

Committee: Economic Matters
Testimony on: HB0832
Organization: Climate Law & Policy Project
Submitted by: Donald M. Goldberg, Executive Director
Position: Favorable
Hearing Date: February 18, 2021

Dear Chairman and Members of the Committee:

Climate Law & Policy Project strongly supports HB832 and urges a favorable report.

HB832 creates an Electric School Bus Pilot Program implemented and paid for by Maryland's investor-owned utilities. School districts in each utility service area will be eligible to purchase zero-emission electric buses rather than diesel ones at no additional cost to the district. While the utility will cover the "incremental cost" and provide the charging infrastructure, savings from operating and maintaining the buses will be retained by the district. Each investor-owned utility that implements the program will purchase a minimum of 25 electric buses and can spend up to \$50 million during the pilot program, which will run 3-5 years. The utility, in consultation with participating school districts, will provide annual reports on the costs and benefits of the program to the General Assembly, the Governor and the Public Service Commission.

Twice a day, five days a week, the children of Maryland must breathe in high concentrations of diesel fumes to get to and from school. The consequences are well understood. Diesel exhaust is carcinogenic, reduces lung function and increases asthma and pneumonia in children.

Diesel tailpipes spew out more than 40 toxic substances, smog-forming nitrogen oxides and black sooty particulate matter, which lodges deep in children's lungs, creating life-threatening health problems. Children are most at risk because their lungs are still developing, and they breathe two times more air per pound of body weight than adults do. The damage can result in permanently reduced lung function and lifelong health problems.

Diesel school buses harm the environment in a number of other ways. They are a major source of greenhouse gas emissions, each bus emitting about 24 tons of CO₂ per year—6 times as much as an average car. Nitrogen oxide, a major constituent of diesel exhaust, contributes to acid rain, ozone formation, and smog.

Frequently, it is the most vulnerable populations that are hit hardest by diesel and other toxic pollution. Environmental justice communities suffer higher rates of air pollution, are hospitalized more often for respiratory illnesses and are disproportionately impacted by climate change. In some environmental justice neighborhoods, 1 in 4 children has asthma.

In the past, the high cost of purchasing electric buses put them out of reach for many school districts. But costs have come down, and recent innovations, such as vehicle-to-grid (V2G) technology, coupled with the lower costs of operating and maintaining electric buses, have made them financially attractive for schools. One estimate puts the the cost of operating electric school buses at about 19 cents per mile, compared to the 82 cents per mile cost of diesel buses.

V2G technology uses bus batteries to provide electricity to the grid when it's needed to stabilize imbalances and meet peak demands. School buses are ideally suited for this function, as they are equipped with very large batteries and only operate for small parts of the day. In the summer, when electricity demand is at its highest, most school buses don't operate at all. School bus routes are typically less than 40 miles, whereas today's electric school buses can travel 120 miles or more on a single charge, which for some buses can be accomplished in only three hours.

Electric school buses are already being deployed in Maryland. Montgomery County, Frederick County, Howard County and Prince George's County already own, or plan to own, and operate electric school buses. In Howard County, BGE utility is furnishing the charging equipment and installation.

HB832 provides the opportunity to expand the benefits of electric school buses to every school district in Maryland within the territory of an investor-owned utility. The program ensures there are no capital, administrative or operational costs to the district. Rather, in addition to the substantial health benefits of the buses, each participating district can expect to see estimated cost savings of thousands of dollars per year per bus, dollars that can go to educational programs, teachers' salaries and assistance to needy students.

HB832 is a win-win-win proposition that would provide substantial health and educational benefits to Maryland's schools and improve the environment for all of Maryland's citizens.

Climate Law & Policy Project urges a favorable report.