

PEER PERSPECTIVES: ELECTRIC SCHOOL BUSES



— Opportunity: Co-ops Can Help Local School Districts Save Money —

In 2021, Congress provided \$5 billion for new, clean electric school buses (ESB). School districts can apply for the funds starting this year. The Beneficial Electrification League (BEL) seeks to assist interested cooperatives to help rural communities take advantage of this new opportunity.



- Several co-ops have already deployed electric school buses.
- Across the country, the first wave of electric school buses is receiving reviews from students, bus drivers, school officials, and parents.
- BEL is working with cooperatives across the country to make this program a success.
- Below are “lessons learned” that may be useful for cooperatives in talking with school districts about this funding opportunity.

— Feedback on Electric School Buses from Schools and Co-ops —

ESBs perform well in tough terrain. Electric buses out-perform their diesel counterparts on mountainous, rugged terrain, providing improved acceleration and torque. This makes electric buses powerful hill-climbers where diesel buses sometimes struggle.

Range. Electric school buses have sufficient range for daily bus routes. While ESBs may be advertised as having over 100 miles of range, cooperatives consistently advise that total routes be less than 100 miles round-trip if no mid-route charging is planned. The availability of fast charging infrastructure will determine whether the bus can be used for other transportation purposes. The prevalence of this infrastructure is expected to expand over the next decade.

Weather. Electric school buses perform well under varying climate conditions. In colder climates such as North Dakota and Colorado, pre-conditioning the bus while it is still plugged in, or pre-heating the vehicle in a bus barn or other indoor location will maintain the bus’s typical range.

Riding and driving experience. In pilot projects across the country, the buses’ performance – their handling, their ride and the overall experience for students and drivers – have made converts of all the stakeholders. Improved air quality, a quieter ride and reduced vibration, have positively influenced students and drivers.

Economics. ESBs are saving schools money on fuel and operating costs; however, they require a significant up-front investment. Widespread deployment may bring down the cost.

“ESBs are a performance upgrade over diesel buses. They climb hills better, have less noise and vibrations, and create no tailpipe emissions. Performance has been excellent in our cold, rugged Colorado mountain climate. Kids love them, drivers love them. Electric school buses are a moving yellow billboard for electrification because they demonstrate the benefits of electric technology in a tangible way for the community.”

CHRIS MICHALOWSKI
Power Use Advisor, Mountain Parks Electric, Inc.

BEL Electric School Bus Initiative

- BEL has urged the U.S. Environmental Protection Agency to cover the entire cost of a school district’s first bus, charging infrastructure, and related costs.
- BEL will announce details on program rules as soon as they are available.
- BEL’s ESB Advisory Board will provide guidance on how BEL can best assist participating cooperatives.

For more information:
www.be-league.org/buses



Electric cooperatives that serve school districts that have adopted electric school buses have had great experiences. Worries about operation in cold weather, bus drivers not liking the buses, or other challenges ended up not being an issue. In fact, they have found that buses have superior performance, and are thus put on the toughest routes, and are the envy of students and drivers alike.

BENEFICIAL ELECTRIFICATION LEAGUE MISSION

Our mission is to increase understanding on the benefits of electrification by promoting electrification, educating policy makers on the value, benefits and tools of beneficial electrification and serving as a conduit and facilitator of BE resources.



For more information:
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