



The Electric Highway

Proprietary to First Priority Group.
Not for Distribution

The Company



- First Priority Group ranks among the top five independent dealers and manufacturers in the United States for Emergency Medical Service, Municipal Conversions, and Commercial Alternative Fuel Vehicles.
- Established 20 years ago, 150 employees in four locations spanning both the East and West Coasts.
- Two subsidiaries: First Priority Emergency Vehicles and First Priority GreenFleet
- FP GreenFleet services all major EV Commercial Fleets: FedEx, UPS, FritoLay/Pepsi, Staples, Ameripride, USMC: 200 vehicles in 6 states
- Largest deployment of electric school buses in U.S. history
- Will have delivered 54 electric school buses by end of 2Q18
- FP GreenFleet tax revenue to SJ County at 2Q18 almost \$1.5MM; \$3MM by year end



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First Priority Group

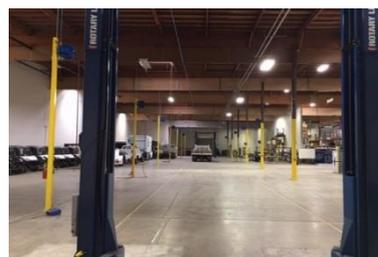


- Four locations: 185,000 sq. ft. combined manufacturing space



Electric Vehicles International

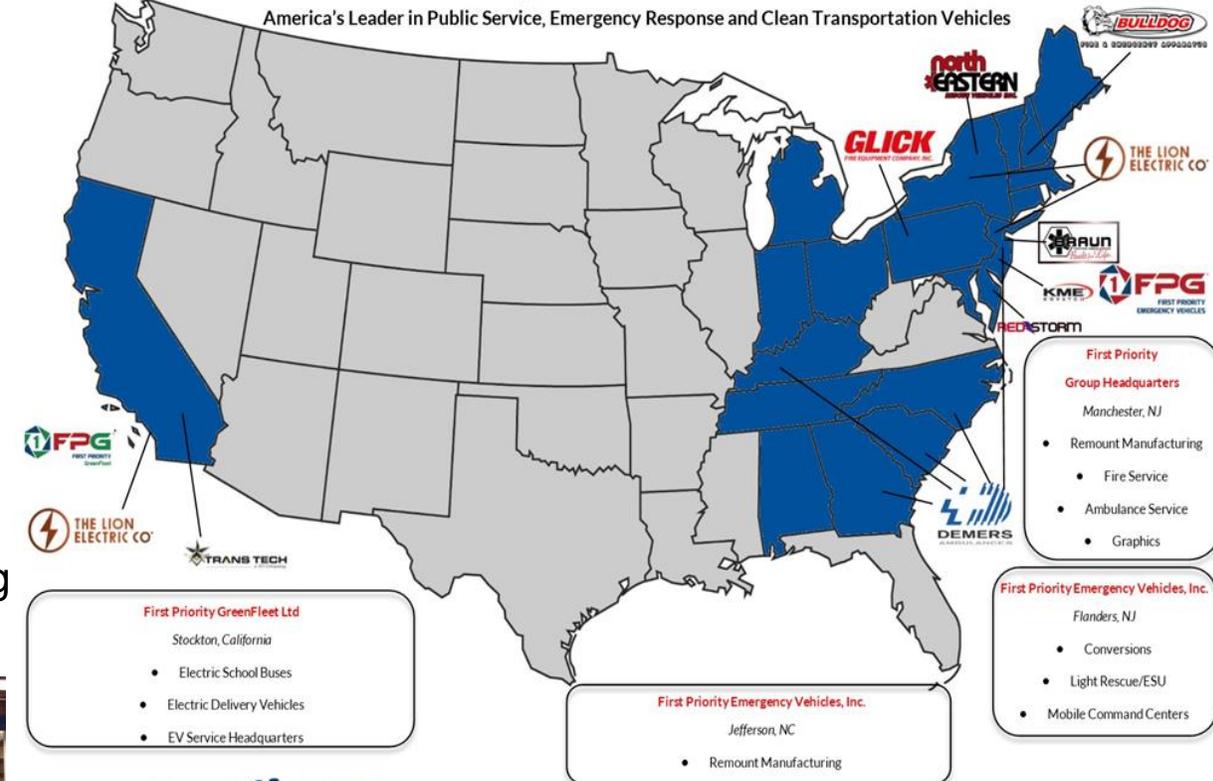
- Located in Stockton, CA
- 75,000 sq ft.
- 6 assembly stations
- 12 subassembly stations
- Fabrication center
- Temp controlled 3,000 sq ft dyno testing
- End of line dyno



Always First.



Built To Last.



www.1fpg.com



- Arrived in Stockton in March of 2016
- Reasons for investment in CA “Green” Market:
 1. Government monetary subsidies
 2. Regulatory climate
 3. Charging infrastructure
 4. Market size: number of potential buyers
- Purchased assets of Electric Vehicles International, Stockton, CA
- San Joaquin Partnership/Mike Ammann
 - Introductions to investment, suppliers and governmental stakeholders
 - Important Connections: PG&E, SJV RTD, partnership with EDI
 - Assisted with understanding geopolitical and economic landscape in SJV
 - Honored at 2016 Annual Industrial Technology BBQ
 - Helped with proposal to VW ZEV Investment Commitment Plan jointly with CalStart and SJV APCD
 - Keeps us current on regional and national industry events and trends

Some of Our Customers

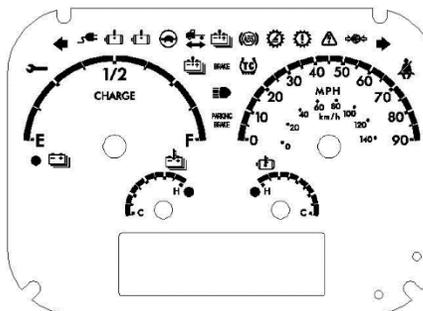


Vehicle Types

- Electric and CNG powered Type A and Type C school buses
- Shuttle buses: Ford and Chevy platforms
- Flatbed, box and step van trucks
 - Class 4 and 5: E 450, F450 and F550, GM 4500
 - Class 6 and 7: Freightliner M2, MT 45 and 55, F59
- The METRO: compact utility vehicle



Telltale	Description	Graphic
1	Maintenance Indicator - Yellow	
2	Left Turn Signal - Green	
3	CHARGER CONNECTED - Yellow	
4	MOTOR WARN - Yellow	
5	MOTOR FAILURE - Red	
6	PERFORMANCE DERATE - Yellow	
7	MOTION ENABLED - Green	
8	BATTERY WARN - Yellow	
9	ABS Warning - Yellow	
10	SHIFT INHIBIT - Yellow	
11	Check Transmission - Yellow	
12	HVIL - Red	
13	Air Pressure - Yellow	
14	Right Turn Signal - Green	
15	Seat Belt - Red	
16	BATTERY FAILURE - Red	
17	Brake - Red	
18	Traction Control - Yellow	
19	High Beam - Blue	
20	Park Brake - Red	
21	Unused - Green	
22	Unused - Green	
23	Low SOC - LED YELLOW	
24	High Battery Temperature - LED RED	
25	High Motor Temp - LED RED	
26	Unused - LED RED	



Vehicle Types: The METRO

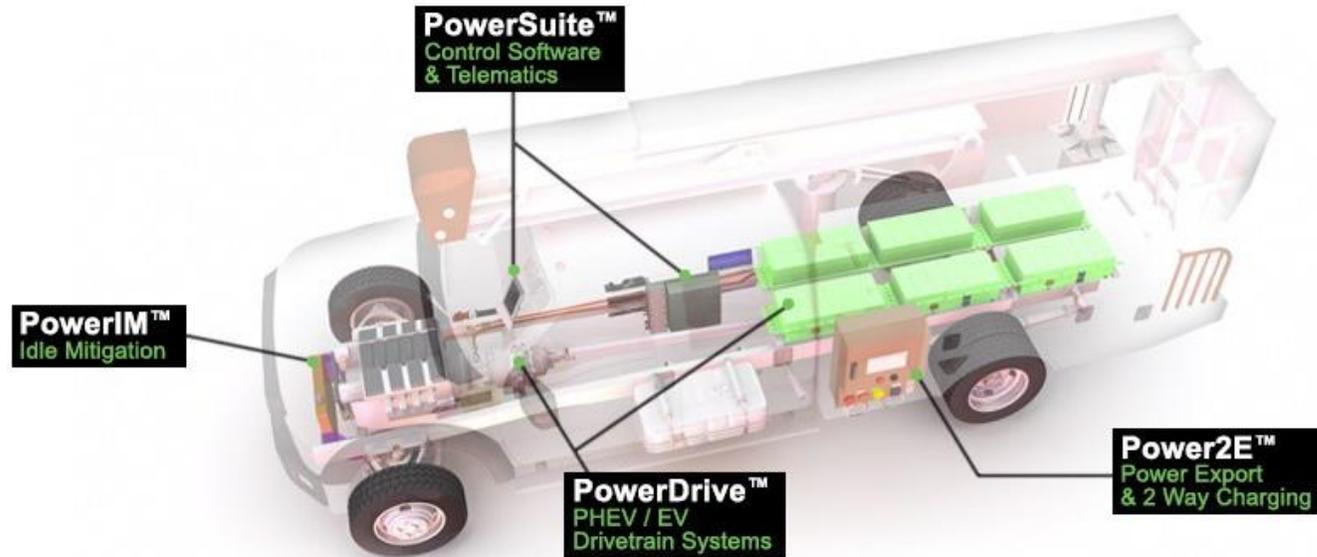
The Cenntro Metro

The Initial product offering from Tropos is the Metro Commercial Utility Vehicle (CUV). The Metro is the first modular LSVT, a dependable, versatile vehicle that is ready to work at an affordable price point.



Partnership: Efficient Drivetrain Inc. (EDI)

PHEV and EV drivetrain, control software and export power solutions



- **EDI PowerDrive™ EV and PHEV**
 - FULL AND HYBRID ELECTRIC drivetrain and vehicle electrification solutions
 - Same parts and components as PHEV product line for economy and ease of service and maintenance
- **EDI PowerSuite™**
 - Software for controlling complex drivetrain and battery system functions. Telematics for diagnostics, fault management, and communicating with operators

Cost of Ownership



Cost of Ownership Lion Electric School Bus			
As compared against comparable diesel bus		Diesel	Electric
MSRP (including tax)		\$ 139,100.00	\$ 334,798.00
CA HVIP incentive: 2017/2018 - Disadv Community			\$(235,000.00)
Customer cost (initial capital investment)		\$ 139,100.00	\$ 99,798.00
Initial Savings on Purchase			\$ 39,302.00
Operating Expenses per Year			
Maintenance cost per year*		\$ 9,075.00	\$ 1,770.00
Diesel fuel**		\$ 6,291.30	
Battery power (kWh)***		\$ -	\$ 2,532.60
Yearly cost of ownership		\$ 15,366.30	\$ 4,302.60
Annual Savings on Operational Expenses			\$ 11,063.70
Total Savings on Operational Expenses over 12 Year Life Cycle			\$ 132,764.40
Replacement of Battery Pack (if Needed - but unlikely†)			\$ (57,080.00)
Savings over 12-year life cycle of bus			\$ 114,986.40

End-to-End Solution



Electric Vehicles in the Valley

- Valley has traditionally lagged other areas of the state in electric vehicle use and ownership
 - Only 3% of participants in state Clean Vehicle Rebate Project
 - Despite recent increase, still lag behind more affluent, urban areas
- District has identified numerous barriers to more widespread EV adoption:
 - High poverty rate
 - Wide-spread geography
 - Lack of public awareness
 - Lack of charging infrastructure
- District implementing numerous strategies to address barriers, including incentive programs for EV purchases and charging infrastructure

- **Funding Levels:**

Charger Type	Funding Amount
Level 2 Single Port	Up to \$5,000 per unit
Level 2 Dual Port	Up to \$6,000 per unit
Level 3 DC Fast Chargers	Up to \$25,000 per unit
Funding Cap	\$50,000 annually per applicant/site

- Minimum 30% applicant cost-share for DC fast chargers
- Incentive designed to cover 50 -75% of cost to purchase and install infrastructure
- Fiscal Year 2017/2018 Spending Plan: \$3 million

SJV Clean Air Vehicle Incentives – Public/Private



Example of how funds can be combined for the lease or purchase of an electric vehicle:

Funding Source	Amount
Valley Air District's Drive Clean! Program	\$3,000
Clean Vehicle Rebate Project	\$2,500
PG&E	\$500
Total	\$6,000
CVRP: additional funds for eligible low- or moderate-income individuals	\$2,000
Total for eligible low- or moderate-income individuals	\$8,000

***Plus \$7,500 tax credit**



Source: SJVAPCD, Incentives for EV Technology

Example of how funds could be combined for a full battery-electric vehicle:

Funding Source	Total
Valley Air District's Public Benefit Program	\$20,000
CVRP's Public Fleet Pilot Project	\$10,000
Total:	\$30,000

Current Trends: Volkswagen Settlement



State of California

**Proposed
Beneficiary
Mitigation Plan**

For the Volkswagen
Environmental Mitigation
Trust

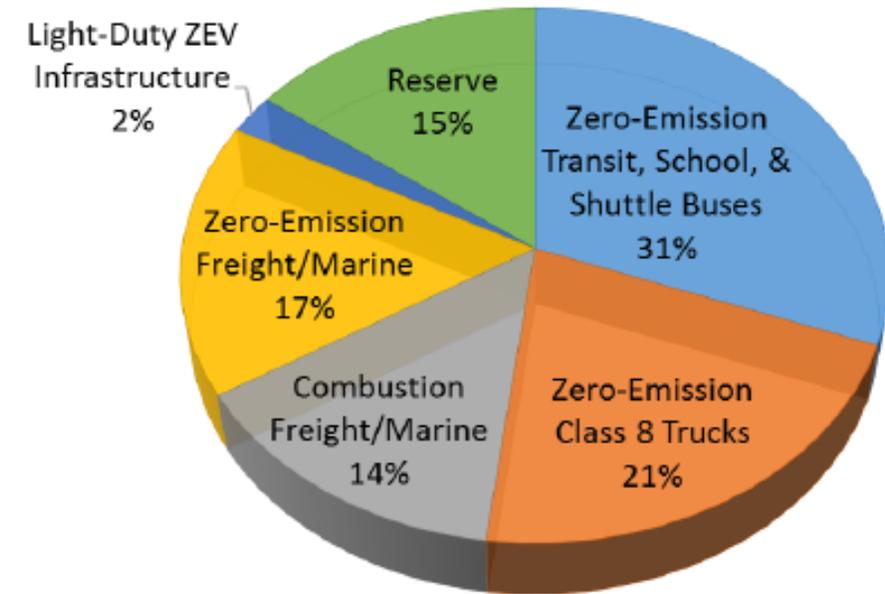


- In September 2015, Volkswagen Group of America, Inc. admitted to the United States Environmental Protection Agency (U.S. EPA) and CARB their use of illegal software “defeat devices” in certain model year 2009 through 2015 2.0-liter diesel passenger vehicles sold in the U.S. and California.
- Approximately 500,000 2.0-liter vehicles were affected nationwide, with about 70,000 of those in California.
- Continuing investigations found about another 87,000 model year 2009 through 2016 3.0-liter diesel vehicles were also affected throughout the country, with about 15,000 of those in California.
- The software detected when the car was being tested in the lab or on the open road, and then effectively bypassed emissions control equipment. As a result, the NOx emissions in normal, everyday driving reached levels up to 40 times the legal standard. Source: Tritium



Current Trends: Volkswagen Settlement

Eligible Mitigation Action Project Category	Benefiting Disadvantaged or Low-Income Communities	Project Allocation (millions)
Zero-Emission Transit, School, and Shuttle Buses	50%	\$130
Zero-Emission Class 8 Freight and Port Drayage Trucks	50%	\$90
Zero-Emission Freight and Marine Projects Forklifts and Port Cargo Handling Equipment Airport Ground Support Equipment Oceangoing Vessel Shore Power Zero-Emission Ferry, Tugboat, and Towboat Repowers	75%	\$70
Combustion Freight and Marine Projects Low NOx Class 7-8 Freight Trucks Tier 4 Freight Switchers Tier 4 or Hybrid Ferry, Tugboat, and Towboat Repowers	50%	\$60
Light-Duty Zero-Emission Vehicle Infrastructure	35%	\$10
Reserve (including administrative costs)		\$63
TOTAL	> 50%	\$423



Recent Progress in the EV Industry

Batteries are the Largest Cost

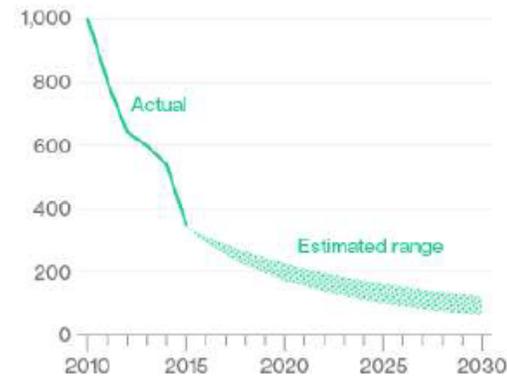
- **EV Battery Prices are Falling Rapidly**
 - Now at \$209 per kW (Bloomberg)
 - Down 24 percent from a year ago
 - One-fifth of what it was in 2010
 - 30% of vehicle's cost
- **EV Battery Chemistry Improving**
 - Provides greater distances

It's All About the Batteries

Batteries make up a third of the cost of an electric vehicle. As battery costs continue to fall, demand for EVs will rise.

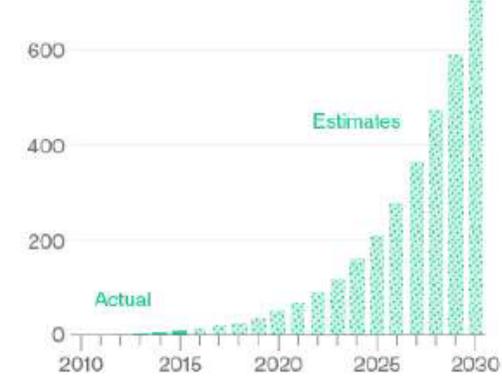
Cost for lithium-ion battery packs

\$1,200 per kilowatt hour



Yearly demand for EV battery power

800 gigawatt hours



Source: Data compiled by Bloomberg New Energy Finance

Bloomberg

Recent Progress in the EV Industry

Charging EV's Outweigh the Infrastructure and Environmental Costs

Figure 1: Estimated Charger Costs & Cumulative PEV Benefits (NPV & Billions)—12 Utilities

Competition and scale will cause further benefits through reduced product costs

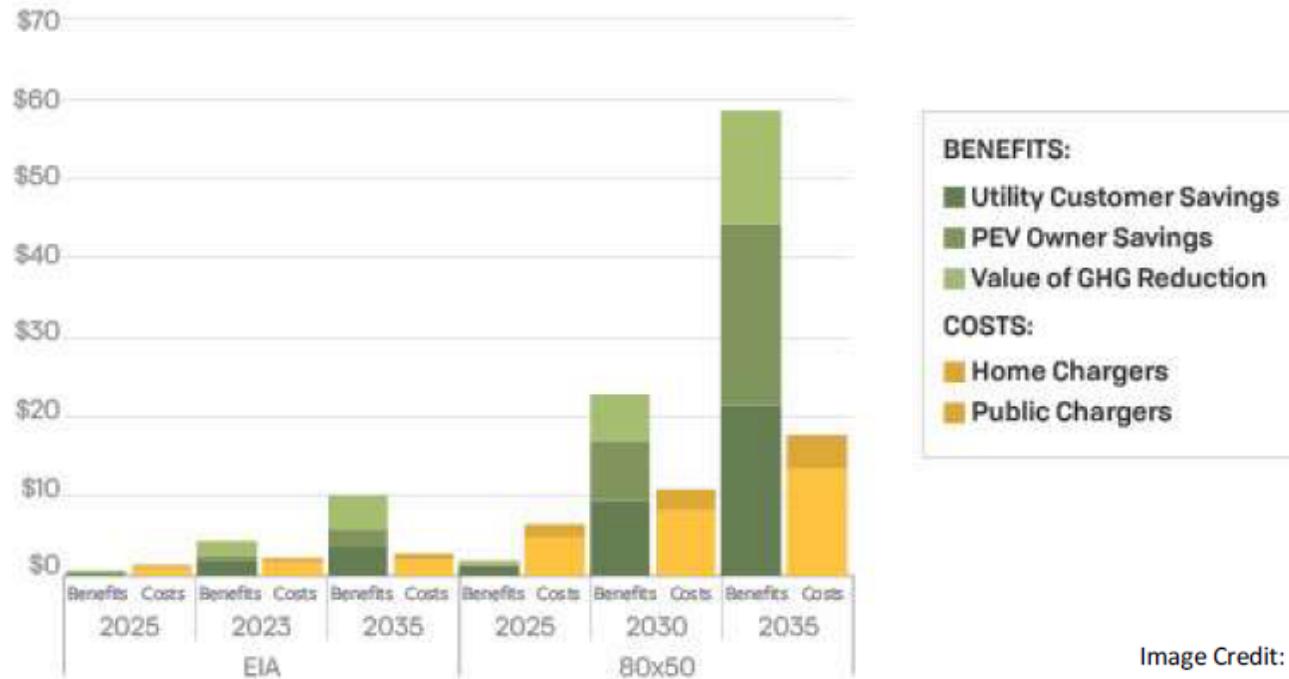


Image Credit: Ceres, Nov 2017



Tesla's no longer alone

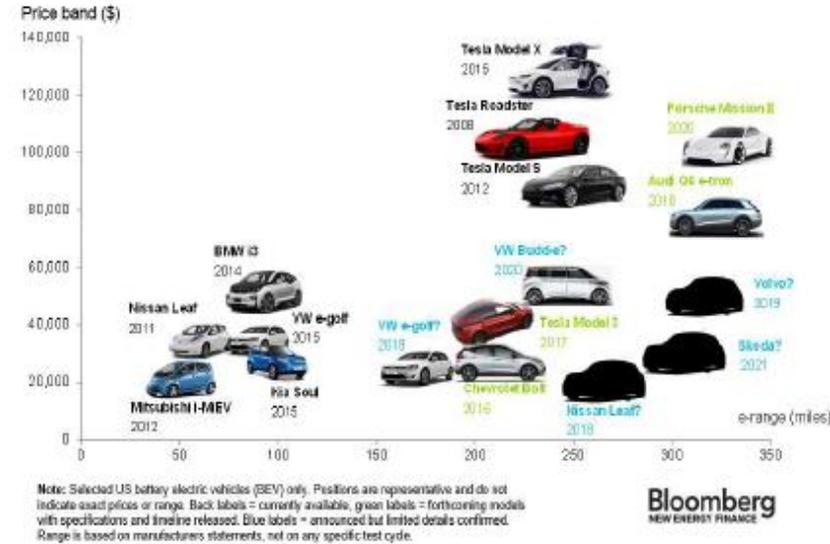
With the arrival of NIO's electric crossover in China, Tesla gained a bona fide competitor. The ES8 features a 70 kW battery, allowing for long-range travel, at a price below \$70,000. (That number is far cheaper than a Model X in China.)

As Mercedes, Audi, and Jaguar continue readying their own high-end EVs for the U.S. market, Tesla will see its first real competition in America by the end of 2018. At the lower end of the plug-in market, Tesla already watched GM sprint forward with its first year of Bolt EV sales. Indeed, Tesla may start to lose its grip as the leader in EVs by the end of 2018

Recent Progress in the EV Industry

Manufacturers Stepping Up!

- **Every Major Auto Manufacturer is “ALL IN”**
 - Tesla and Chevy has proved EV’s are desirable. Still a long way to go.
 - Many committing to all EV’s
 - By 2025, 39 different models of 200+ mile battery-electric vehicles are projected to represent 87 percent of sales [Navigant, 2016b]
 - Exciting new models are coming



Porsche Mission E



VW ID Bus



Fisker E-motion



Lucid Motors





Multiple long-range EVs below \$30,000 USD

Though Tesla's Model 3 rollout was less than successful, the delays allowed other, more established automakers to prep their own long-range EVs for market. In January 2018, the new Nissan Leaf (150 miles, \$29,900) arrived at U.S. dealerships.

For the first time ever, consumers will have three quality choices below \$30k with fast-charging options and enough range to curb most anxiety.

Recent Progress in the EV Industry

Range Anxiety – GONE (almost)!

- **200+ mile range is already its already here!**
 - Tesla and Chevy Bolt can achieve this range today
 - 300+ mile range is nearly in reach - “Industry input received during the Outreach Plan provides Electrify America with confidence that one or more vehicle manufacturers plan to sell 320 kW capable ZEVs by 2020.” (EA ZEV1 plan)



Tesla Model 3

Chevrolet Bolt



Porsche Mission E





A surge in electric mass transit

With transportation emissions now the leading contributor of greenhouse gas emissions in the U.S., every municipality is grappling with ways to reduce its footprint. For the first time ever, we expect a surge in EV mass transit orders following Los Angeles's order of 95 electric buses at the cost of \$138 million.

Recent breakthroughs in bus production, along with lower battery costs, have allowed cities to invest in this type of green transportation. As L.A. leads the way and other cities learn about the environmental and cost savings available, expect more transit authorities to shift to electric power. Proterra buses can now travel 350 miles on a single charge, eliminating the need to charge for an entire day.



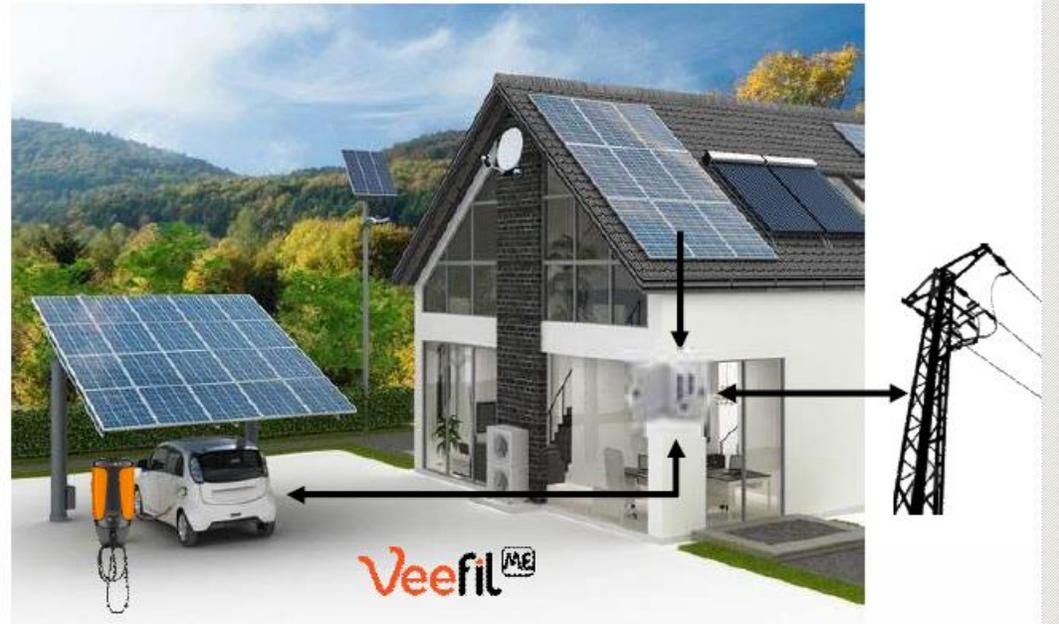
Rise of the used EV market

When sales were low and fewer than 20 models existed, the used electric car market was limited at best. By 2017, we began to see three-year leases of '14 models and other pre-owned EVs hit the market.

iSeeCars.com: fastest-selling cars on the used market, six of the top 10 were plug-ins. Once original buyers deduct incentives and factor in depreciation, most of the early EVs sold for less than half their original price. As 2018 begins, a 2016 Nissan Leaf (107 miles) may be the most economical car (electric, gas or otherwise) in the used car market.

Where will we be in 10 years?

- Air Quality much better
- U.S. EV market annual growth now reaching 40% annual growth rate. U.S. EVs 1.07% new car sales; CA 5% (Norway 42%) Currently second largest EV car market in the world after China
- EVs will reach 10% of U.S. vehicle sales in 2023
- EV chargers will be ubiquitous
- Utilities will have greater off-peak flexibility and grid stability
- Home owners with an EV and bi-directional charging will enjoy the following benefits:
 - Avoid peak energy prices
 - Use cheaper off peak power
 - Blackout proof your home
 - Sell energy from your vehicle back to the utility





Appendix: Cost of Ownership Notes

Additional savings

(Note: Does not include savings related to reduction in manhours required for maintenance and technical support estimated at \$2,200 annually. Also does not include savings in health care cost estimated at \$8,062 per bus.)

* Noel, L. & McCormack R. 2014. "A cost benefit analysis of an..... electric school bus compared to a traditional diesel school bus." Applied Energy, 126: 246-265. Maintenance cost savings calculations take into consideration oil and filters, transmission fluids/flush, brake shoe linings and drums, body leaks/repairs and painting (eLion bus composite roof and panels – only 200 rivets).

** Calculations based on 12,060 miles/year @ 6 mpg. U.S. Energy Information Administration forecasts crude oil to increase at 5% CAGR per year over the next 25 years from \$40 per barrel to \$136 in 2040 with a commensurate increase in gas and diesel retail prices. Based on a regression analysis of oil and gas prices from 2000 through the present (J. Hamilton, oil-price.net), diesel gas would be priced at \$4.24 in 2040. Currently at \$2.30, the average price of diesel gas over the next 12 years would be \$3.13 per gallon per year.

*** Calculations based on 12,060 miles/year @ 1.5 kWh per mile (Lion Bus) at \$0.15 kWh. Report by UC Davis, Energy Efficiency Center, 2013, projects the price of electricity to increase from \$0.12 kWh to \$0.21 kWh over the 25 year period with an average annual rate of \$0.15 per kWh over the next 12 years.

† Evans, Simon, "EV Battery Costs Already Probably Cheaper than 2020 Projections," *The Carbon Brief*, March 2015 www.cleantechnica.com. Industry-wide costs of batteries have fallen by 14% per year overall and by 8% for market-leading firms from 2007 through 2015, or an average of 11%. Present, cost of battery packs is \$29,000 per pack. At 5 packs for a Type C, 100 mile electric bus, total battery cost today is \$145,000. At current rate of reduction at 11% per year, projected battery cost in 8 years is \$57,080.

†† The combustion of diesel fuel releases particulate matter, ozone, sulfur dioxide, nitrous oxide, and other pollutants which cause heart disease, respiratory issues and increased risk of cancer. Based on the weight of a Type C school bus, classified as a Class 7 Heavy Duty vehicle, the estimated cost of health related issues affecting the children passengers is \$0.08 per mile. (National Research Council. *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use*. Washington, D.C. National Academy of Sciences, 2010.)