CLEAN ENERGY CASE STUDY

Power Your Drive for Fleets
Total cost of ownership for your school district EV fleet

Did you know?
The program connects fleets with resources, fleet-friendly charging rates, and financial incentives to easily and cost-effectively design and install the charging infrastructure needed to power medium- and heavy-duty electric fleets.

Power Your Drive for Fleets

Electrifying your school bus fleet can enable your district to:

- Save up to $1.16 million in fuel costs over 10 years.
- Take advantage of more than $250,000 in funding per electric school bus.
- Reduce greenhouse gas emissions by 77% over 10 years.
- Provide a cleaner, quieter and more comfortable ride for students.

A school district’s top priority is the health and safety of its students. EVs eliminate harmful diesel and gasoline tailpipe emissions while reducing maintenance expenses and fuel costs.

With short, predictable routes and ample time between trips to allow for charging, school buses operate under an ideal model to convert to EVs. Increased up-front costs related to vehicles and electric vehicle supply equipment (EVSE) can be greatly reduced with historic funding available to help public schools reduce costs and electrify their fleets.

This sample TCO analysis illustrates the cost savings of a fleet of diesel Class 6 and 7 school buses compared to a fleet of electric buses and the key factors fleets should consider when developing their own analysis.

To learn more, scan QR Code or visit sdge.com/evfleets

Continues inside
An EV school bus fleet can save up to $2.15 million compared to a diesel school bus fleet over 10 years.

### Understanding Key TCO Components

**Vehicle Subtotal** =
- CapEx
- Operating Expense
- Fuel Costs
- Insurance
- Residual Value
- SDG&E® Infrastructure Incentives
- LCFS Credits

**EVSE Subtotal** =
- EVSE CapEx
- EVSE Maintenance
- EVSE Residual

**TCO Total** =
- EVSE Subtotal
- Vehicle Subtotal
### Key Fleet Assumptions:

<table>
<thead>
<tr>
<th></th>
<th>20 Vehicles</th>
<th>150,313 Miles/Year</th>
<th>320 Days/Year Operation</th>
<th>10 Years Average Vehicle Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual value of vehicles straight line depreciation over 7 years</td>
<td>9.25% Sales tax</td>
<td>Insurance costs 3% of vehicle residual value</td>
<td>LCFS credit price $70 per credit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Diesel</th>
<th>EV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per vehicle purchase cost (2023)</td>
<td>$90,000</td>
<td>$350,000</td>
</tr>
<tr>
<td>Fuel cost</td>
<td>$6.08/gal</td>
<td>$0.12/kWh</td>
</tr>
<tr>
<td>Fuel efficiency</td>
<td>10.4 mpg</td>
<td>2 kWh/mile</td>
</tr>
<tr>
<td>Maintenance costs</td>
<td>$0.21/ml</td>
<td>$0.17/ml</td>
</tr>
<tr>
<td>Infrastructure purchase costs</td>
<td>$0</td>
<td>$275,000/charger*</td>
</tr>
<tr>
<td>Infrastructure maintenance costs</td>
<td>$0</td>
<td>$22,000/charger/year</td>
</tr>
<tr>
<td>Purchase incentives</td>
<td>$0/vehicle</td>
<td>$250,000/vehicle</td>
</tr>
</tbody>
</table>

*School district fleets are eligible for up to $75,000 in additional rebates to reduce the upfront cost of EV chargers.
**Improve TCO with increased vehicle replacement**

As many school districts look for the most cost-effective path to fleet electrification, they will find that transitioning to EVs on a concentrated replacement schedule can maximize project savings and reduce TCO. Replacing vehicles and installing infrastructure slowly over time may have its benefits, but it is more costly over the long term. It is less efficient and far more expensive to install or upgrade EV charging infrastructure “one-by-one” as each vehicle is deployed.

Additionally, the attractive and lucrative funding opportunities that are currently available to fleets through utility programs and other state-wide funding programs are limited and will become less available and more restrictive over time, especially as California moves towards mandating a zero-emission commercial transportation sector.

---

**Power Your Drive for Fleets**

SDG&E’s **Power Your Drive for Fleets** program helps fleet managers reduce operating costs, eliminate emissions, and simplify vehicle maintenance by transitioning to electric vehicles. The program connects fleets with resources and financial incentives to easily and cost-effectively design and install the charging infrastructure needed to power medium- and heavy-duty electric fleets.

For more information on the program, visit: [sdge.com/evfleets](https://sdge.com/evfleets)