

**Committee: Education, Health, and Environmental Affairs Committee**  
**Testimony on: SB0137 - “Zero–Emission Bus Transition Act”**

**Organization: Climate Parents of Prince George’s**  
**Person Submitting: Joseph Jakuta, Lead Volunteer**  
**Position: Favorable, With Amendments**  
**Hearing Date: January 28, 2021**

Climate Parents of Prince George’s supports SB 137, Zero–Emission Bus Transition Act, with amendment.

The need to transition to zero emission buses is vital for Maryland to meet its obligation to the current generation of young people and to future generations. We cannot become the zero emission society that we need to by 2050 if our public transit system continues to rely on dirty 20th century technologies. This legislation is needed to reduce our emissions, better Marylanders’ health, and save taxpayers money.

While the health and climate reasons for this legislation are probably the most important impacts of this legislation, also being discussed this session is a bill to shore up the operating costs of MTA. While SB 137 is not a panacea for MTA’s budget shortfalls, one of the main benefits of the transition to zero emissions buses is that the operating and maintenance costs of electric buses are much lower than those of traditional diesel buses. A recent paper<sup>1</sup> by researchers at the University of Texas and McMaster University in Ontario found the following comparison:

<i>Type</i>	<i>Purchase Price</i>	<i>Annual Fuel Expense</i>	<i>Annual Maintenance Cost</i>	<i>12-Year Life Cycle Cost</i>
Diesel	\$300,000	\$27,202	\$34,328	\$1,038,357
Battery Electric	\$650,000	\$8,226	\$18,062	\$965,450

These numbers show that even with the higher upfront costs of electric buses, which most definitely will come down over the next decade, MTA will still save on operating budgets for every bus that is electric.

Even based solely on the cold hard economic calculation, battery electric buses make sense and this doesn’t consider all of the negative externalities associated with diesel buses that disappear (e.g., premature death and morbidities from air pollution, noise pollution, greenhouse gas emissions).

The one amendment we would like to see is a requirement that zero emissions buses be placed into service in historically disadvantaged communities first. Communities of color and other disadvantaged communities in Maryland and elsewhere bear higher levels of vehicular air pollution, in particular due to the placement of highways and other arterial roadways through their communities. Zero emission buses are not going to erase years of high levels of exposure to diesel particulate, oxides of nitrogen, and other harmful air pollution, but prioritizing deployment in the communities that face the highest air pollution will have the most benefit due to the negative health effects these communities experience.

We encourage a FAVORABLE report with the recommended AMENDMENT for this important legislation.

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<sup>1</sup> Quarles, N.; Kockelman, K.M.; Mohamed, M. Costs and Benefits of Electrifying and Automating Bus Transit Fleets. *Sustainability* **2020**, *12*, 3977. <https://doi.org/10.3390/su12103977>