

TESTIMONY REGARDING HB 829 being heard by the Maryland House Environment and Transportation Committee on Friday, February 25, 2022 at 1:00 PM

Dear Chair Barve, Vice Chair Stein, and Members of the Committee:

Thank you for the opportunity to comment on HB829, Department of the Environment – Zero-Emission Medium and Heavy-Duty Vehicles - Regulations, which requires the Department of the Environment to adopt the Advanced Clean Truck (ACT) Regulation by the end of 2022. In 2021, California's ACT Regulation was adopted by five additional states – Massachusetts, New Jersey, New York, Oregon & Washington – and several states are planning to adopt the regulation in 2022. As one of the initial signatories to the 2020 Multi-State Zero Emission Medium- and Heavy-Duty Vehicle Memorandum of Understanding, Maryland joined 15 other states and the District of Columbia in committing to make sales of all new medium- and heavy-duty vehicles in signatory jurisdictions zero emission vehicles by no later than 2050, including at least 30% of new truck sales by 2030. To have any chance of meeting its goals, truck operators in Maryland must have access to the newest models of zero emissions trucks in all classes on the market and the ACT is the key regulatory tool to ensure that these advanced vehicles are available to Maryland's truck fleets. The ACT rule will encourage manufacturers to focus more time, energy, and resources on selling electric trucks to operators in the state. This will not only help accelerate the adoption of these trucks but will guarantee there is ample supply of electric trucks of all classes available in Maryland.

Tesla's mission is to accelerate the world's transition to sustainable energy. Moreover, Tesla believes the world will not be able to solve the climate change crisis without directly reducing air pollutant emissions—including carbon dioxide (CO2) and other greenhouse gases (GHG)—from the transportation and power sectors. To accomplish its mission, Tesla designs, develops, manufactures, and sells high-performance fully electric vehicles and energy generation and storage systems, and installs, and maintains such systems. Tesla currently produces and sells four fully electric, zero emissions vehicles (ZEVs): the Model S sedan, the Model X sport utility vehicle (SUV), the Model 3 sedan, and the Model Y mid-sized SUV. Tesla will also be introducing a medium duty pickup truck, the Cybertruck, and a Class 8 heavy-duty truck, the Tesla Semi. The Tesla Semi will come in two models with ranges of 300 and 500 miles respectively and will demonstrate that an all-electric truck can meet virtually any duty cycle when paired with the megawatt charging system that Tesla and the industry is developing.

The ACT rule is not only an essential tool for addressing GHG and tailpipe emissions from the truck sector, it is also reasonable and warranted given the level of demand that can be observed in the marketplace. On the heavy-duty side, since unveiling the Tesla Semi in late 2017, a significant number of fleets with substantial freight needs have placed reservations for the truck, indicating broad industry demand for heavy-duty electric vehicles. These fleets will be deploying the Tesla Semi in a wide range of applications, including but not limited to, manufacturing, retail, grocery and food distribution, package delivery, dedicated trucking, rental services, intermodal, drayage, and other applications. Companies with operations throughout North America representing every major trucking sector and category of the economy have reserved the Tesla Semi, ranging from food service to logistics to retail.

The reason for this strong interest is clear – the economics of electrified heavy-duty vehicles are incredibly compelling for end-users. With the per mile operational costs being so much less expensive than that of diesel trucks, economic minded operators will maximize the use of their electric trucks and quickly expand the number of electric trucks in their fleets.



Tesla is not alone in its efforts to manufacture electrified medium and heavy-duty vehicles, with numerous other major manufacturers announcing plans to make zero emission Class 8 trucks. ¹² A similar picture emerges in the context of electric pick-up trucks, with several major legacy and new automakers unveiling plans to manufacture electric pick-up trucks. ³⁴ According to a report from CalStart, ⁵ there will be nearly 200 models of zero emission medium and heavy-duty vehicle models in commercial production by the end of 2023 (several years before the ACT requirements would even come into effect for Maryland).

Strong consumer demand helps drive investments from vehicle manufacturers. Yet, strong regulations that set a clear direction for industry, such as the ACT rule, accelerate the pace of innovation and ensure the industry makes these vehicles available to consumers. As has been the case with the ZEV regulations on light-duty vehicles, EV model availability and supply is significantly more robust in states that adopted the ZEV rule, than in those that did not. In a similar vein, states that adopt the ACT should see more electric trucks models available to operators in those states compared to states that do not put a regulatory scheme in place. With growing demand and wide availability, supported by a strong regulatory framework, the broader industry could easily exceed the targets in the rule, giving momentum towards meeting state emission reduction goals.

Thank you for the opportunity to provide this testimony in support of SB687.

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¹ "8 electric truck and van companies to watch in 2020"; Shane Downing, GreenBiz, January 13, 2020. https://www.greenbiz.com/article/8-electric-truck-and-van-companies-watch-2020

² "Big Rigs Begin to Trade Diesel for Electric Motors", Susan Carpenter, New York Times, March 19, 2020; https://www.nytimes.com/2020/03/19/business/electric-semi-trucks-big-rigs.html
³ Id.

⁴ https://www.ford.com/trucks/f150/f150-lightning/2022/

⁵ https://calstart.org/zero-emission-model-numbers-expected-double-2023/