

Using Electric School Buses for a More Affordable, Reliable, and Resilient Electrical Grid



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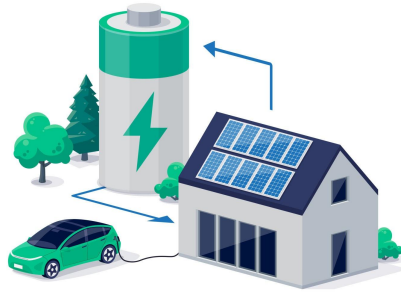
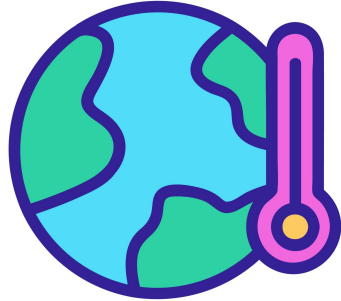


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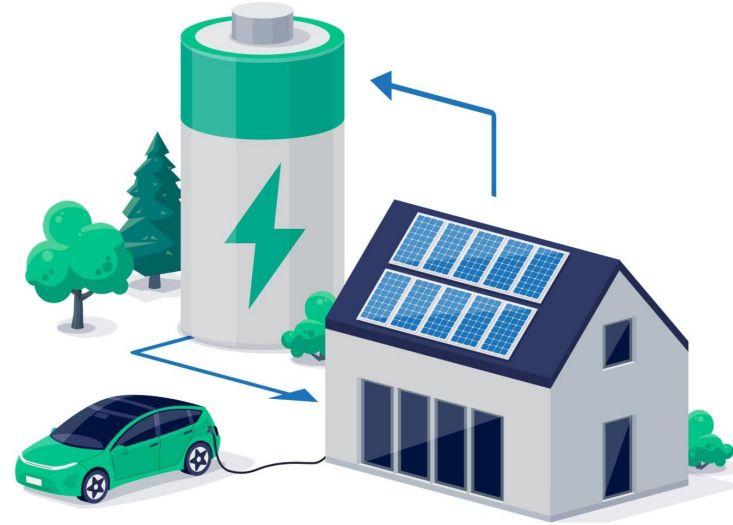
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Why Electric School Buses?



Grid Benefits of Electric School Buses

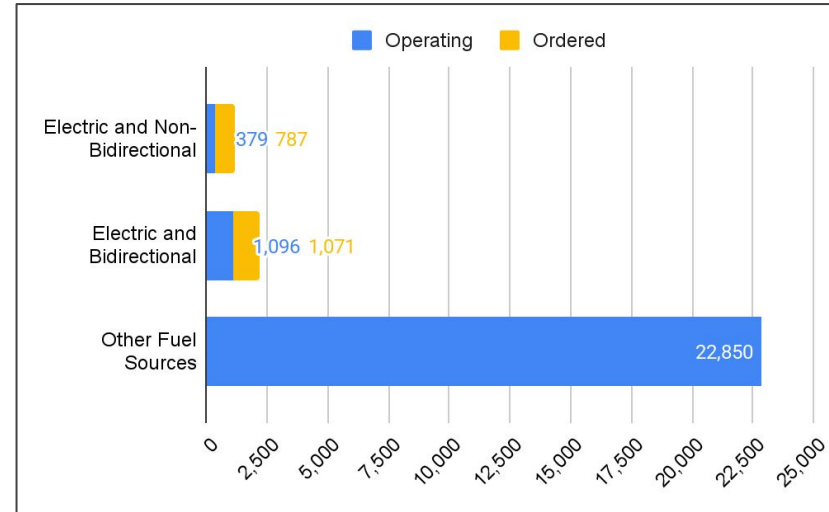
- Electric school buses = batteries on wheels
- Smart charging: ESBs can charge when electricity is cheaper and more abundant.
- Bidirectional charging: ESBs can both charge from and provide power to a home (V2H), building (V2B), or the grid (V2G).
- Most ESBs are now bidirectional-capable, have predictable routes and schedules, can earn revenues through exporting power, and can provide backup power to schools.



California Leads the Nation in Electric School Bus Deployment

- Funding programs (e.g. EPA Clean School Bus Program, ZESBI and HVIP) have been crucial to expanding ESBs.
- ~100 buses are currently being used bidirectionally in Oakland (74), Cajon Valley (8), Fremont (6), Torrance (6), Ramona (8).*
- 80+ ESBs are planned to be used bidirectionally in Modesto (37), Conejo Valley and LA County (20), Richmond (20), Pittsburg and Napa (6).

California's School Bus Fleet: By the Numbers*



Source: WRI Electric School Bus Initiative

*Figures as of September 23, 2025