



Clean Air Partnership

February 18, 2021

1 Million Commercial Buses in the US

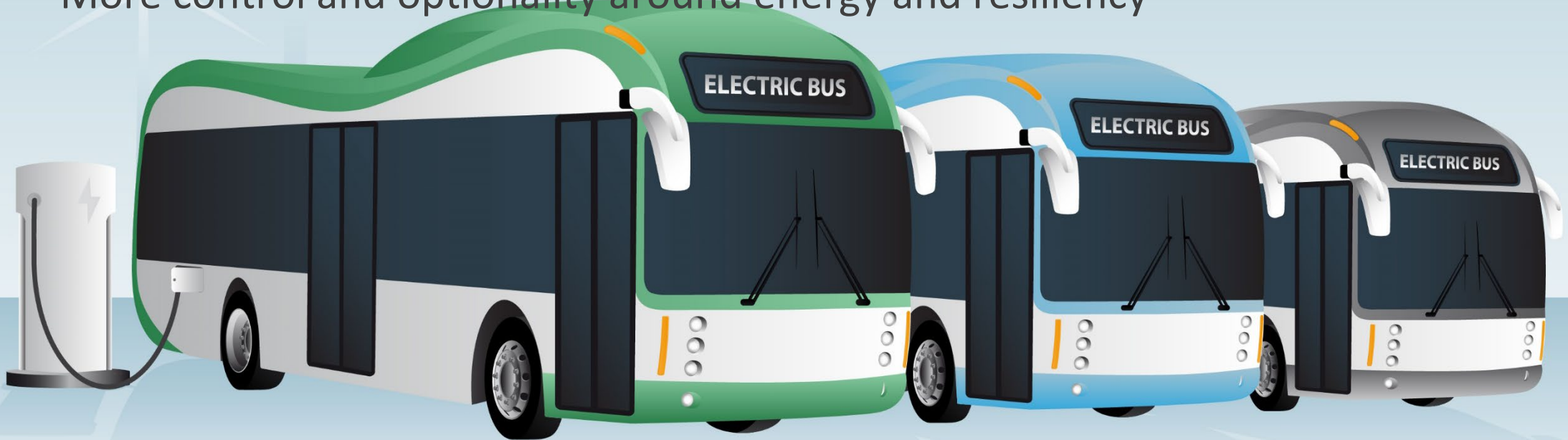
17 Million Tons
of CO2 per year

A GLOBAL CRISIS
that can only be addressed by **ZERO EMISSIONS VEHICLES (ZEVs)**

Sources: EPA (greenhouse emissions, Statista (Bus count)

Driving Electrification

- Electrification brings:
 - Dramatic noise reduction (for both outside the vehicle and passengers)
 - Air Quality and human health
 - Climate change
 - More control and optionality around energy and resiliency



What Lightning eMotors Does

We provide complete electrification solutions for urban commercial fleets



(Direct Sales)

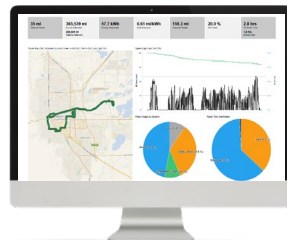
COMMERCIAL ZEVs

- Manufacture complete vehicles: Class 3 – 7 trucks & buses
- Offering both Battery (BEV) and Fuel Cell (FCEV)
- Highest up-time backed by supplier parts and service
- We sell powertrains and Repowers to strategic partners



ANALYTICS

- Actionable fleet intelligence
- Unique Big Data on drive cycles
- High Resolution, 1 Hz data, with detailed electric efficiency by subsystem
- Artificial intelligence optimization



(Energy-as-a-Service)

CHARGING

- Complete charging solutions
- Patented mobile charging Solution
- Rent or buy or lease
- Full service end-to-end solution, or a-la-carte



(EV-as-a-Service)

FINANCING

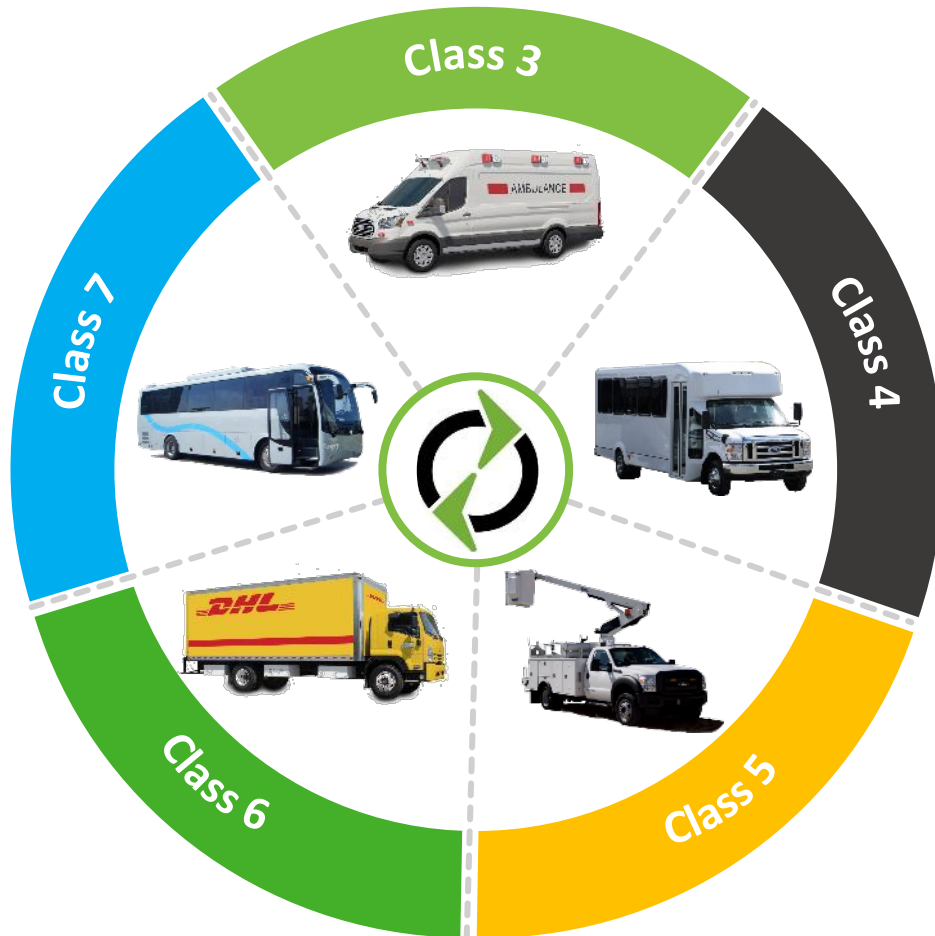
- Support financing to overcome higher upfront costs
- Strategically differentiated from legacy OEMs e.g. Ford and GM
- EV-as-a-Service
- Financing partners in place



GENERATECAPITAL



Optimized Modular Design Addresses Diversified Fleets



- Vehicle class and application agnostic design
- Each class has numerous specialty vehicles
- High level of cost-effective customization enabled by modular software and hardware
- Serving all segments of urban commercial fleets with proven reliability
- Software-enabled platform and integration capabilities translate to fast time-to-market with new platforms

We provide complete commercial electric vehicles and infrastructure

Note: Pictures represent selected vehicles as examples in each class and our products are not limited to vehicles shown in the above.

Our Facility



230,000 Sq Ft of Manufacturing Space

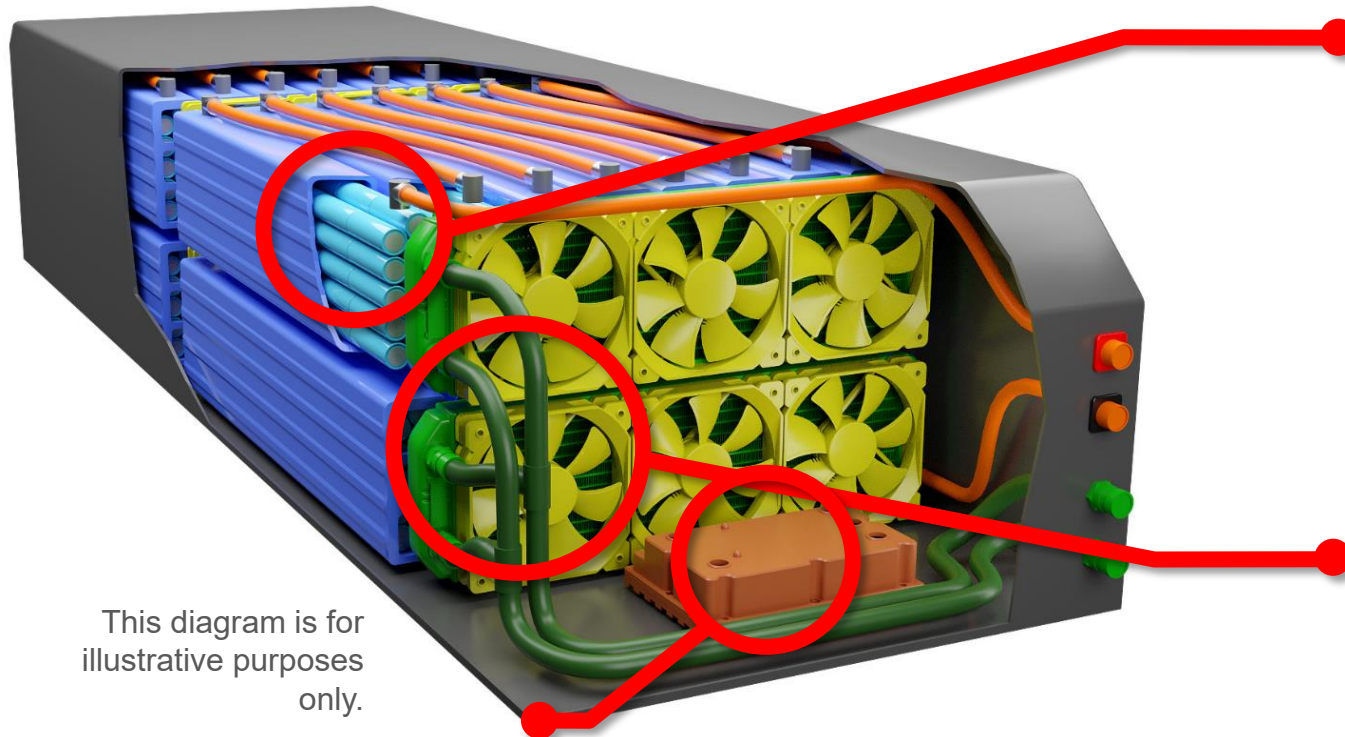


FULLY OPERATING PRODUCTION FACILITY

- In-house wiring and frame fabrication
- Supports Class 3 – Class 7 vehicles, and Mobile Charger production
- Complete Engineering on-site
- Capacity for 3000 vehicles per year, per shift



Lightning Utilizes Only the Best Batteries



This diagram is for illustrative purposes only.

Battery Management

- Lightning Systems' electric drivetrains incorporate **sophisticated software and hardware controls** at all levels.
- **Battery controls** manage state-of-charge including cell balancing.
- Supports **AC charging and DC Fast Charge**. (Most other vendors don't offer DC Fast Charge.)

Premium battery cells

- **High-quality** Li-ion cells from a major electronics OEM.
- The same cells are used in EVs from most **major US and European car manufacturers**.
- Nickel-Manganese-Cobalt (NMC) technology provides **great range and reliability**.
- **Internal safety features** prevent over-current conditions.

Thermal Management











- Batteries have an optimal operational temperature range for **maximum range and performance**.
- It also extends the battery's operational life from **just one year to seven years or more**.
- Lightning's thermal management system is one of the **most sophisticated in the industry**. It automatically...
 - cools to ambient temperatures (radiator)
 - cools below ambient temperatures (chiller)
 - heats above ambient temperatures (heater)



Product Lineup

Repower EXISTING Vehicles

Convert NEW Vehicles

| | Class 3 | Class 4 | Class 5 | Class 6 | Class 7/8 | Class 8 |
|--------|---|---|---|--|--|--|
| TRUCKS | Ford Transit 350HD  | Ford E-450  | Ford F-59  Ford F-550  | GM 6500XD Isuzu FTR Hino  | | |
| BUSES | Ford Transit 350HD  | Ford E-450  | Ford F-550  | | Transit Bus Repower  | Motor Coach  |



CARB Certified

Enabled and supported by



and their dealer networks



AI-Enabled Analytics

Help with Fleet and Driver Management



- Increase range
- Optimize routes
- Reward/correct behavior

 **Lightning Systems**

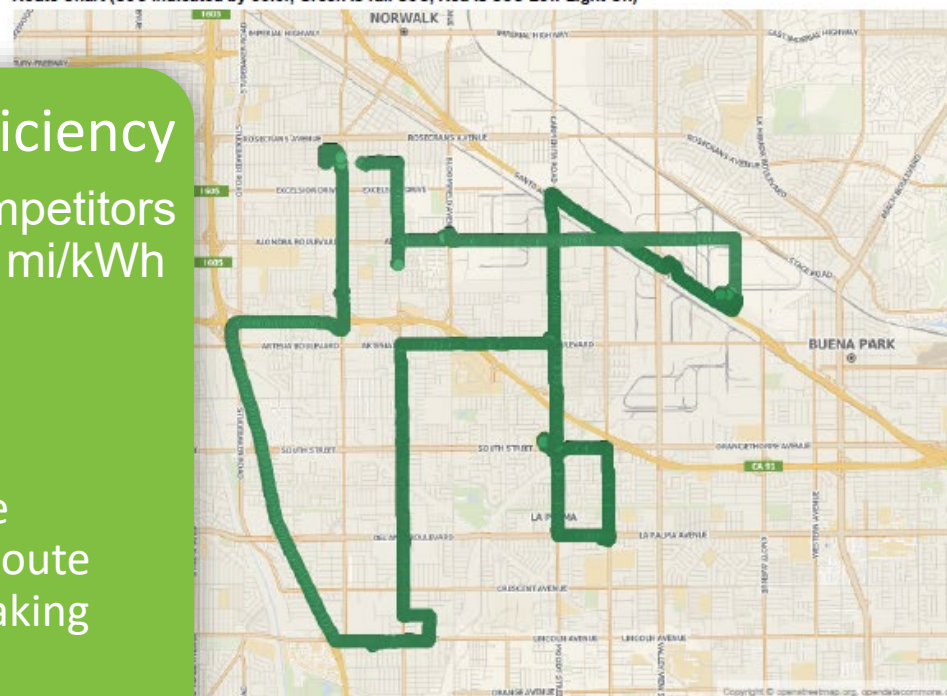
Secure, customizable reports that **INTEGRATE** with existing fleet management programs

Lightning Analytics Provide Deep EV Insights

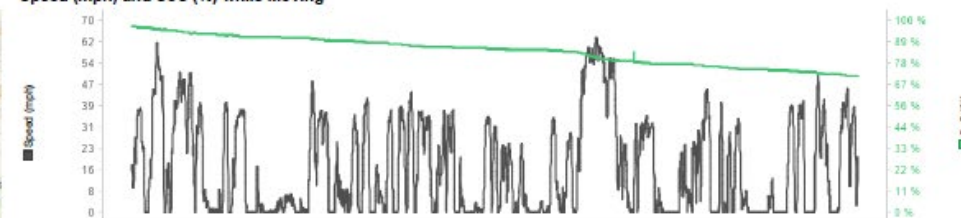
Daily Report (August 14th, 2018)



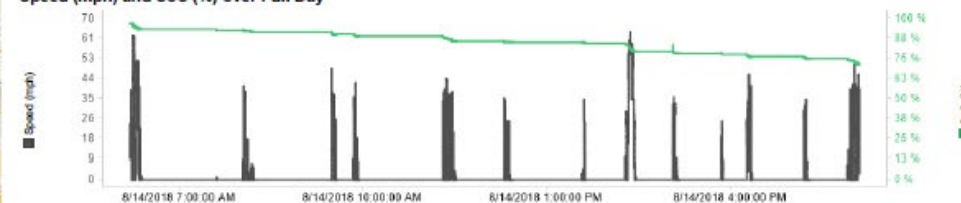
Route Chart (SoC indicated by color, Green is full SoC, Red is SoC Low Light On)



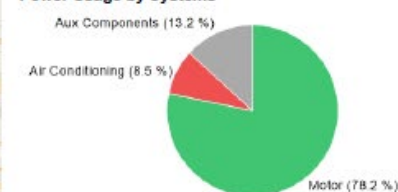
Speed (mph) and SoC (%) while Moving



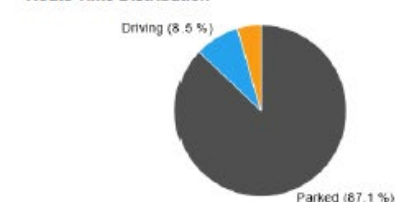
Speed (mph) and SoC (%) over Full Day



Power Usage by Systems



Route Time Distribution



50% Greater Efficiency

LS Class 3 Competitors
1.8 mi/kWh 1.2 mi/kWh
(official CARB test data)

Machine Learning
Optimization:

- HVAC energy use
- Acceleration & Route
- Regenerative Braking
- Driver training

50 vehicle parameters at 1Hz
= 260M DataPoints/veh/day

Servicing Lightning eMotors Products

National network of independent and OEM service/maintenance providers



Fleet training for those that prefer to do their own maintenance



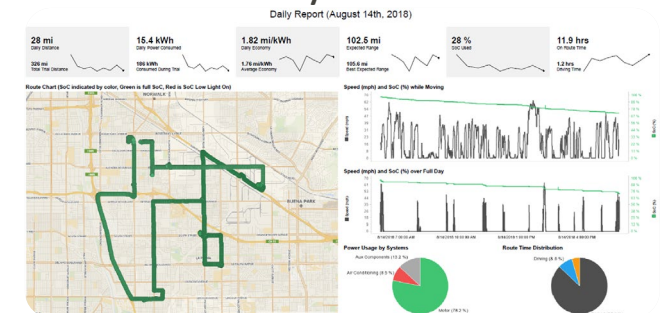
Vehicles built on legacy OEM platforms mean you have easy access to replacement components (think ball joints or rearview mirrors)



Ford eQVM status means chassis and body warranties remain intact



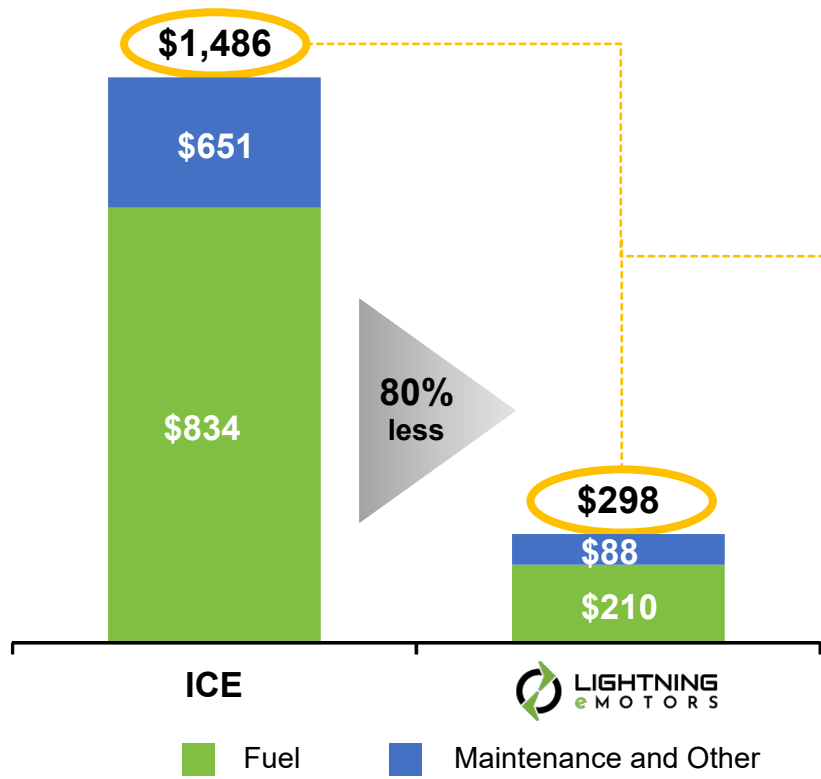
24/7 network Operations Center provides telematics data to predict issues before they arise



Offering Immediate Operational Savings

Monthly Fuel + Maintenance Cost (2020)

Class 3 Ford Transit 350HD
(3,500 miles / month in California)



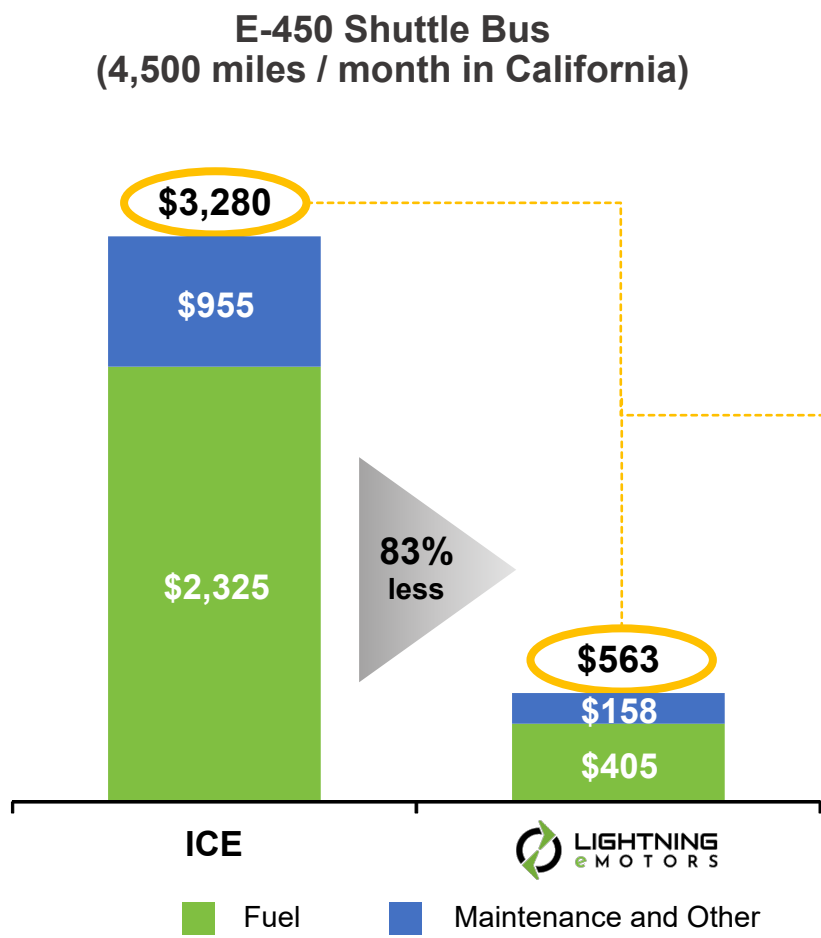
Cost Comparison



| Illustrative LEASE Example | Gasoline | Lightning eMotors | |
|--|----------------|-------------------|----------------|
| | 2020 | With Grants 2020 | No Grants 2021 |
| | | | |
| Fuel and Maintenance Cost per Month | 1,486 | 298 | 298 |
| Vehicle Lease | 581 | 1,224 | 1,709 |
| Charger Rental | -- | 300 | 300 |
| LCFS (Low Carbon Fuel Standard) Credit | -- | (360) | (360) |
| Total Monthly Cost | \$2,067 | \$1,462 | \$1,947 |
| Monthly Cost Difference to Gasoline | | \$605 | \$120 |

Offering Immediate Operational Savings

Monthly Fuel + Maintenance Cost (2020)



Cost Comparison

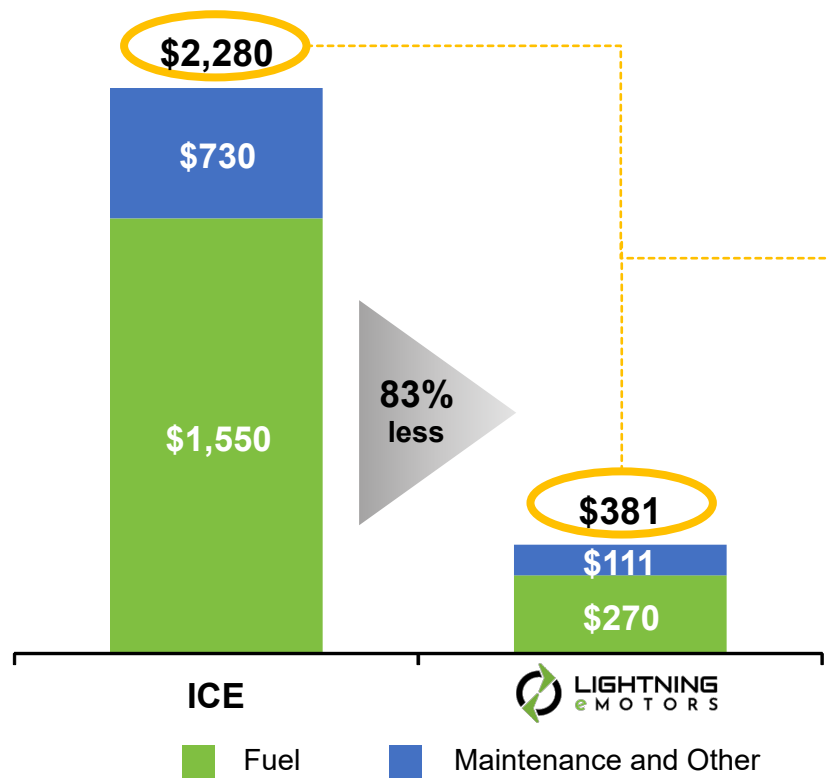


| Illustrative LEASE Example | Gasoline | Lightning eMotors | |
|--|----------|-------------------|----------------|
| | 2020 | With Grants 2020 | No Grants 2021 |
| | 2020 | 2020 | 2021 |
| Fuel and Maintenance Cost per Month | 3,280 | 563 | 563 |
| Vehicle Lease | 821 | 1,762 | 2,401 |
| Charger Rental | -- | 300 | 300 |
| LCFS (Low Carbon Fuel Standard) Credit | -- | (1035) | (1035) |
| Total Monthly Cost | \$4,101 | \$1,590 | \$2,229 |
| Monthly Cost Difference to Gasoline | | \$2,511 | \$1,875 |

Offering Immediate Operational Savings

Monthly Fuel + Maintenance Cost (2020)

E-450 Shuttle Bus
(3,000 miles / month in California)



Cost Comparison

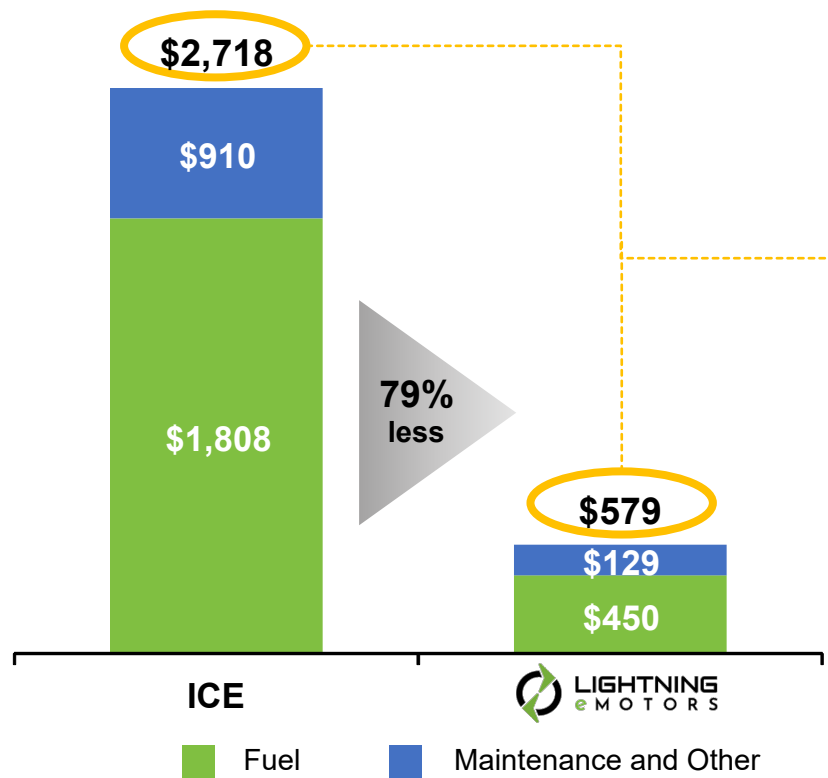


| Illustrative LEASE Example | Gasoline | Lightning eMotors | |
|--|----------|-------------------|----------------|
| | 2020 | With Grants 2020 | No Grants 2021 |
| | 2020 | 2020 | 2021 |
| Fuel and Maintenance Cost per Month | 2,280 | 381 | 381 |
| Vehicle Lease | 821 | 1,762 | 2,401 |
| Charger Rental | -- | 300 | 300 |
| LCFS (Low Carbon Fuel Standard) Credit | -- | (690) | (690) |
| Total Monthly Cost | \$3,101 | \$1,753 | \$2,392 |
| Monthly Cost Difference to Gasoline | | \$1,348 | \$709 |

Offering Immediate Operational Savings diesel

Monthly Fuel + Maintenance Cost (2020)

GM 6500 Class 6
(3,500 miles / month in California)



Cost Comparison

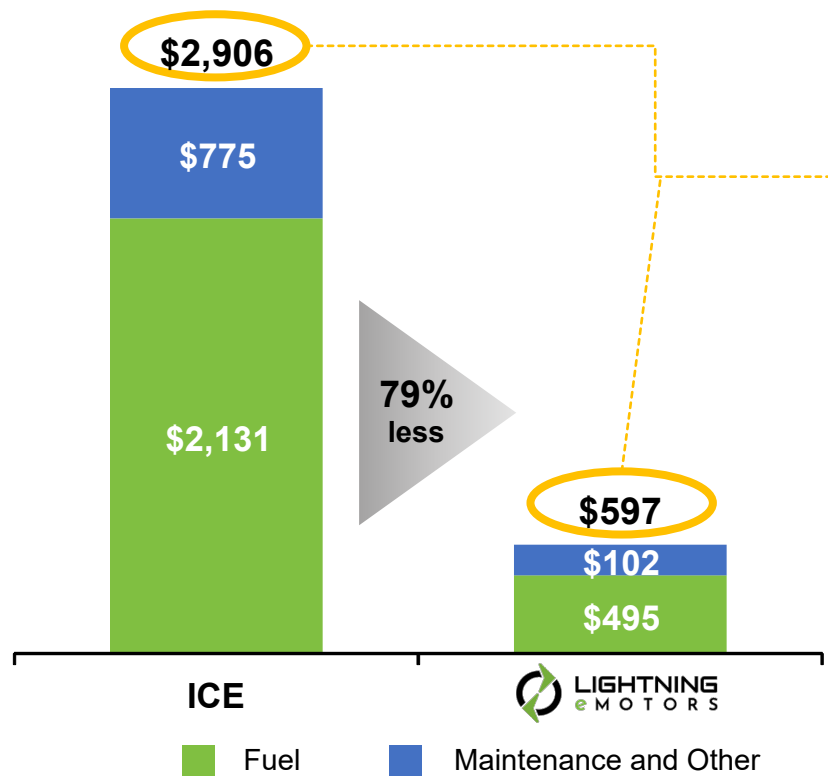


| Illustrative LEASE Example | Diesel | Lightning eMotors | |
|--|---------|-------------------|----------------|
| | 2020 | With Grants 2020 | No Grants 2021 |
| Fuel and Maintenance Cost per Month | 2,718 | 579 | 579 |
| Vehicle Lease | 1,281 | 2,384 | 3,312 |
| Charger Rental | -- | 300 | 300 |
| LCFS (Low Carbon Fuel Standard) Credit | -- | (907) | (907) |
| Total Monthly Cost | \$3,999 | \$2,356 | \$3,284 |
| Monthly Cost Difference to Gasoline | | \$1,353 | \$715 |

Offering Immediate Operational Savings diesel

Monthly Fuel + Maintenance Cost (2020)

Diesel Transit Bus Repower
(2,750 miles / month in California)



Cost Comparison



Illustrative LEASE Example

| | Diesel | Lightning eMotors | |
|--|---------|---------------------|-------------------|
| | 2020 | With Grants 2020 | No Grants 2021 |
| Fuel and Maintenance Cost per Month | 2,906 | 597 | 597 |
| Vehicle Lease | 3,501 | 4,137 | 4,688 |
| Charger Rental | -- | 300 | 300 |
| LCFS (Low Carbon Fuel Standard) Credit | -- | (1,270) | (1,270) |
| Total Monthly Cost | \$6,407 | \$3,764 | \$3,718 |
| Monthly Cost Difference to Gasoline | | \$2,643 | \$2,687 |

Purchase price of a new electric bus is \$800,000+
and has a 18-24 month wait time

How to Buy a Lightning eMotors Vehicle?

Lightning performs holistic analysis by evaluating drive cycles, operating conditions, temperature, etc. to suggest battery size and optimal charging solution.

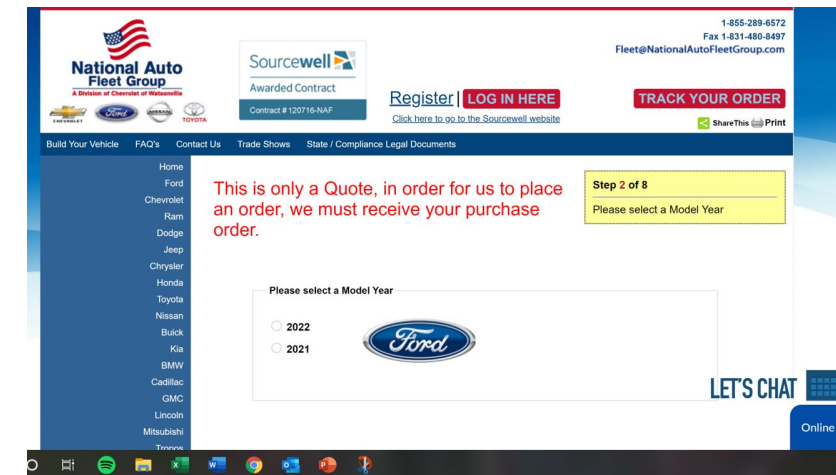
Lightning eMotors assists customer to ensure that any incentives are applied.

Customer purchases the complete vehicle and Lightning organizes shipping and logistics.

Lightning eMotors works with your preferred dealer and upfitters to build base shell vehicle or we can hook you up with one of our partners

Lightning eMotors quotes the complete vehicle, including electric powertrain, any upfits, and incentive programs

Available on Sourcwell in Q2 2021



Battery Electric Ford Transit 350HD

- Battery-electric vehicle
- Smooth, quick and quiet
- Best efficiency of any Class 3 van
- Elegant cabin integration with batteries fully under the floor
- 140,170, and 250-mile range options
- CARB and HVIP certified
- Ford eQVM certified: Ford vehicle warranty and matching Lightning powertrain warranty for complete coverage
- Installation, maintenance and service performed by certified partners
- Lightning Analytics gives insight into usage and efficiency
- Available new or repower



Battery Electric Ford Transit 350HD

| | | | |
|--|---|---|--------------------|
| Base Chassis | Ford Transit 350HD Passenger Van | | |
| GVWR | 11,000 lbs | | |
| Minimum Wheelbase | 148 in | | |
| Electric Vehicle Supply Equipment (EVSE) Compatibility | Level 2 (6.6 kW) and Level 3 (up to 80 kW) with J1772 CCS Combo | | |
| Efficiency | 61 MPGe / EPA City and 66 MPGe / EPA Highway | | |
| All Electric Range (confirmed in EPA-certified dyno test)* | 140 miles | 170 miles | 250 miles |
| Battery Capacity | 86 kWh | 105 kWh | Hydrogen fuel cell |
| Charge Time | 11 hours (Level 2) 2 hours (Level 3) | 13.5 hours (Level 2) 2.5 hours (Level 3) | |
| Payload and Passenger Capacity** | 15 passengers including driver | | |
| Maximum Speed | 65 mph (electronically limited) | | |
| Peak Power | 215 HP (160 kW) | | |
| Torque Rating (after transmission) | 733 lb-ft (994 Nm) | | |
| Warranty | <ul style="list-style-type: none"> • Base Chassis: Ford standard warranty • EV Conversion: Lightning eMotors standard warranty (Powertrain and battery 5 year / 60,000 miles) | | |
| Analytics | <ul style="list-style-type: none"> • Preventive Maintenance • Range Analysis • Driver Behavior | | |



* All-electric range can vary depending on route or drivecycle, environmental conditions, vehicle or equipment configurations, and driver behavior.

** Payload and Passenger capacity can vary and greatly depend on vehicle wheelbase, seating configuration, and other characteristics or features as delivered by the OEM or chassis manufacturer. Equipment added to the base chassis by aftermarket upfitters or equipment installers could also affect Payload and Passenger Capacity.



Battery Electric Ford E-450



- Battery-electric vehicle
- Smooth, quick and quiet
- Elegant cabin integration with batteries fully under the floor
- Ford eQVM certified: Ford vehicle warranty and matching Lightning powertrain warranty for complete coverage
- Installation, maintenance and service performed by certified partners
- Lightning Analytics gives insight into usage and efficiency
- Available new or repower



Battery Electric Ford E-450



| | | |
|--|---|--|
| Base Chassis | Ford E-450 Shuttle, Cutaway, Stripped Chassis | |
| GVWR | 14,500 lbs | |
| Minimum Wheelbase | 176 in | |
| Electric Vehicle Supply Equipment (EVSE) | Level 2 (13.2 kW) and Level 3 (up to 80 kW) with J1772 CCS-1 Combo | |
| All Electric Range* | 80 miles | 120 miles |
| Battery Capacity | 86 kWh | 129 kWh |
| Charge Time | 11.25 hours (Level 2) 1.5 hour (DC Fast Charge) | 16.75 hours (Level 2) 2.25 hours (DC Fast Charge) |
| Payload and Passenger Capacity** | 7,980 lbs (Weight of body is part of total payload) | 7,200 lbs (Weight of body is part of total payload) |
| Maximum Speed | 65 mph (electronically limited) | |
| Peak Power | 241 HP (180 kW) | |
| Torque Rating (after transmission) | 790 lb-ft (1071 Nm) | |
| Warranty | <ul style="list-style-type: none"> Base Chassis: Ford standard warranty EV Conversion: Lightning Systems standard warranty (Powertrain and battery 5 year / 60,000 miles) | |
| Analytics | <ul style="list-style-type: none"> Preventive Maintenance • Range Analysis • Driver Behavior | |



*All-electric range can vary depending on route or drivecycle, environmental conditions, vehicle or equipment configurations, and driver behavior.

**Payload and Passenger capacity can vary and greatly depend on vehicle wheelbase, seating configuration, and other characteristics or features as delivered by the OEM or Chassis manufacturer. Equipment added to the base chassis by aftermarket upfitters or equipment installers could also affect Payload and Passenger Capacity.



Battery Electric GM 6500XD

Low Cab Forward

- Class 6, GVWR: 25,950 lbs
- Range options (miles): 88, 110, 130, 150, 250
- EVSE: SAE J1772 with CCS1 Combo, DC Fast Charge standard
- CARB and HVIP certified



Modular ZEV platform for new vehicles and repowers





Comprehensive Charging solutions for any fleet's needs

- A full range of charging hardware available for purchase or lease
- Charging as a Service (CaaS) for organizations that prefer to outsource all charging infrastructure to support their fleet





Energy as a Service (EaaS)



A turnkey solution that takes the challenges of deploying charging infrastructure off your plate for a simple monthly fee

- Charging needs analysis
- Permitting
- Project management for construction, electrical, boring, etc.
- Charging hardware
- Charger installation and commissioning
- All maintenance
- Any required service
- One throat to choke if something doesn't work
- Reporting
- Everything except the electricity
- One monthly fee



Level 2 AC Chargers



- Available in 7.2 kW and 9.6 kW capacities
- Available in wallbox or pedestal formats
- J1772 connector standard
- Single or dual ports
- OCPP compliant
- Options include wi-fi, 3G/4G connectivity, credit card/RFID reader, cable retractor



DC Fast Chargers



- 25 kW capacity
- Wallbox format, pedestal is optional
- Single cable version:
 - J1772 Combo CSS Type 1 connector
- Dual cable version:
 - J1772 Combo CSS Type 1 connector
 - CHAdeMO connector
- OCPP compliant
- Credit card/RFID reader
- Optional 3G/4G connectivity



DC Fast Chargers



- 50 kW capacity
- Pedestal format
- Single cable versions:
 - J1772 Combo CSS Type 1 connector
 - or CHAdeMO connector
- Dual cable version:
 - J1772 Combo CSS Type 1 connector
 - and CHAdeMO connector
- OCPP compliant
- Ethernet ready
- Credit card/RFID reader
- Optional 3G/4G connectivity



Lightning Mobile

For mobile fast charging and lot charging



Specifications

| | |
|---------------------------------------|--|
| Battery capacity | 184 kWhr |
| Charging input (from grid) | AC Level 2 up to 19.2 kW DC Fast Charge up to 80 kW |
| Charging output (to electric vehicle) | DC Fast Charge up to 80 kW |
| Input connector | SAE J1772 |
| Output connector | SAE J1772 Combo CCS Type 1 |
| Maximum energy output per day | 460 kWhr * |
| Output cable length | 25 feet |
| Active thermal management | Yes, integrated |
| Data reporting / analytics | Yes, over 4G modem |
| Weight | 3,700 lbs approx. |

* If connected for 24 hours to 19.2 kW L2 EVSE.

Let's Talk About Your Fleet Needs



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