

September 26, 2022

Attn: Michael Powell, Co-Chair  
Maryland Commission on Climate Change  
Greenhouse Gas Mitigation Working Group  
1800 Washington Blvd.  
Baltimore, MD 21230

RE: Financial Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles; Use of Renewable/Biofuels

Dear Co-Chairman Powell:

At the Mitigation Working Group (MWG) meeting on September 20, I was afforded the opportunity to present the trucking industry's perspective on decarbonization. During the meeting you asked for specific recommendations the industry could offer on appropriate financial incentives that should be made available to the medium and heavy-duty trucking industry as part of the effort to encourage adoption of zero emission vehicles. This letter is in response to your request.

As you know, the Maryland General Assembly considered legislation in 2022 to adopt California's Advanced Clean Trucks Regulation. Legislation is expected to be reintroduced in 2023, and the Maryland Commission on Climate Change may very well recommend its passage. One of the many hurdles that I identified to widespread adoption of ZEV trucks is the massive increase in the cost of the vehicles and charging equipment. Consider the real-world example offered below by one member of our organization:

Vehicle cost:

- One electric day-cab tractor: \$400,000
- Equivalent model diesel tractor: \$130,000
- Cost difference: \$270,000

Charging infrastructure:

- One charging station equipped with two chargers: \$150,000<sup>1</sup>

Currently California offers between \$120,000 - \$180,000 for a Class 8 tractor as part of its Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). **California mandates cannot be achieved without similar financial investments from the jurisdictions that impose them.** Maryland's Clean Fuels Incentive Program offers up to \$150,000 for Class 8 tractors, but the entire program budget for Fiscal Year 2023 is only \$1,300,000. By comparison, the California HVIP was allocated a total of \$569.5 million for Fiscal Year 2022.

Maryland Motor Truck Association believes the state should offer financial incentives based on a percentage of a vehicle's cost. A percentage-based approach allows for the subsidized dollar amount to be automatically reduced should the cost of these vehicles go down as the technology advances. It also automatically adjusts based on the lower pricing of a medium-duty ZEV. Given the cost differential that exists in the example above, the **minimum percentage** that MMTA feels is appropriate would be 40%. This would still require an additional outlay by a motor carrier of more than \$100,000 compared to a diesel-powered tractor. Of note, this does not include the cost of charging equipment. The California Electric Vehicle Infrastructure Project indicates that charging equipment similar to that in my example above receives an average subsidy of approximately 58%.

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<sup>1</sup> The California Electric Vehicle Infrastructure Project shows an average cost of \$114,674 for DC fast charging equipment, with an average rebate of \$66,569. (<https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/california-electric-vehicle>)

I also want to take this opportunity to counter statements being made by some that electric trucks are expected to achieve cost parity with diesel-powered vehicles in the next few years. That is simply not the case. Those projections are based on total life-cycle cost of the vehicle and assume that a trucking company that purchases a new truck will retain it for its entire useful life. Typically those projections range between 12 and 15 years. However, most motor carriers are on a replacement cycle ranging from five to seven years, with some companies turning over their vehicles as frequently as every three years. Companies replace vehicles for many reasons, such as: operational needs change; comfort and appeal to drivers; a desire to have equipment with the latest safety technologies; etc.

Lastly, you asked for a recommendation regarding the use of low carbon fuels (e.g., biofuels, renewables). MMTA cannot offer a specific recommendation regarding the use of these fuels because we have concerns about their limited production and availability nationwide. However, recent research has shown that accelerating the turnover of older vehicles to new diesels, coupled with the use of renewable fuels or natural gas, provides three times the reduction of greenhouse gases at a fraction of the cost of electrification and could provide important near-term emissions reductions.<sup>2</sup>

Thank you,



Louis Campion  
President & CEO  
Maryland Motor Truck Association

cc: Kim Coble, Co-Chair  
Mark Stewart, MD Dept. of the Environment

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<sup>2</sup> [Research Finds More Emissions Benefits at Lower Cost from Accelerated Fleet Turnover and Use of Bio- and Renewable Fuels than Switching to Electrified Medium and Heavy-Duty Trucks \(dieselforum.org\)](http://dieselforum.org)