THE ELECTRIC SCHOOL BUS TRANSITION:
Accelerating Equitable Deployment Through Understanding Grid Impacts and Policy Solutions

Across the country, school bus operators are leveraging unrivaled federal funding and state incentive programs to transition their fleets to electric school buses (ESBs). This move uniquely benefits students, communities, and operators while addressing public health, environmental, and economic issues.

The Electric School Bus Transition report examines how underserved communities can be prioritized in this nationwide effort to electrify school buses. It also explores the complexities of adopting ESBs, including their impact on the electrical grid, the roles of utility companies throughout ESB adoption, and the corresponding policies in facilitating a fair and efficient transition.

Centering Equity in ESB Adoption
Switching diesel-powered school bus fleets to electric presents a unique opportunity to address disparities, especially in areas disproportionately affected by air pollution and climate change.

• By prioritizing equity when adopting ESBs, the communities most impacted can be the first to gain health and societal benefits.
• Engaging with communities in the decision-making process regarding fleet planning strategies empowers those communities to have a say in their transportation options.
• Stakeholders can develop a framework for implementing ESB programs that effectively cater to the needs of targeted communities based on the feedback and analysis of high-priority schools.

Understanding Grid Impacts
This report explores the effects of ESBs on the electrical grid, particularly with the capacity of distribution feeders to support charging buses. It highlights the potential need for infrastructure investments and the consideration of operational requirements and charging schedules to maximize grid efficiency and minimize expenses.

The Role of Utility Companies
Utility companies can play a critical role in supporting an equitable and efficient transition to electric school buses. Their responsibilities can encompass strategic planning, imparting insights from prior ESB implementations, developing utility incentives, and advancing rate design innovations. These roles are vital for assisting school bus operators in overcoming electrification challenges and steadily integrating ESBs into the electrical grid.

Potential Policy Enablers
The report emphasizes the need for policy backing and regulatory initiatives to supplement funding and expedite ESB deployment. Proposed policy mechanisms include:

• Utility-sponsored programs to lower barriers to adoption.
• Innovative rate offerings to manage operational expenses and grid impacts.
• Forward-looking strategies for grid planning and investment.
• Fair compensation mechanisms for vehicle-to-grid contributions.
• Scalable ESB deployments.

For more information, please visit: https://calstart.org/electric-school-bus-transition
School Bus Electrification Journey Map: The Role of the Utility Company

The School Bus Electrification Journey Map illustrates the various ways that utility companies can offer assistance and guidance throughout the electrification process. School bus operators should contact their local utility companies early in the process and work directly with them to better understand the types of services that they can offer.