



Common Questions, Answers & Advice

Safer. More reliable. Lower cost.

OrangeEV.com

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How much does it cost to replace the battery?
How does the cold weather impact the range?
How much does it cost to charge?





The batteries will outlast the rest of the vehicle

The battery compartments are heated to prevent cold weather impact on range

As an example, a Chicago based client has a ComEd rate of \$0.10 cents per kwh. Standard charger delivers 22kwh. Rate is \$0.10 x 22kw per \$2.20/hr. Average 6 hours/day = \$15.40/day.

Insist on a demonstration of the vehicle's capabilities

Batteries: Proven to go the Distance



Orange EV trucks operate very efficiently, achieving high use time per kW

- Hours per charge vary based on site conditions, load, speed, distance traveled, etc.
- Opportunity charging makes a full recharge more efficient

Batteries have been in use 9+ years and all trucks are still on their original battery pack. Multiple trucks have > 23,000 hours with batteries measured above 80% SOH.

- **Battery warranty: 7.5 years** or
 - 220,000 kWh (100kWh battery)
 - 396,000 kWh (180kWh battery)
 - 410,000 kWh (243kWh battery)
- End-of-life recycling plan options available

Operating hours on a single charge

Examples from current fleets. Figures are based on available kWh before reaching "limp mode".

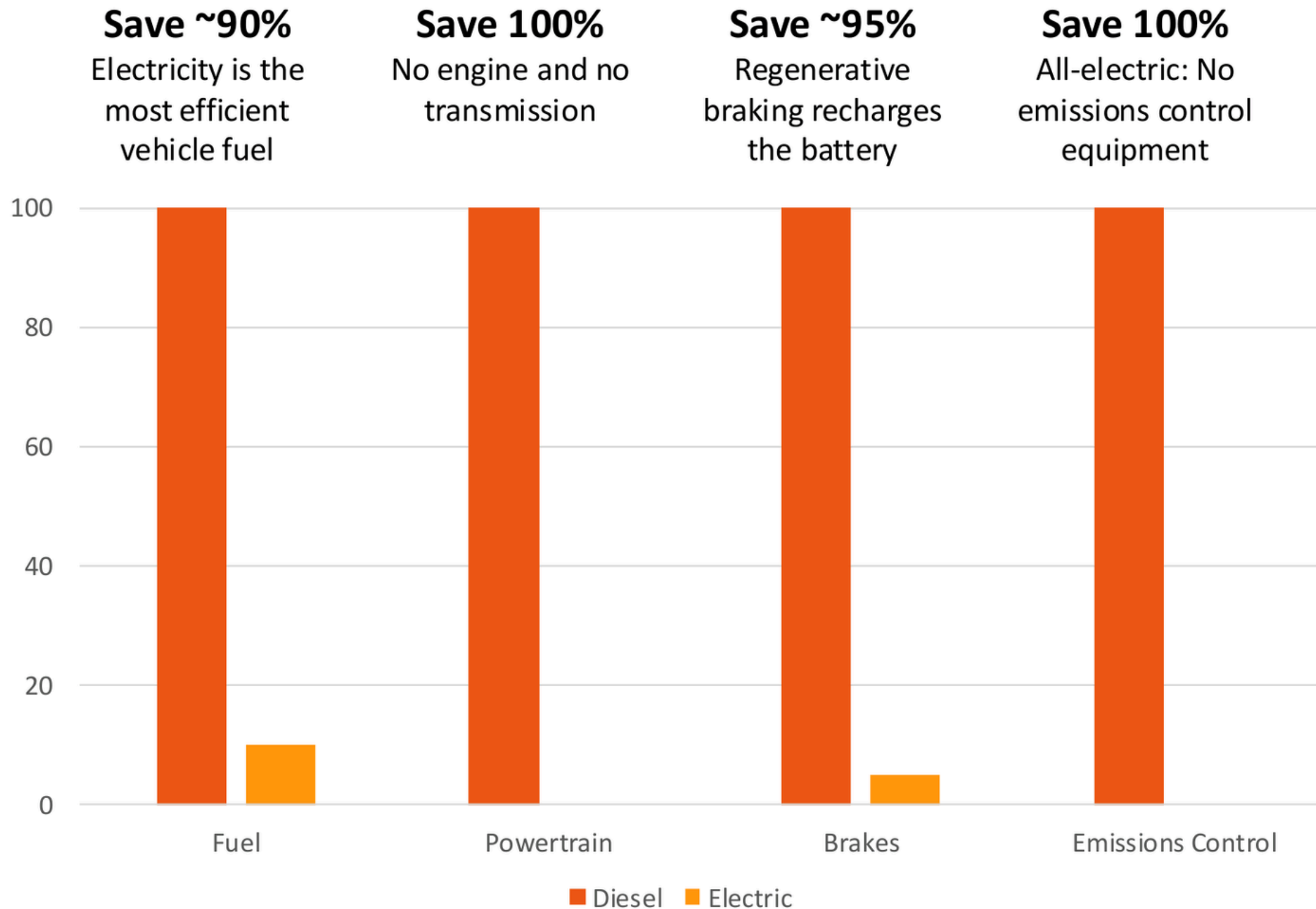
e-TRIEVER® Extended Duty (180 kWh) Battery:

Muni Waste Transfer & Consolidation <i>- Low speed, long idle times</i>	36.8 hours (4.3 kWh)
3PL Global Distribution <i>- Moderate speed and load</i>	30.5 hours (5.2 kWh)
National LTL Freight <i>- Moderate speed and load</i>	27.5 hours (5.8 kWh)
Global Manufacturing Spotter Services <i>- Fast pace, high use, rough lot</i>	17.6 hours (9.0 kWh)
National Rail Intermodal <i>- Top speeds, heavy loads, large rough yard</i>	13.5 hours (11.7 kWh)
Global Retail Distribution <i>- Top speeds, long moves, large yard</i>	12.8 hours (12.4 kWh)

e-TRIEVER® Standard Duty (100 kWh) Battery:

Regional Trucking <i>- Slow pace, long idle times, small lot</i>	17 hours (5.2 kWh)
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Reduced Costs vs Diesel



Save even more on a broad range of diesel-related costs including:

- Liability/work comp
- Safety
- Health care
- Absenteeism/retention
- Fuel management
- Emissions compliance
- Tier-related downtime

Lower Total Cost of Ownership



Full TCO model available to help quantify the cost benefits of shifting to Orange EV trucks

Customers report ~\$2.50/hr of OEV operation vs. their diesel trucks at \$5-9/hr, saving up to \$50-\$90k annually on fuel, maintenance, and repair. Savings include:

Hard Dollars:

- Diesel vs. electricity cost
- Downtime improvement
- DEF avoidance
- Haz Mat cleanup
- No more powertrain refurb

Soft Dollars:

- Safety benefits
- Improved driver satisfaction

A screenshot of the Orange EV Total Cost of Ownership (TCO) model interface. The interface is titled "Total Cost of Ownership: Orange EV vs Diesel" and "Produced for: Your Company Here". It includes a "Purpose & Goal" section, a "How to Use this File" section, and a "Enter your main assumptions below" section. The "Enter your main assumptions below" section contains a table with columns for "Assumption", "Value", and "Unit". The table lists assumptions such as "Calculate Key Assumptions", "Operating Hours", "Annual Mileage", "Fuel Cost", "Electricity Cost", "Maintenance Cost", "Repair Cost", "Purchase Cost", and "Lease Cost". The "Maintenance Costs Worksheet" section includes a table with columns for "Assumption", "Value", and "Unit", and a "Repair Costs Worksheet" section includes a table with columns for "Assumption", "Value", and "Unit". The "Purchase & Lease Cost Comparison" section includes a table with columns for "Assumption", "Value", and "Unit". The interface also includes a "Blue Cells used for inputs look like this" section with a visual example of a blue cell.

The Orange EV TCO model includes: Maintenance Costs Worksheet, Repair Costs Worksheet, Purchase & Lease Cost Comparison, Emissions Benefits Summary, and Low Carbon Fuel Standard credit sales income.

Calculations use customized inputs for hours of operation, fuel costs, labor costs, and more.