Gas appliances, especially those that vent outdoors like water and space heating equipment, also play a large role in contributing to dangerous levels of smog pollution.⁴

Maryland has already demonstrated support for reducing emissions in the buildings sector through building electrification, and both existing and proposed climate- and health-protective policies could be threatened by HB 1258. MDE has implemented Building Energy Performance Standards (BEPS), which require increasing electrification and energy efficiency in buildings over 35,000 square feet. As called for in the December 2023 Climate Pollution Reduction Plan and Governor Moore's June 2024 Executive Order⁵, MDE is developing Zero Emissions Heating Equipment Standards and Clean Heat Standards that will reduce emissions from residential and commercial buildings as space and water heating equipment is replaced at the end of its useful life. HB 1258 would also directly impact implementation of HB 973, the Better Buildings Act, if both were passed.

For these reasons, we urge an unfavorable report.

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⁴ Sonoma Technology, <u>Ozone Impacts from Building Combustion Sources on Nonattainment Areas in Maryland</u>. September 2024.

https://www.sierraclub.org/press-releases/2024/11/report-buildings-play-big-role-unsafe-smog-levels-51-million-marylanders

⁵ 01.01.2024.19, Leadership by State Government: Implementing Maryland's Climate Pollution Reduction Plan