



THE MARYLAND HOUSE OF DELEGATES  
ANNAPOLIS, MARYLAND 21401

February 25, 2022

**Sponsor Testimony for HB 829 – Department of the Environment – Zero–Emission  
Medium and Heavy Duty Vehicles – Regulations (Zero–Emission Truck Act of 2022)**

Chair Barve, Vice Chair Stein, Members of the Environment and Transportation Committee:

As those of you on this Committee well know, in the state of Maryland, we have set ambitious goals to combat the drastic consequences of pollution. The current Greenhouse Gas Emissions Reduction Act Plan aims to reduce Greenhouse Gas (GHG) emissions by 50% no later than 2030, and includes decreasing discharges from transportation as a key element. With trucks contributing the most significant portion of GHG emissions from transportation, we must take action in this area to help make our bold environmental goals a reality. HB 829 does this by requiring the establishment of regulations regarding the sale of new zero-emission medium and heavy duty vehicles in our state.

**The Context**

Nationally, trucks and buses - usually fueled by diesel - account for 4% of vehicles on the road, but are responsible for nearly 25% of greenhouse gas emissions from transportation.<sup>1</sup> Truck emissions are the fastest growing source of greenhouse gas emissions.<sup>2</sup> Hazards from these emissions include soot or particulate matter (PM), oxides of nitrogen (NO<sub>x</sub>), hydrocarbons (HC), carbon monoxide (CO), and other air pollutants (HAPs) and air toxics.<sup>3</sup> They contribute significantly to serious human health and environmental effects.

Health studies show that exposure can affect the respiratory system, worsening asthma, allergies, bronchitis, and lung function, as well as increase the risk of heart problems, premature death, and lung cancer. According to EPA data, for the state of Maryland alone in 2023 these emissions will cause 186 deaths, 73 heart attacks, 5,814 respiratory illnesses, and 218 cases of increased risks for cancer, resulting in \$2,061,170,446 in monetized health damages per year.<sup>4</sup>

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<sup>1</sup> <https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/>

<sup>2</sup> <https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/>

<sup>3</sup> <https://www.epa.gov/diesel-fuel-standards/about-diesel-fuels>

<sup>4</sup> <https://www.catf.us/deathsbydiesel/>

From an environmental perspective, these emissions contribute to the production of ground-level ozone which damages crops, trees, and other vegetation. They also produce acid rain, which affects soil, lakes and streams, and enters the human food chain via water, produce, meat, and fish. And, they contribute to climate change that impacts air and water quality, weather patterns, sea levels, ecosystems, and agriculture.<sup>5</sup>

Finally, in terms of social considerations, these emissions often occur in industrial or urban areas, contributing to health disparities and inequalities in frequently marginalized communities. Reducing emissions from medium and large-size vehicles through the sales of equal-size electric vehicles will improve air quality, protect people, improve the environment, and combat the effects of climate change *for all*.

In fact, recognizing the benefits of this transition, Governor Larry Hogan announced in July 2020 that he, along with the governors of 14 other states and the mayor of Washington, D.C., had signed an agreement to collaborate on increasing the number of electric medium- and heavy-duty vehicles — pursuing a goal of all sales of these vehicles being zero-emission models by 2050.<sup>6</sup> The passage of HB 829 supports this goal, and is the next logical step.

### **What the Bill Will Do**

HB 829 will mandate that the Department of the Environment (MDE) adopt regulations on or before December 1, 2022 establishing requirements for the sale of new zero-emission medium and heavy duty vehicles in the State. (There is one amendment in your packet - Medium duty vehicles are defined as weighing between 8,501 and 14,000 pounds, and heavy duty vehicles are defined as weighing 14,001 pounds or more). This Bill will encourage manufacturers and purchasers of medium and heavy-duty vehicles – including trucks and buses – to transition faster to zero-emission medium and heavy duty transport vehicles.

HB 829, the Zero-Emission Truck Act of 2022, is modeled after 2020 legislation passed in California to help the state meet its air quality and climate targets. California's Advanced Clean Truck Regulation is part of their holistic approach to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles. Beginning in 2024, the regulations require each truck manufacturer selling medium-and heavy-duty vehicles in the state to increase over time the number of electric versions of these vehicles sold.<sup>7</sup> These regulations, the first in the world aimed at boosting sales of zero-emission trucks to regulate pollution from motor vehicles, have prompted many other states including Massachusetts, New Jersey, New York, Washington, and Oregon to adopt similar legislation.<sup>8</sup>

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<sup>5</sup> <https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera#:~:text=Environment%20%2D%20Emissions%20from%20diesel%20engines,%2C%20produce%2C%20meat%20and%20fish>

<sup>6</sup> <https://news.maryland.gov/mde/2020/07/14/hogan-administration-joins-multi-state-clean-truck-initiative/>

<sup>7</sup> <https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet>

<sup>8</sup> <https://www.scientificamerican.com/article/california-passes-historic-clean-truck-rule/>

Despite the many benefits of moving in California's direction, I fully acknowledge that the transportation sector is still recovering from the economic impacts of COVID – all while being counted on to help with supply chain issues – and may have concerns including:

- **Aren't EVs Expensive?:** While it is true that the up-front cost of an electric truck is higher today than its comparable diesel option, over the lifetime of the vehicle, many electric trucks are currently competitive with diesel trucks due to fuel savings and lower maintenance costs. Since batteries are the single most expensive components of a new electric truck, upfront costs are falling as battery prices continue to decline.
- **Will the Public Still Buy Without a State Sales Incentive Plan?:** Pent up demand for electric trucks is resulting in billions of dollars in preorders and driving massive investment from new manufacturing entrants.
- **Is the Timeline Too Ambitious?** The timeline in HB 829 is only the regulation adoption date. After the rule is adopted, manufacturers will likely have two years to prepare before it goes into effect. The annual new sales requirements start low and ramp up gradually while new types of electric trucks and buses continue to enter the market. This also gives Maryland time to build the necessary charging infrastructure.

In sum, the benefits of moving toward requirements for the sale of new zero-emission medium and heavy duty vehicles in the State, far outweigh any costs.

For all the foregoing reasons, I urge the Committee to adopt a favorable report of HB 829.

Sincerely,  
Delegate Sara Love