



ADVANCED TRANSPORTATION IN VIRGINIA

Electrifying Virginia's transportation sector, from light-duty cars and trucks to school buses, municipal transit, and heavy-duty fleets, represents an economic, environmental, and public health opportunity for the Commonwealth.

The advanced transportation industry employs 5,400 people in the Commonwealth today and is primed to grow.¹ With lower fuel and maintenance costs, EVs have the potential for a lower total cost of ownership (TCO) compared to conventional cars, helping save transportation dollars.² As battery technology improves³ and EVs become more efficient, these vehicles will begin to have lower upfront costs and ultimately become more adorable to own than traditionally fueled vehicles.

Virginia's transportation sector is the largest source of air pollution, representing 48% of the state's carbon dioxide emissions.⁴ These pollutants include particulate matter, nitrogen oxides and volatile organic compounds, all of which are known or suspected to cause health and environmental impacts.⁵ Given the benefits that EVs provide, it is of the utmost importance that Virginia prioritizes transportation electrification (TE).

EV Progress in Virginia

The Northam Administration and the General Assembly have made laudable strides towards TE over the past several years. Utilizing the \$96 million in funds from the VW Settlement, Virginia's DEQ and the Administration have spurred the deployment of EV charging infrastructure along key transit corridors, and launched pilot programs to electrify school buses, port vehicles, and municipal transit, among other items.

This past legislative session, the General Assembly passed an array of EV-related measures that will establish an advanced Clean Cars standard (HB. 1965), an EV rebate program (HB. 1979), an equitable electrification fund (HB. 2118) and facilitate EV infrastructure planning and deployment (SB. 1223 and HB. 2282).

¹ AEE Jobs Report, Virginia. 2019.

² Consumer Reports. *Electric Vehicle Ownership Costs: Today's Electric Vehicles Offer Big Savings for Consumers*. October 2020. <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf>

³ Bloomberg. *Batteries For Electric Cars Speed Toward a Tipping Point*. <https://www.bloomberg.com/news/articles/2020-12-16/electric-cars-are-about-to-be-as-cheap-as-gas-powered-models>

⁴ United States Energy Information Administration, State Carbon Dioxide Emissions Data. Table 4.2017 State energy-related carbon dioxide emissions by sector. <https://www.eia.gov/environment/emissions/state/excel/table2.xlsx>

⁵ United States Environmental Protection Agency. <https://www.epa.gov/transportation-air-pollution-and-climate-change/smog-soot-and-local-airpollution>



Recommendations for the Road Ahead

The actions of the current Administration and the General Assembly have laid the groundwork for advanced transportation in Virginia. It is now incumbent upon the next Administration to sustain and accelerate this momentum. Here are a set of steps we recommend that will help achieve that:

- **State Fleet Electrification:** The Administration has an opportunity to grow Virginia's advanced transportation sector and cut emissions by electrifying the fleet of state vehicles. *Set clear targets and timelines for full electrification of Virginia's state fleet and ensure the next Secretary of Administration prioritizes the deployment of charging infrastructure to support those targets.*
- **Clean Cars Implementation:** HB. 1965 directs the Air Board to establish low-emission vehicle (LEV) and zero-emission vehicle (ZEV) standards, starting in model year '25. These standards will help drive down the emissions of new vehicles sold and increase the share of EVs on Virginia roadways. *Help ensure the Air Board implements this legislation, establishing LEV and ZEV standards.*
- **Funding for Key EV Policies:** While the General Assembly established an EV Rebate and Transportation Electrification Fund, the '21 budget didn't provide funding for these measures. Alongside ZEV standards, an EV rebate is key to helping accelerate uptake of EVs across Virginia, particular among middle-class consumers. The Electrification Fund will likewise be critical to accelerating the electrification of Virginia's school bus fleet. *Commit to fully funding these important policies to ensure long term policy and business stability.*
- **Infrastructure & Planning:** A lack of accessible EV infrastructure is a key obstacle to TE. Two important measures passed by the General Assembly this year aim to address this issue and ensure that we have the infrastructure necessary to fully electrify. HB. 2282 directs the SCC to develop a set of policy proposals, with stakeholder input, regarding how public utility programs can help accelerate electrification. SB. 1223 integrates advanced transportation into the Energy Plan process, requiring the Administration to analyze the state of TE in Virginia and determine the EV infrastructure needed to decarbonize Virginia's economy by 2045. *The next Administration should thoroughly engage in the SCC process, integrate those proposals into the larger Energy Plan, and ensure that the plan lays the groundwork for policy, investments, and executive actions that will facilitate EV infrastructure deployment.*