

2022 Joint Legislative Budget Hearing on Education

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TESTIMONY of

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Thank you for the opportunity to provide testimony on the proposed Executive Budget on behalf of Advanced Energy Economy (AEE) and the Alliance for Clean Energy New York (ACE NY).

AEE is a national association of businesses that are making the energy we use secure, clean, and affordable. We work to accelerate the move to 100% clean energy and electrified transportation in the U.S. Advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting our energy needs today and tomorrow. These include energy efficiency, demand response, energy storage, solar, wind, hydro, nuclear, electric vehicles, biofuels and smart grid. AEE represents more than 100 companies in the \$238 billion U.S. advanced energy industry, which employs 3.2 million U.S. workers.

ACE NY is a broad coalition dedicated to promoting clean energy, energy efficiency, transportation electrification, a healthy environment, and a strong economy for the Empire State, and is New York's premier advocate for the rapid adoption of renewable energy, energy efficiency and transportation electrification technologies. Our members include renewable energy, energy efficiency companies, and companies that manufacture electric vehicles or electric vehicle charging infrastructure or otherwise support the electrification of transportation. You can learn more about ACE NY at www.aceny.org.

This testimony will focus on our support of the Governor's proposal to electrify the school bus fleet. ACE NY will also be submitting written testimony on the environment and revenue budget proposals.

AEE and ACE NY support the Governor's proposal to achieve 100% electric school buses in New York by 2035 in Part B of the Education Article VII bill (ELFA) (S.8006/ A.9006). The ambitious but achievable 2027 target for all new school bus sales to be electric will help the State meet its emissions reductions required by the Climate Leadership and Community Protection Act (CLCPA) and remove some of the heaviest polluting vehicles from our streets. Electric school buses carry enormous potential economic, climate and health benefits. We are asking the Legislature to accept portions of Part B and modify others.

In New York State, the largest source of pollution that causes global climate change is transportation. Diesel emissions from buses are a major contributor to local air pollution,

adversely impacting human health particularly in low income and communities of color.^[1] More than 10% of school buses in the U.S. are registered in New York State, and they transport over 2 million children per day.^[2] The reduction of transportation emissions through electrification is crucial to improving air quality and children's health, and reducing greenhouse gas emissions as required under the Climate Leadership and Community Protection Act, which requires the state to limit greenhouse gas emissions by 40% by 2030 and 85% by 2050.

By enacting Part B, New York would be one of the first states to provide dedicated transportation aid for charging infrastructure and the electricity associated with charging these electric school buses. This section should be adopted. The goals of enactment of stages of adoption by 2027 and 2035 also place our state in the forefront of adoption and should be embraced. These additional aid categories are designed to accelerate the adoption of electric school buses, which in addition to reducing greenhouse gas emissions and harmful air pollutants, are cheaper to maintain over the long run. Part B will also help achieve New York's commitment under the joint Multi-State Medium- and Heavy-Duty Memorandum of Understanding^[3] to work collaboratively to ensure that 100% of all new medium- and heavy-duty sales be zero-emission vehicles (ZEV) by 2050, with an interim target of 30% ZEV sales in these categories by 2030.

Health Effects from Diesel Buses

Diesel exhaust contains the pollutants nitrogen oxides (NOx) and particulate matter (PM). NOx causes ground level ozone, smog and acid rain. PM are very small particles of 10 micrometers or less that are produced from combustion. Diesel PM emissions can carry toxic chemicals deep in our lungs, making them especially hazardous. Air pollution from diesel engines can lead to decreased lung function, aggravated asthma and respiratory tract inflammation.

California has designated diesel PM emissions as a toxic air contaminant because of its link to lung cancer. In addition, PM smaller than 2.5 micrometers (PM2.5) contributes to premature death, hospitalizations and exacerbates chronic heart and lung disease. California found that 70% of the total known cancer risk related to air toxics is from diesel PM.

Children are more susceptible to the health effects of diesel pollution given their bodies are still developing and that they breathe in more air per pound of body weight than an adult. Compounding this, a 2015 study found that emissions levels inside of diesel buses were 3 times greater than ambient air outside of the bus.¹

The American Lung Association has found that exposure to PM pollution increases the likelihood of children developing asthma and reduced lung development. A recent study² has found that 15% of absences from school are because of asthma. School absenteeism has been shown to affect academic performance.³

Low income and communities of color are disproportionately affected by diesel pollution mainly due to being located next to major traffic corridors. The New York City Department of Health has

¹ [Adopting Clean Fuels and Technologies on School Buses. Pollution and Health Impacts in Children | American Journal of Respiratory and Critical Care Medicine \(atsjournals.org\)](https://atsjournals.org/)

² [Asthma and Attendance in Urban Schools \(cdc.gov\)](https://www.cdc.gov/)

³ [Student absenteeism: Who misses school and how missing school matters for performance | Economic Policy Institute \(epi.org\)](https://www.epi.org/)

found that 17% of children in the Bronx have been diagnosed with asthma compared with an 11% asthma rate for children in all of New York City.⁴

Given the health effects of diesel bus emissions on our children, it is imperative that we switch to zero-emission buses.

Amendments to Part B

As you work in the coming weeks to hammer out the details of electric school bus incentives within the FY 2022-2023 Budget, AEE and ACE NY offer the following suggestions and additional context for you to consider:

- **Ensure Schools Have Immediate Access to Robust Incentives:** while the federal Infrastructure Investment and Jobs Act and state Bond Act money may eventually help fund these incentives for electric school buses, the timing for those funding streams' availability is not clear. Especially if school districts are to begin pilots now and start purchasing electric school buses to meet the governor's 2027 target for all new school bus sales to be electric, those school districts need to have access to those incentives in the coming months. A state appropriation of at least one year of incentive funding will ensure the funds are available immediately. They can be replenished on a supplemental basis once other funding streams are secured. This near-term investment from the state would be consistent with other nationally-leading states, including proposed funding for electric school buses in California (\$1.5 billion in Governor Newsom's 2022 budget proposal) and Colorado (\$150 million in Governor Polis' budget proposal). Assuming 10 percent annual state fleet turnover, \$350,000 per electric school bus and \$15,000 per level 2 charger, AEE and ACE NY recommend allocating at least \$250 million to this program annually.
- **Prioritize Incentives to School Districts Most in Need:** A critical piece of the process to make 100% adoption by 2035 realized is providing more than just traditional transportation aid available to districts as they transition to electric school buses. This extra aid will soften the financial blow of these required purchases and allow districts to make these important investments. As is outlined in a bill we actively support, S.5268/ A.6754, AEE, ACE NY and our partners recommend an incentives program that gives the most aid to the school districts who are most in need of support, as measured by the level of financial aid that a school district received in the previous fiscal year. S.5268/ A.6754 provides 10% in additional aid for EV buses for districts receiving 20-35% state aid, 15% for districts receiving 35-60% aid, and 20% for districts receiving 60-90%, not to exceed 100% of the total cost of the expense.

Whatever the ultimate rate structure, this approach will ensure these incentives help school districts in low- and moderate-income communities the most, many of which have disproportionately higher levels of exposure to dangerous pollutants and may experience more incidence of premature death and elevated rates of respiratory disease as a result of pollution from diesel emissions.

- **Utilize Existing School Aid Systems for Distributing Incentives:** As is proposed in S.5268/ A.6754, AEE and ACE NY support bus and charging infrastructure incentives

⁴ [databrief126.pdf \(nyc.gov\)](#)

being distributed via the same avenues for school aid that districts already use for applying for and receiving state aid. This will help ensure both that school districts can easily identify and understand these funding streams, and that a state agency familiar with schools' needs is distributing these funds to the schools. Administering incentive dollars through existing transportation funding formulas is familiar and easy to project for school districts, simplifying the planning and budgeting process.

- **Lease Term Extension:** The Executive proposal increases the length of allowable procurement terms for electric school buses, whether leased or purchased, from five to ten years. This is a needed change but increasing this option further to fifteen years will allow districts even more latitude and flexibility in negotiating for favorable terms when procuring these buses. Increasing to fifteen years does not mean that all districts will choose the maximum term, but it gives them additional flexibility to make that decision at the local level. Longer ownership terms enable bus operators to realize greater total cost of ownership savings through lower fuel costs and reduced maintenance needs with electric compared to diesel buses.
- **Sales Tax Exemption:** School districts also utilize school bus contractors to transport their students. S.5268/ A.6754 offers a state sales tax exemption for the purchase of electric buses for school bus contractors, which is already the case for district-owned school buses. These private contractors should also receive an incentive to transition their fleet to zero-emission buses.

Thank you for the opportunity to provide input on the education part of the Executive Budget. AEE and ACE NY are extremely supportive of provisions in Part B and excited for the health and environmental benefits it will bring to our state. Please let us know if we can be of any assistance.

^[1] Union of Concerned Scientists, *Inequitable Exposure to Air Pollution from Vehicles in New York State* (June 21, 2019), <https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-NY.pdf>

^[2] New York School Bus Contractors Association, <https://www.nysbca.com/fastfacts.html>

^[3] Multi-State Medium- and Heavy-Duty ZEV MOU, <https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf/>