



**To:** Members of the Joint Committee on Energy, Utilities and Technology

**From:** Rachel Lane, VP, Electrification and Sustainability, Student Transportation of America

**Date:** March 7<sup>th</sup>, 2023

**Re:** Testimony in Support of LD 519: Resolve, to Conduct a Vehicle-to-Grid Pilot Project Using Electric School Buses

Senator Lawrence, Representative Ziegler, and the members of the Joint Committee on Energy, Utilities, and Technology,

I am speaking on behalf of Student Transportation of America, the parent organization of Ledgemere Transportation, the contracted entity providing school bus transportation to the Wells-Ogunquit School District.

As the second largest provider of contracted school bus services in the United States and Canada, our mission is to provide safe, reliable, and cost-effective transportation to the 1.25 million students we transport per day. Part of our commitment is to provide greener transportation options to create healthier environments for the communities we serve. We are excited to bring electrified buses to Maine as part of the EPA's Clean School Bus Program. Through the receipt of this EPA grant, we will deploy 11 electric Type C buses and complementary charging infrastructure. This will result in the largest electric school bus fleet in the state of Maine. This district will be an example of school bus electrification for the state, naturally leading it to be an ideal site for a Vehicle to Grid pilot program in Maine. We urge an "ought to pass" report on LD 519: Resolve, to Conduct a Vehicle-to-Grid (V2G) Pilot Project Using Electric School Buses.

Maine has already proven to be a leader in renewable energy. Adding Vehicle-to-Grid technology to the existing mix of wind, solar and hydropower will further accelerate Maine's progress toward meeting its goal of being carbon neutral by 2045. This technology treats an electric vehicle like a battery storage device. By exporting excess stored energy in vehicle batteries during peak hours, Vehicle-to-Grid technology reduces the strain on the electrical grid and deters the need for electrical infrastructure investment. Batteries can also be called upon following natural disasters or mass power outages to provide power otherwise not available. School buses are ideal for controlled Vehicle-to-Grid testing, as they have large battery packs, predictable usage models, and low utilization during summer months, peak periods and weekends.

Vehicle-to-Grid capability can also provide a revenue stream for school districts. The establishment of this pilot program enables Efficiency Maine to determine the optimal price point for energy purchased from the buses, offsetting any additional up-front infrastructure costs and battery usage, to entice district participation. This pilot will also verify if operational requirements for a utility-beneficial program can be supported with school district operational constraints.

This Vehicle-to-Grid pilot could also be used as a starting point for further development in vehicle-to-battery programs, creating additional resiliency for bus providers and districts, and, if employed at a large enough scale, redundancy for entire communities.

In conjunction with the Wells-Ogunquit School District, Efficiency Maine, and bus and charging infrastructure partners, we support participating in this Vehicle-to-Grid pilot program. We welcome the opportunity to increase our operational understanding of this capability. This pilot will allow all parties to understand the challenges and benefits of deploying Vehicle-to-Grid solutions in Maine, with the goal of allowing us to further proliferate V2G in Maine and throughout our other electrified sites across the country.

Thank you for your time and consideration.

Sincerely,  
Rachel Lane

*Rachel Lane*

VP, Electrification and Sustainability  
Student Transportation of America