



County of Fairfax, Virginia

MEMORANDUM

DATE: January 21, 2022

TO: Board of Supervisors

FROM: Bryan J. Hill 
County Executive

SUBJECT: Update on State and Federal Vehicle Emissions Standards

In 2021, the Virginia General Assembly passed [House Bill \(HB\) 1965 \(Bagby\)](#), which directed the State Air Pollution Control Board to implement a low-emissions vehicle (LEV) and zero-emissions vehicle (ZEV) program for motor vehicles with a model year of 2025 and later. The bill was signed into law by the Governor in March 2021 and is expected to encourage adoption of more fuel-efficient combustion engine vehicles as well as battery and plug-in hybrid electric vehicles (EVs), thereby reducing statewide emissions from the transportation sector.

The Board of Supervisors has long expressed support for federal, state and local efforts to reduce emissions and promote clean air, including through the adoption of stricter vehicle emissions standards. Such principles have also been endorsed by the [Environmental Quality Advisory Council \(EQAC\)](#) and the [Community-wide Energy and Climate Action Plan \(CECAP\) Working Group](#). Despite general support for HB 1965 when it first passed, there was some uncertainty about Virginia's ability to proceed due to restrictions at the federal level put in place by the previous Administration. Since the 2021 General Assembly session concluded, several important developments have occurred at both the state and federal levels to address these uncertainties. The purpose of this memorandum is to update the Board on these developments and highlight their significance to the county.

Background

HB 1965 directs the State Air Pollution Control Board to adopt and enforce LEV and ZEV standards pursuant to Section 177 of the Clean Air Act. Section 177 allows states to seek adoption of California's vehicle emissions standards in place of federal standards. As California was the only state to have comparable vehicle emissions standards in place prior to the passage of the Clean Air Act, it is authorized to seek a waiver from the Environmental Protection Agency (EPA) to establish and enforce its own vehicle emissions standards, provided that they are at least as stringent as those set by the federal government. As of today, fifteen states and the District of Columbia have adopted California's vehicle emissions standards.

California's current vehicle emissions standards are packaged as the Advanced Clean Cars Program, which includes LEV regulations for criteria pollutants (including nitrogen oxides, carbon monoxide and particulate matter) and greenhouse gas (GHG) emissions, as well as a ZEV program to encourage adoption of electric, plug-in hybrid electric and hydrogen fuel cell vehicles. Standards developed under the Advanced Clean Cars Program extend to vehicle model year 2025 and apply to both light- and medium-duty vehicles, including passenger cars and medium-duty trucks, vans and SUVs. The California Air Resources Board (CARB) is now moving forward with development of the Advanced Clean Cars II Program, to address regulations for light- and medium-duty vehicle model years 2026 and beyond. A rulemaking package is expected to come before CARB in June 2022.

State Action on Vehicle Emissions Standards

In accordance with HB 1965, on December 2, 2021, the State Air Pollution Control Board adopted final regulations for an LEV and ZEV program in Virginia. The regulations will go into effect in 2024 for vehicle model year 2025. The mandated two-year delay is intended to give manufacturers and dealerships time to comply. When final regulations are adopted by CARB for vehicle model years 2026 and beyond, Virginia will automatically adopt these standards due to enabling language included in HB 1965.

Adoption of the LEV and ZEV standards is critical to meeting Virginia's statutory goal to achieve net-zero carbon emissions for all sectors by 2045. According to the Virginia Department of Environmental Quality (VDEQ), on-road transportation is the largest sector contributing to statewide GHG emissions with light-duty vehicles making up a majority of those emissions. The ZEV program in particular is expected to drive GHG emissions reductions by as much as 73 percent by 2050, assuming all new light-duty vehicles sold in 2035 and beyond are EVs.

The ZEV program will put in place mandates for auto manufacturers doing business in Virginia, which will be required to provide a certain number of ZEVs each year to new car dealerships in the state, with numbers increasing annually. A credit system awards manufacturers for ZEVs sold and allows them to sell or buy credits from one another. Due to the ZEV mandates and credit system, manufacturers and dealerships tend to prioritize EV sales in states that have adopted the ZEV program; it is expected that once the regulations take effect, dealerships in Virginia will begin to offer a more extensive range of EV models than has previously been available to consumers. While there are no light- and medium-duty vehicle manufacturers based in Virginia, there are over 450 new car dealerships that will need to comply with the new regulations. The ZEV program was supported by the Virginia Automobile Dealers Association in the 2021 General Assembly session.

Federal Action on Vehicle Emissions Standards

When HB 1965 was first passed, the Biden Administration was initiating a process to review the previous Administration's rulings on vehicle emissions standards, including a ruling preempting California from adopting stricter emissions standards than those set at the federal level (the

SAFE-1 Rule¹) and a weakening of federal emissions standards overall (the SAFE-2 Rule²). This review was mandated by President Biden in [Executive Order 13990](#), issued on January 20, 2021. In response to Executive Order 13990, both the EPA and the National Highway Traffic Safety Administration (NHTSA) moved to reconsider and repeal the SAFE-1 Rule. Following a public comment period, the NHTSA officially [withdrew](#) its portion of the SAFE-1 Rule on December 21, 2021. This repeals the Trump Administration's interpretation that states, including California, were to be preempted from issuing their own GHG emissions standards and zero-emission vehicle mandates. The EPA has yet to issue a final ruling on SAFE-1, but indicated its intention in an April 2021 [Notice of Reconsideration](#) to overturn its revocation of California's waiver for the Advanced Clean Cars Program.

Executive Order 13990 also initiated a review of the SAFE-2 Rule, which culminated in the EPA's December 20, 2021 [announcement](#) of stricter federal GHG emissions standards for light-duty vehicle model years 2023-2026, effective February 28, 2022. As a result, under the federal program, light-duty vehicles will average 40 miles per gallon by model year 2026 as opposed to the 32 miles per gallon average under the SAFE-2 Rule. The EPA estimates the new standards will result in three billion tons avoided GHG emissions through 2050. The NHTSA is currently developing updated fuel efficiency standards for model years 2024-2026.

Significance to Fairfax County

Stricter vehicle emissions standards enacted at the state and federal levels are expected to provide numerous environmental and health benefits to Fairfax County and the surrounding region. The more stringent standards for criteria pollutants and GHG emissions will help mitigate ozone pollution, which is of particular concern in the Northern Virginia nonattainment area. Improving air quality contributes to public health as well as water quality improvements as nitrogen oxide emissions are a significant source of pollution in the Chesapeake Bay watershed.

The state's new ZEV program will support the county's operational and community-wide climate and energy goals. Should the range of available EV options increase as expected for consumers in Virginia, there are likely to be more options available that meet the needs of county agencies and support the transportation electrification targets included in the 2021 Operational Energy Strategy. The ZEV program is also expected to drive adoption of EVs in the greater community, helping to meet the carbon reduction goals included in CECAP.

Please contact Kambiz Agazi at 703-324-1788 or via email at Kambiz.Agazi@fairfaxcounty.gov if you have questions or need more information.

¹ The Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program, or SAFE-1, was finalized in November 2019 by the Trump Administration. The SAFE-1 Rule revoked California's waiver for its Advanced Clean Cars Program and included an interpretation that other states would be unable to adopt its standards.

² The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, or SAFE-2, was finalized by the Trump Administration in March 2020. The SAFE-2 Rule reduced fuel efficiency standards for vehicle model years 2021-2026 from those originally proposed by the Obama Administration.

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