HB 60

Department of Legislative Services

Maryland General Assembly
2022 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 60 (Delegate Fraser-Hidalgo)
Environment and Transportation

Environment – New Motor Vehicles – Pollution Fee

This bill requires the Maryland Department of the Environment (MDE) to charge, and the Comptroller to collect, a fee on each new motor vehicle sold or registered in the State that has a U.S. Environmental Protection Agency (EPA) carbon dioxide (CO_2) pollution rating that is equal to or greater than the "minimum pollution level" established under the bill. The bill establishes several exemptions from the fee. Fee revenue is deposited into the Maryland Strategic Energy Investment Fund (SEIF) to be used for specified purposes related to electric vehicles and electric vehicle infrastructure. The Maryland Department of Transportation (MDOT) must review and make recommendations regarding the fee exemptions by July 1, 2029.

Fiscal Summary

State Effect: SEIF special fund revenues increase significantly, likely by *at least* several million dollars annually beginning in FY 2023; special fund expenditures increase correspondingly. General fund expenditures increase significantly beginning in FY 2023 to charge and collect the fee. State expenditures (multiple fund types) may increase beginning in FY 2023 to the extent any new vehicles purchased are subject to the fee.

Local Effect: Local government expenditures may increase beginning in FY 2023 to the extent any new vehicles purchased are subject to the fee. Local governments may also benefit to the extent that they are eligible to receive financial assistance from SEIF for the purchase of electric vehicles and/or to install electric vehicle infrastructure.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: The initial minimum pollution level is 400 grams per mile (g/mile) in the 2023 model year; the fee decreases by 10 g/mile each model year. The fee is based on the rating by EPA of the CO_2 tailpipe exhaust of passenger vehicles and light trucks and is $1.25 times the EPA pollution rating of the motor vehicle in its model year.

The bill establishes the following fee exemptions: (1) commercial vehicles used for transporting goods; (2) agricultural vehicles; (3) public transportation vehicles; (4) ambulances; and (5) vehicles owned by the State or a county or municipality that are not used strictly as passenger vehicles. By July 1, 2029, MDOT must review the exemptions and is authorized to recommend to the Secretary of the Environment a modification or elimination of any of the exemptions.

Fee revenue is deposited into SEIF to be used to (1) provide rebates on the sale of electric vehicles; (2) purchase electric transit and school buses; and (3) expand electric vehicle infrastructure.

Current Law: Each motor vehicle, trailer, semitrailer, and pole trailer driven on a highway must be registered unless exempted. A "motor vehicle" is defined as a vehicle that, unless otherwise specifically exempted, is self-propelled or propelled by electric power obtained from overhead electrical wires and not operated on rails. Certain vehicles, such as low-speed vehicles, bicycles, and motor scooters, are restricted to certain highways based on the maximum posted speed limit; they may be subject to different rules of the road than passenger cars and trucks.

Vehicle Emissions Inspection Program

The State's Vehicle Emissions Inspection Program (VEIP) is a component of the State's plan to improve air quality and is jointly administered by MDE and the Motor Vehicle Administration (MVA). Under VEIP, all model year 1977 and newer vehicles in the State, unless specifically exempt, must be inspected and tested every two years. MVA and MDE must set the VEIP fee for each vehicle to be inspected and tested, which may not exceed $14. The current fee is $14. New vehicles, when registered for the first time, are scheduled for VEIP testing at least 36 months from the registration date and are not subject to the fee.

Federal Regulations and Standards for Greenhouse Gas Emissions from Passenger Cars and Trucks

In December 2021, EPA finalized revisions to greenhouse gas (GHG) emissions standards under the federal Clean Air Act for light-duty vehicles for 2023 and later model years. These revisions are more stringent than prior revisions made under "The Safer Affordable

Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks,'' promulgated in April 2020. The final rule takes effect February 28, 2022. Under the rule, the projected fleet targets for the final standards increase in stringency in model year 2023 by almost 10% (compared to the SAFE rule standards in model year 2022), followed by stringency increases of 5% in model year 2024, 6.6% in model year 2025, and 10% in model year 2026. Additionally, in August 2021, President Biden signed Executive Order 14037, *Strengthening American Leadership in Clean Cars and Trucks,* which sets a nonbinding target of making 50% of all new passenger car and light truck sales zero emission vehicles in 2030.

Maryland Strategic Energy Investment Program

Chapters 127 and 128 of 2008 created the Maryland Strategic Energy Investment Program and the implementing SEIF to decrease energy demand and increase energy supply to promote affordable, reliable, and clean energy. SEIF is primarily funded through the proceeds from the auction of carbon allowances to power plants under the Regional Greenhouse Gas Initiative. The Maryland Energy Administration (MEA) administers SEIF.

State Fiscal Effect:

New Fee and Associated Strategic Energy Investment Fund Revenues and Expenditures

While the bill likely generates significant revenue from the establishment of the fee, the Department of Legislative Services (DLS) is unable to reliably estimate the increase in special fund revenues at this time. As noted above, the bill establishes a fee of $1.25 times "the EPA pollution rating of the motor vehicle in its model year." However, it is unclear as to what specific EPA "rating" is intended to be used in calculating the fee. EPA has more than one "rating," or CO_2 pollution estimate, for new vehicles, as discussed below.

Exhibit 1 shows the EPA GHG rating for model year 2022 (the most recent model year GHG rating is available), which reflects vehicle tailpipe emission of CO_2. As shown in the exhibit, the rating ranges from 1 to 10, with vehicles scoring a 1 being the dirtiest and vehicles scoring a 10 being the cleanest. Using this rating, the minimum pollution level for model year 2023 (400 g/mile, as established by the bill) falls somewhere between a rating of 4 and a rating of 5. If the fee is based on this rating, because the bill states that the fee must be charged on those vehicles with a CO_2 pollution *rating equal to or higher than the minimum pollution level*, it appears that the fee might apply to the cleaner vehicles (generally, those with ratings of 5 through 10); in this case, the minimum fee is $6.25 (for vehicles with a rating of 5) and the maximum fee is $12.50 (for vehicles with a rating of 10). Alternatively, one could assume that the intent is for the fee to apply to the dirtier vehicles (those with CO_2 emissions estimates of at least 400 g/mile in model year 2023, meaning the fee would generally apply to those vehicles with ratings of 1 through 5.)

Exhibit 1
U.S. Environmental Protection Agency's Greenhouse Gas Rating
Model Year 2022

GHG Rating	Miles Per Gallon (Gas)	CO_2 Emissions (Grams/Mile)
10	>=58	0-155
9	45-57	156-200
8	37-44	201-243
7	31-36	244-291
6	27-30	292-335
5	22-26	336-413
4	19-21	414-480
3	16-18	481-573
2	14-15	574-658
1	<=13	>=659

CO_2: carbon dioxide
GHG: greenhouse gas emissions

Source: U.S. Environmental Protection Agency

In addition to the 1 to 10 rating described above, EPA also develops estimates of CO_2 emissions (in g/mile) for specific types of vehicles and conducts annual reporting on automotive trends about light-duty vehicle GHG emissions, fuel economy, technology data, and auto manufacturers' performance in meeting federal GHG emissions standards. These emissions estimates are sometimes referred to as CO_2 ratings and vary depending on the type of modeling used to develop the estimates. Specifically, EPA develops two categories of CO_2 emissions data for new vehicles: (1) compliance data and (2) estimated real-world data. Compliance data, referred to as "2-cycle" test data, is calculated by weighting the city and highway test results. These results are used to determine regulatory compliance to determine whether manufacturers meet federal GHG and corporate average fuel economy standards, but do not accurately reflect real-world driving. Estimated real-world data is measured using additional laboratory tests to capture a wider range of operating conditions (including hot and cold weather, higher speeds, and faster accelerations). If the fee is based on this CO_2 emissions data (as opposed to the

1 to 10 rating scale described above), using the minimum pollution level established by the bill, the minimum fee for model year 2023 vehicles is $500.

In addition to the uncertainty with regard to which EPA CO_2 rating/emissions estimate is intended to be used in calculating the fee under the bill, specific data on the actual or projected CO_2 emissions for new vehicles sold and registered in the State is not readily available. Nevertheless, assuming that the fee is charged on new vehicles that emit CO_2 at a rate of at least the minimum pollution level (400g/mile in model year 2023, decreasing each model year), it is anticipated that special fund revenues increase by tens of millions of dollars annually regardless of whether the fee is calculated using estimated real-world emissions data or 2-cycle emissions data. However, if the fee is calculated using the 1 to 10 rating shown in Exhibit 1, fee revenues are significantly less.

For illustrative purposes only, based on nationwide EPA CO_2 emissions data for model year 2021, special fund revenues for SEIF could increase by approximately $63.2 million in the first full year under the following assumptions:

- the fee is calculated based on EPA real-world estimates of CO_2 emissions in g/mile;
- an estimated 300,000 new motor vehicles are sold or registered in the State annually;
- approximately 37% of new vehicles sold in the State are subject to the fee;
- the fee for most vehicles ranges from $517 to $771; and
- the CO_2 emissions estimates for new vehicles sold in Maryland are similar to the CO_2 emissions estimates for new vehicles sold nationwide.

Using the same general assumptions, if the fee is calculated using the 2-cycle emissions data rather than the real-world estimates, special fund revenues increase by approximately $18.1 million in the first full year.

Using the same general assumptions, if the fee is instead based on the EPA GHG rating shown in Exhibit 1 (that uses the 1 to 10 rating scale), special fund revenues increase by approximately $1.3 million in the first full year (using real-world emissions estimates) or by $2.2 million in the first full year (using 2-cycle emissions estimates).

Of course, the minimum pollution level that is the basis for calculating the fee decreases each year (as required by the bill), subjecting potentially more vehicles to the fee. On the other hand, over time, average fuel economy is expected to continue to improve, particularly because of the new GHG emissions standards that EPA recently finalized. Accordingly, future year revenue estimates may vary.

SEIF expenditures are assumed to increase correspondingly for the purposes specified by the bill. Because the purposes specified under the bill are consistent with the authorized uses of SEIF under current law, it is assumed that MEA can administer the additional funds with existing staff.

Administrative Costs for the Comptroller and the Maryland Department of the Environment

MDE estimates that general fund expenditures for the department increase by approximately $1.1 million in fiscal 2023 and by at least $1.4 million annually thereafter to hire 20 new staff to develop and implement an invoicing process to be able to *charge* the fee, as required by the bill. In order to *collect* the fee, the Comptroller estimates that general fund expenditures increase by approximately $9.5 million in fiscal 2023, by $7.3 million in fiscal 2024, and by at least $342,100 annually thereafter for staff and programming changes to its tax collection programs. The most significant costs anticipated by the Comptroller, expected to be incurred in fiscal 2023 and 2024, are for programming costs to build capacity within the agency's new Compass and legacy Smart tax collection systems and for costs associated with subsequent delays in the launch of the Compass system ($7.0 million in both fiscal 2023 and 2024), which is scheduled to launch in 2025.

Both the Comptroller and MDE note that neither agency currently has the infrastructure or capacity to charge and/or collect the fee under the bill; accordingly, significant investments in both information technology and staff are necessary.

The Comptroller notes that even with significant additional general funds, it is unlikely to be able to complete the necessary computer programming changes in time to be able to collect the fee by the bill's effective date. Even so, this analysis assumes the Comptroller begins collecting the fee in fiscal 2023.

DLS is unable to independently verify these anticipated costs without actual experience under the bill. Accordingly, a reliable estimate of the increase in costs cannot be made at this time. Even so, it is anticipated that general fund expenditures increase significantly for both MDE and the Comptroller beginning in fiscal 2023.

MDOT anticipates that it can review the exemptions and recommend any modifications to the exemptions with existing budgeted resources. MDOT further estimates that it can create and regularly send a file of new vehicles purchased to MDE with existing resources.

Increased New Vehicle Costs for State Agencies

State expenditures (multiple fund types) may increase on an annual basis as early as fiscal 2023 to pay the fee on the purchases of new vehicles. DLS notes that, among other exemptions, the bill exempts State-owned vehicles that are not used strictly as passenger vehicles from the fee. It is unclear how many vehicles purchased by the State each year may be subject to the fee. For informational purposes, the Department of General Services (DGS) advises that all future passenger vehicles purchased by DGS will be electric vehicles or plug-in hybrids, and thus likely exempt from the fee, assuming the fee is assessed on vehicles that pollute more than the minimum pollution level.

Local Fiscal Effect: Similar to the impact described for State agencies above, expenditures for local governments may increase as early as fiscal 2023 to pay the fee on the purchase of new vehicles. DLS notes that, among other things, the bill exempts county- and municipality-owned vehicles that are not used strictly as passenger vehicles from the fee. It is unclear how many vehicles purchased by local governments each year may be subject to the fee.

Certain projects funded through the new fee may benefit local governments, assuming they are authorized as eligible recipients. For example, the purchase of electric transit and school buses would result in cost savings for local governments and local school systems.

Small Business Effect: Expenditures increase for small businesses that purchase new vehicles that are subject to the fee established by the bill.

On the other hand, the bill requires MEA to use the fee revenue generated by the bill to incentivize and purchase electric vehicles and to expand electric vehicle infrastructure. Therefore, any small businesses that are involved in those industries may be eligible to receive program funding.

Additional Information

Prior Introductions: None.

Designated Cross File: SB 126 (Senator Kramer) - Education, Health, and Environmental Affairs.

Information Source(s): Baltimore, Charles, Frederick, Montgomery, and Somerset counties; City of Havre de Grace; Comptroller's Office; Maryland Department of the Environment; Department of General Services; Maryland Department of Transportation; Maryland Energy Administration; U.S. Environmental Protection Agency; Federal Register; Department of Legislative Services

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