

V O L V O

TO: The Honorable Kumar P. Barve, Chair
Members, House Environment and Transportation Committee
Maryland Energy Administration

FROM: Richard A. Tabuteau

DATE: February 25, 2022

RE: **SUPPORT** – House Bill 894 – *Transportation Electrification and Modernization (TEAM) Act*

INTRODUCTION

The Volvo Group drives prosperity through transport and infrastructure solutions, offering trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase our customers' uptime and productivity. Founded in 1927, the Volvo Group is committed to shaping the future landscape of sustainable transport and infrastructure solutions. The Volvo Group is headquartered in Gothenburg, Sweden, employs nearly 100,000 people and serves customers in more than 190 markets.

Volvo Group North America, with headquarters in Greensboro, NC, employs over 13,000 people in the United States and operates 11 manufacturing and remanufacturing facilities in seven states. In Maryland, the Volvo Group's , Hagerstown facility manufactures powertrains for its Class 8 heavy duty trucks and buses sold in North America in Washington County where it proudly employs over 1,700 people, many of which are members of the Local UAW Union.

In the past few years, the Volvo Group has made major investment in the Hagerstown facility, including \$43 million in powertrain production upgrades and expansion; \$76 million for R&D, including electromobility assembly and fossil-free solutions to power electric trucks. Since 2011, \$212 million has been invested in the 1.5 million square foot facility.

Co-located is the company's powertrain engineering and testing division. In 2021, the company announced a \$33 million expansion of the research and development site for the construction of a new, state-of-the-art Vehicle Propulsion Lab (VPL). The all-new VPL, slated to open in the second quarter of 2023, will enable the company the ability to more quickly develop and test battery-electric and hydrogen-based fuel cell solutions, as well as internal combustion engines, which will be powered by fossil-free fuels in the future, for our Class 8 trucks and coach buses.

The Volvo Group has invested heavily in sustainability efforts both in our facilities and our product offerings. In fact, the battery electric drivetrain is assembled in Hagerstown for the Volvo VNR electric and the Mack LR electric trucks. At our facility, we installed approximately 5,000 solar panels that produce 1.3 megawatts of electricity to help offset energy demands. The facility is part of Maryland's Green Registry and a Superior Energy Performance Platinum-Certified Partner by the U.S. Department of Energy.

The Volvo Group is the only major heavy-duty truck manufacturer that produces all its vehicles for the North American market in the U.S. In 2020, the Volvo Group's global net sales amounted to about \$36.8 billion. Volvo shares are listed on Nasdaq Stockholm. For more information, please visit www.volvogroup.com.

TRANSITION TO ZERO-EMISSION VEHICLES

In 2020, the Volvo Group made a global commitment to having 100% of its product sales being fossil free by 2040, including a nearer term goal of 35% of product sales being zero-emission by 2030. We have more than 5,000 electric transit buses in service throughout the world and have been selling heavy-duty battery electric trucks in Europe since 2019. In the United States, we have Class 8 battery-electric tractors and refuse trucks as well as compact construction equipment all being used in customers' commercial operations. In addition to batteries, we recognize that hydrogen fuel cells will be needed to power electric drivelines for heavy transport and demanding long-haul applications and we have formed a joint venture with Daimler Trucks to accelerate the development of this technology.

Volvo Trucks just announced the commercial production of its second-generation Class 8 VNR Electric truck which has 565kWh of battery capacity and a range of 275 miles along with a 90-minute charge time. In addition, Mack Trucks produces a Class 8 LR Electric refuse truck, Nova Bus produces a fully electric LFSe, and Volvo Construction Equipment produces an electric mini excavator and wheel loader. Most importantly VGNA has gained substantial additional understanding of both the expected advancements in battery technology and the needed marketplace conditions to support battery electric vehicles through the CARB-funded Volvo LIGHTS project operating in southern California (www.lightsproject.com).

We are very excited about this transition to a zero-emissions transportation future; however, unlike consumers purchasing electric cars, these vehicles must be cost competitive with their diesel counterparts with similar reliability and ease of use if fleets are going to consider purchasing them.

Currently, battery-electric heavy-duty trucks cost at least double the cost of a comparable diesel truck, without consideration for charging equipment.

MARYLAND HB894

For this reason, the Volvo Group supports House Bill 894 which, among other provisions, establishes the Medium- and Heavy-Duty Zero Emission Vehicle Grant Program. It authorizes the Maryland Energy Administration, between 2023 and 2025, to issue grants to a person or unit of government for the cost of a medium- or heavy-duty zero emission vehicle. The grant may also be used for medium- or heavy-duty zero emission vehicle supply equipment, defined as property used for recharging or refueling the vehicles. It requires the Governor to include in the annual budget bill an appropriation of at least \$5,000,000 for the program.

Recognizing these costs and the risk that comes from embracing new technology, the state of California established HVIP, its medium- and heavy-duty incentive program, more than 10 years ago, funding more than 7,000 advanced technology vehicles. In addition, several utilities in California have established well-funded charging infrastructure incentive (“make-ready”) programs available several years in advance of regulatory requirements.

The significantly higher cost of Class 8 battery-electric trucks and charging infrastructure (charger and cost of civil and electrical upgrades) and the many unknowns (variability in the electricity rates, maintenance, and total cost of ownership, etc.) make it nearly impossible at this stage of the market’s development for fleets to purchase and integrate battery-electric trucks into fleet operations without significant and sustained funding. For this reason, we believe House Bill 894 is an important first step, though Maryland should consider appropriating far greater funding for Class 8 battery-electric trucks, charging equipment and infrastructure investments. Additionally, establishing competitive electric utility rate structures, expedited permitting and market development programs such as the Low Carbon Fuel Standard will further catalyze the adoption of these advanced technologies.

For more information call:

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